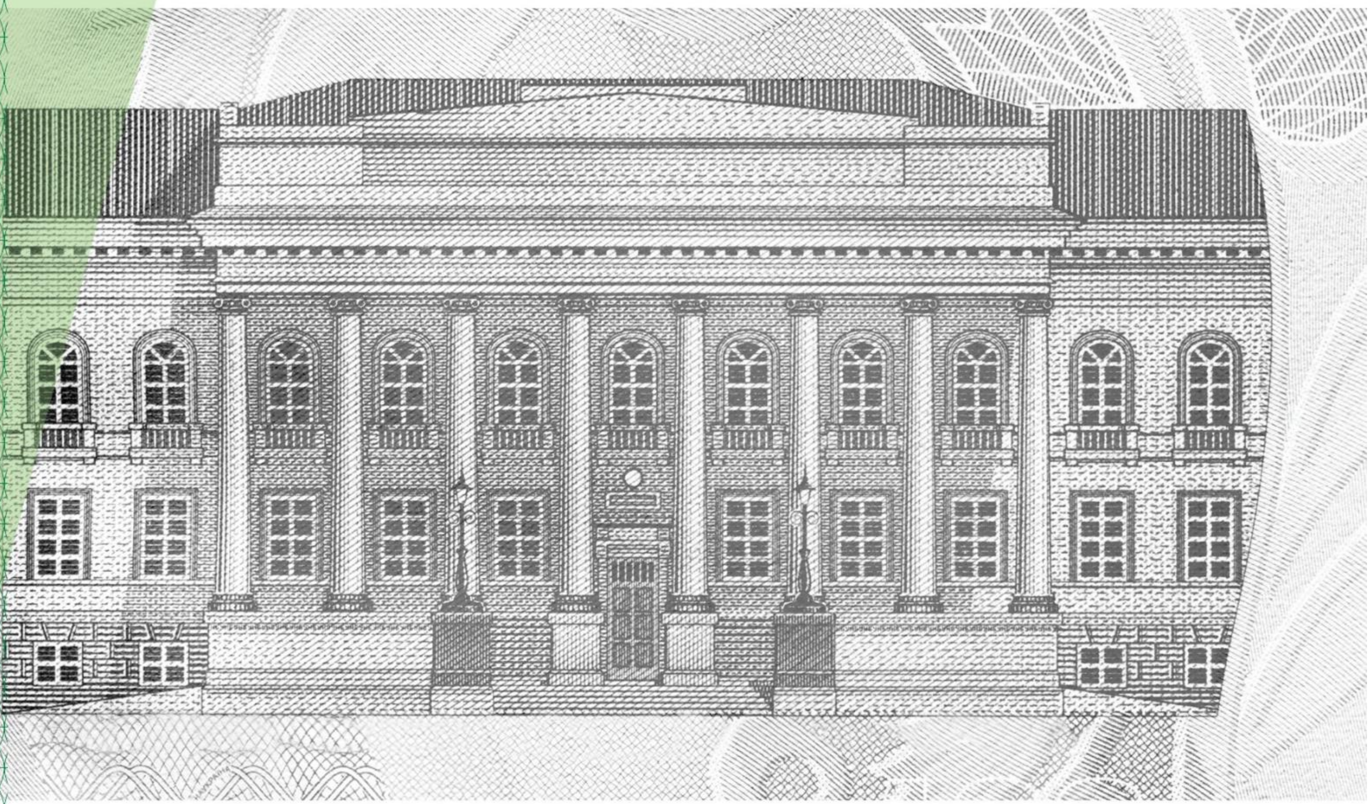
National Bank of Ukraine

Financial Stability Report

June 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 further explores the impact of the current crisis on financial sector and mostly focuses on banking sector risks. 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 18 June 2021.

Contents

Summary

The financial system remained highly profitable and resilient to the coronavirus crisis. The financial sector has managed to pass through the crisis without incurring significant losses, as the banks paid close attention to the quality of their portfolios before and during the crisis, and loans to distressed borrowers were restructured in a timely manner. Banks are increasingly using their available liquidity and capital for lending – the pace of which accelerated markedly in 2021. The good condition of the banking sector and the economic recovery are enabling the NBU to gradually phase out its anti-crisis measures, in particular long-term refinancing. Moreover, sustained high profitability allows new regulatory requirements – primarily the requirements for bank capital – to be implemented as planned.

The economic recovery continues, although not at a fast pace. The improvement in consumer sentiment and increase in domestic demand are important economic recovery drivers. Favorable external market conditions are supporting both GDP and the current account. The growth in global prices, coupled with strong domestic demand, have spurred inflation. The NBU has been responding to the increase in inflation risks since the start of 2021, twice raising its key policy rate. However, monetary policy continues to be accommodative overall, as the inflation risks are mainly temporary. The FX market remains balanced. Investors are regaining their interest in the debt instruments of Ukrainian issuers. However, the access to borrowing from global markets has narrowed due to the increase in yields on U.S. long-term securities in Q1. This also impacted the yields on the borrowings of other countries, including Ukraine. With global inflation risks on the rise and interest rates likely to increase, the capital markets will remain volatile. Therefore, long pauses in cooperation with international financial institutions pose major risks to both refinancing Ukraine's external debts and financing the country's budget deficit.

The real sector also continues to recover gradually. The majority of Ukrainian companies are coping with the coronavirus crisis without incurring large losses. Only some business segments have faced serious difficulties. The corporate sector is resilient to the crisis, as the service sectors that were most affected by anti-pandemic restrictions account for only a low share of the Ukrainian economy. Corporate lending is growing noticeably: state programs are encouraging growth in the loan portfolios of small and medium borrowers.

Retail lending is also growing, and its growth is accelerating. Unsecured consumer loans account for the bulk of the portfolio, but some banks have been scaling up their mortgage lending for more than a year already. The segment of unsecured loans for current needs yields the largest profits but also carries the highest credit risks. Raising risk weights for these assets from 100% to 150% by the end of 2021 will help banks to build up capital cushions that can be used to absorb potential losses if credit risks are underestimated in this segment and it becomes more vulnerable to crisis events. Mortgage lending is less profitable, but its risks are lower. The penetration of mortgage lending to GDP is less than 1%, so the rapid growth in mortgage lending could continue for a long time.

The impact of the coronavirus crisis on loan quality has turned out much weaker than expected at the start of the crisis. The banks' provisioning expenses doubled in crisis-ridden 2020, but remained moderate and did not significantly affect the sector's profitability. In general, the results of an asset quality review showed that the provisions made by the banks corresponded to the expected credit losses. High lending standards, especially for corporate segment, were the main reason why losses from credit risk were moderate. The quality of retail loan portfolios is also high. During the crisis, lenders became more attentive to borrowers' ability to service their debts, in particular through assessing their debt burden. Prudent lending standards will contribute to the balanced growth in the loan portfolio, as well as its proper diversification.

The banks' holdings of domestic government debt grew markedly in 2020. An increase in investment by banks in government debt securities to finance widened budget deficits has been observed in many countries around the world. In Ukraine, the increase was fueled by growing yields on domestic government debt securities in late 2020, along with access to long-term refinancing from by the NBU. However, investment in government securities did not influence the banks' ability and willingness to lend. The financial institutions continued to

increase their loan portfolios. The need for banks to finance the budget will be much lower in 2021: the deficit will narrow gradually, and other financing opportunities will become available. Thus, the volume of domestic government debt securities in the banks' portfolios will stop growing, and their share in net assets may decline somewhat.

The crisis has caused major changes in the term structure of the banks' funding: the share of demand deposits has increased. This was driven by lower deposit interest rates and depositors' wish to have immediate access to their savings in the period of crisis. At the same time, 2020 proved that even the demand deposits of households are a rather stable source of funding. The changes in the funding structure therefore do not bear any significant liquidity risks. The new Net Stable Funding Ratio (NSFR), which was launched as a requirement in April 2021, will serve to minimize these risks even more.

The cost of funding has decreased for the banks. The decrease was driven by a change in the term structure of liabilities and last year's decline in deposit interest rates. This trend allowed the majority of financial institutions to maintain an acceptable interest margin, despite there being a general decline in rates. The post-crisis pickup in bank lending transactions increased their net interest income. The potential for a decline in the cost of funds is almost exhausted. Instead, competition on the lending market will prompt the banks to cut their loan rates. The banks should thus adapt to operating under conditions of lower interest margins.

The banks managed to maintain high profitability, and some of the institutions paid dividends to their owners. In addition to the increase in net interest income, high fee and commission income also supported profitability. It proved resilient to quarantine restrictions as the financial institutions adapted to new working conditions. Generated income comfortably covers not only operating expenses but also provisioning, which declined markedly in 2021.

The average core capital adequacy ratio of the banks is almost twice the regulatory minimum. The banks are taking into account future changes in capital requirements in their capital planning. Most of the banks are effectively in complience with the future capital buffer requirements (the capital conservation buffer and systemic importance buffer). The NBU decided to put off the implementation of these buffers in view of the crisis that broke out in the spring of 2020. However, the central bank will still schedule their implementation, as the sector is highly profitable.

The NBU is continuing to harmonize bank regulations with the EU acquis. This primarily concerns the previously announced implementation of operational risk capital requirements, which is scheduled for 1 January 2022. Another important innovation is the start of test calculations by the banks of internal capital under the internal capital adequacy assessment process (ICAAP) in 2022. This should significantly improve the quality of capital management and planning. Furthermore, the regulatory capital structure will change. After amendments to banking legislation are approved, the NBU will receive the right to set higher bank-specific capital requirements. The regulatory framework for nonbank financial institutions is also being actively improved. Bills on financial services and finance companies, insurance, and credit unions have already passed their first reading. Updating the regulatory framework will make the financial sector much more resilient and transparent.

Financial Stress Index

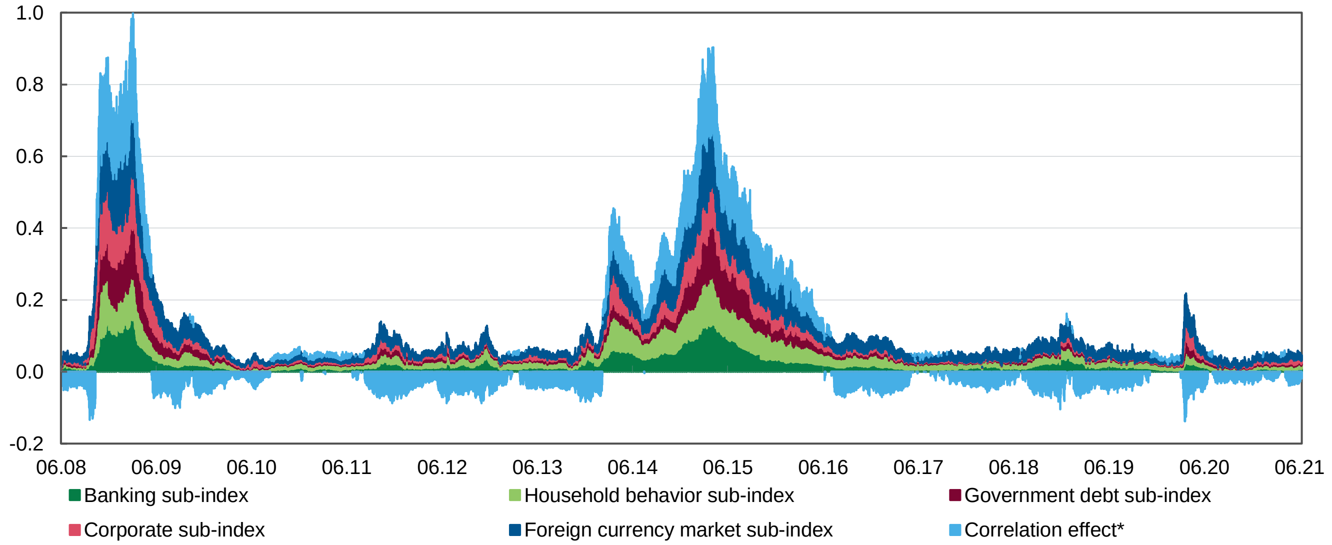
The Financial Stress Index (FSI) remains low. The volatility of the index over the last six months has been due to a temporary increase in the government debt and corporate sub-indices. The latter reacted to surge in the yields on risk-free assets on the global financial markets, and the higher threat of Russian army invading Ukraine. After the tensions on Ukraine's borders eased, the sub-indices returned to their previous values. The stock index of Ukrainian companies[1] has reached an eight-year high. The stress level of the banking sub-index is approaching 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.

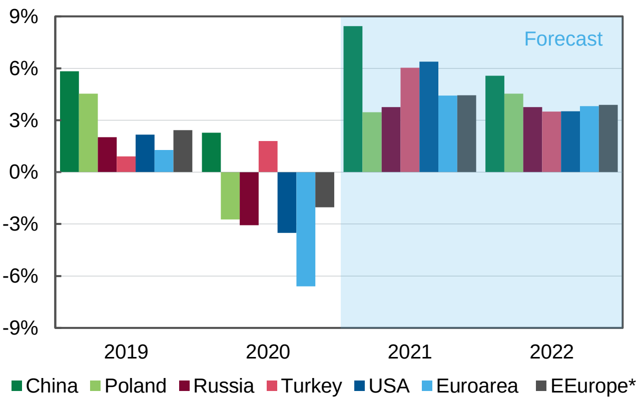
[1] Stock price dynamics based on Warsaw Stock Exchange index.

Part 1. External Conditions and Risks

1.1. External Developments

The recovery in partner countries continues thanks to, among other things, fiscal and monetary support. However, the growth is uneven – in particular due to the varied progress of their vaccination campaigns. The coronavirus remains the main global challenge. Capital inflows to emerging markets are uneven. At the same time, the rise of interest rates in the leading economies creates risks for fresh borrowing. Prices for Ukrainian exports are high. Geopolitical risks are rising, and threats from Russia are increasing.

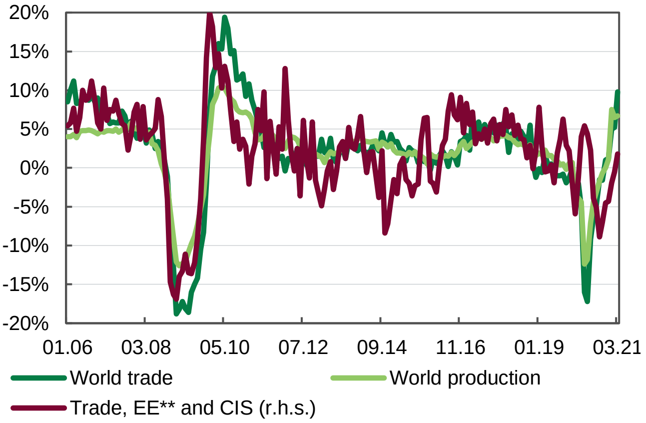
Figure 1.1.1. Change of GDP of Ukraine's major trading partners



* Belarus, Ukraine and Moldova.

Source: World Bank, Global Economic Prospects, June 2021.

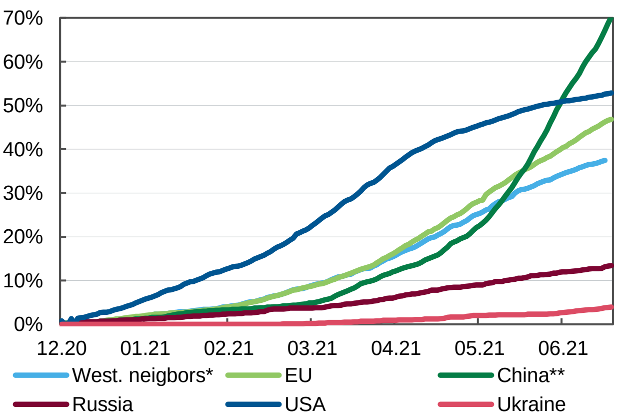
Figure 1.1.2. Change in world trade and production, yoy, %*



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

Source: Centraal Planbureau (CPB), the Netherlands.

Figure 1.1.3. Vaccinations, % of total population



* Population-weighted data for Bulgaria, Lithuania, Romania, Poland, Slovakia, Hungary, and the Czech Republic. ** Number of vaccinations per 100 residents.

Source: Our World in Data.

The economies of Ukraine's partners are recovering, although the recovery is uneven and is tied to their progress in vaccination

The second and third waves of quarantine tightening have caused uneven economic development in Ukraine's main trading partners. COVID-19 and its variants, and the risks of new waves of the pandemic, will continue to threaten economic recovery and remain factors of economic uncertainty. The IMF has noted the direct dependence between the pace and stability of further economic growth and the vaccination coverage of the population. Therefore, emerging markets (EMs) are expected to be affected more because of the slower paces of their vaccination campaigns.

Compared to October 2020, the IMF significantly upgraded its forecast for economic growth in the United States in 2021 (+3.3 pp), while downgrading its forecast for the euro area (- 0.8 pp). Its forecasts for China and the European EMs were revised slightly upward. The leading indicators of all of Ukraine's main trading partners are growing, although at different paces. In many partner countries (China, United States, the majority of Eastern Europe's EMs, Egypt, and Kazakhstan), real GDP will recover to pre-crisis levels as early as 2021. At the same time, some of Ukraine's neighbors and many EU economies will not reach these levels this year. The unemployment rate is also mostly higher than before the crisis.

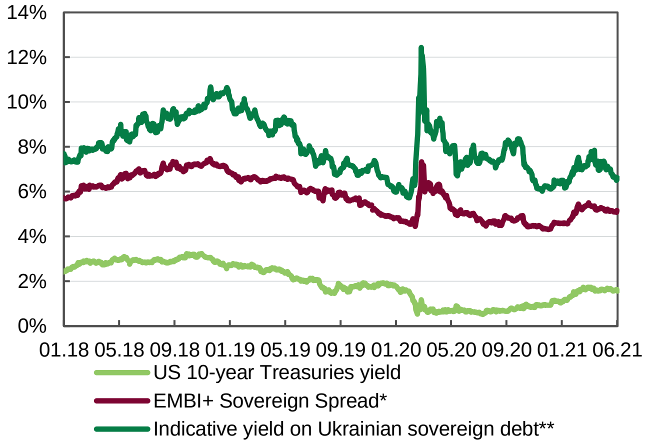
Global trade is actively recovering, especially in Asian countries. Global industrial production continues to grow, primarily thanks to the EMs.

New anti-crisis monetary measures were not needed. Economies continue to receive fiscal support

Over the last six months, countries did not take any new monetary and regulatory measures to fight the crisis. The U.S. Fed signaled the winding down of its stimulus measures, although monetary committee members expected the current near zero rates to remain in place until 2023. The ECB has not expanded any of its stimulus measures since the start of 2021. The Bank of Canada has become the first large central bank to start to wind down its stimulus measures (its asset purchase program). The central banks of many EMs are already raising their key rates.

Large-scale fiscal support for economic recovery continues to be provided in both advanced economies and emerging markets. In particular, the United States in March approved an economic stimulus program totaling USD 1.9 trillion. Germany, the UK, Serbia, India, the Philippines, the South

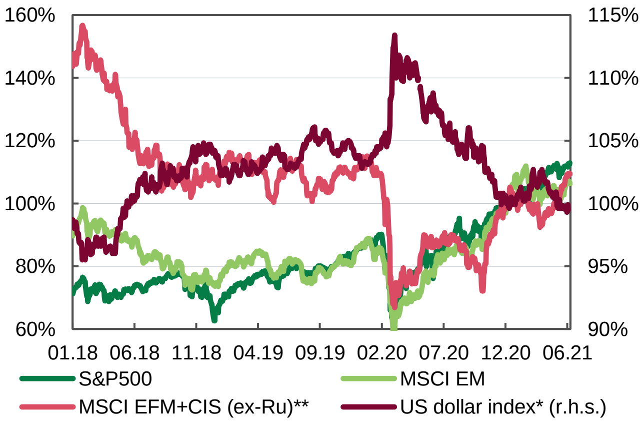
Figure 1.1.4. Yields on sovereign bonds of USA, EM and Ukraine



* Above the yields on 10-year U.S. Treasury bonds. **Based on Ukrainian long-term USD-nominated government Eurobonds.

Source: CBonds, Bloomberg.

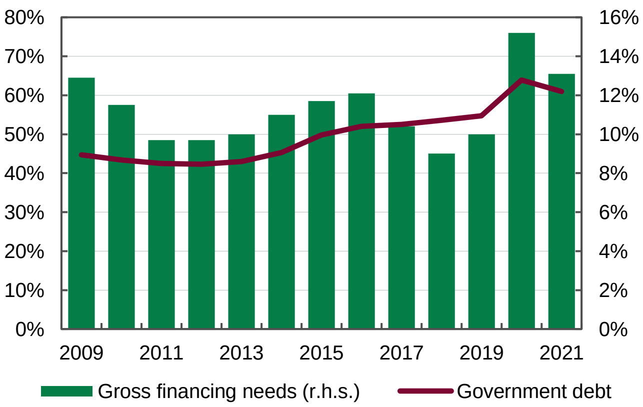
Figure 1.1.5. Changes in U.S. and EM stock market indices and U.S. dollar index, 1 January 2021 = 100%



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

Source: Federal Bank of St Louis, Morgan Stanley, US Federal Reserve System.

Figure 1.1.6. EM government debt and financing needs, % of GDP



Source: NBU, IMF, Global Financial Stability Report, April 2021.

African Republic, and a number of other countries also expanded their fiscal support programs in late 2020 and early 2021. At the same time, China, the economy of which has been growing for five consecutive quarters, moved to fiscal consolidation.

Higher rates on risk-free assets lead to higher borrowing costs for EMs

Interest rates on U.S. Treasury bonds, the world's key risk-free asset, have risen to pre-crisis levels, fueled by higher inflation and expectations that the Fed will respond to this trend with a rate hike. Rates stopped rising in April, but risks of future increases remained in place. This causes higher borrowing costs for EMs and a weaker appetite to invest in such debt instruments. This poses a risk to Ukraine, as the country relies heavily on foreign borrowing in order to refinance its old liabilities and finance its budget deficit. Given its current international credit rating and with no new tranches from the IMF in the pipeline, further growth in yields on U.S. dollar risk-free assets will lead to faster growth in borrowing costs for Ukraine.

Capital inflows to EMs were uneven

The Institute of International Finance (IIF) expects that portfolio investment inflows to EMs in 2021 will exceed the pre-crisis level of 2019. China will be the main recipient of international capital (accounting for almost 40%). The EM governments' needs to finance their budgets for 2021 will decrease compared to 2020, but will remain higher than before the pandemic.

Prices for EM assets grew more slowly than those for assets of advanced markets. Equity prices in Europe's frontier markets and the CIS countries remained almost unchanged. The exchange rate volatility of EM currencies was relatively low.

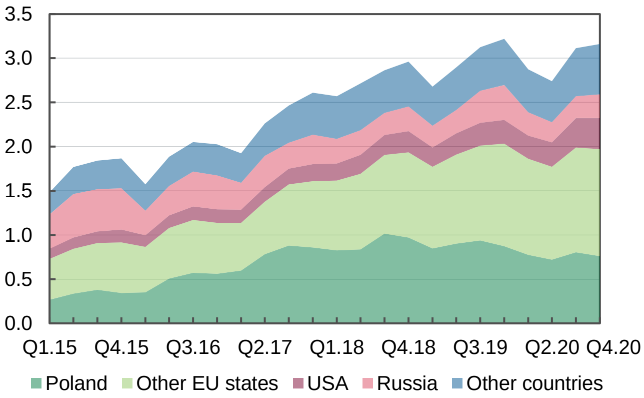
In the World Bank's estimates, global remittances from labor migrants in 2020 declined less than expected at the start of the crisis. Last year, remittances sent to low- and middle-income countries exceeded the amount of foreign direct investment and official assistance provided to these countries. Remittances to Ukraine rebounded after declining in the spring of 2020 and in early 2021. As these remittances come from developed countries, stable volumes can be expected.

Commodity prices soared

The recovery in the global economy and international trade, along with sectoral factors, caused a sharp rise in global commodity prices. This is favorable for Ukrainian exports. Higher demand and situational supply problems (particularly from Brazil) supported high steel prices. Ore prices are at a record high. Prices for Ukrainian food exports are on the rise, driven by bad weather (wheat), high demand from animal farming and bioethanol production (corn), and weaker harvests and decreased inventories (sunflower oil).

Crude oil prices will remain close to current levels. On the one hand, oil prices are supported by improved economic

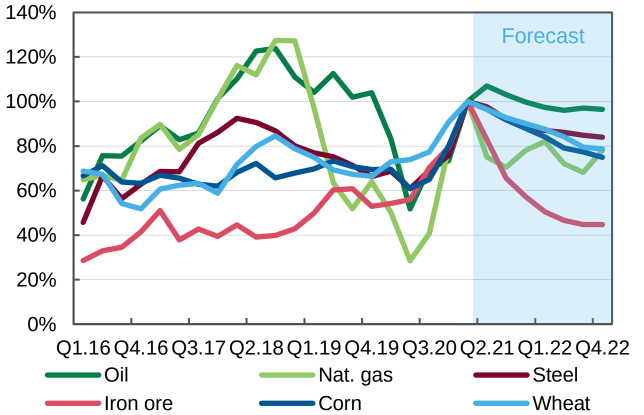
Figure 1.1.7. Private remittances to Ukraine, USD billions*



* From official and unofficial sources.

Source: NBU.

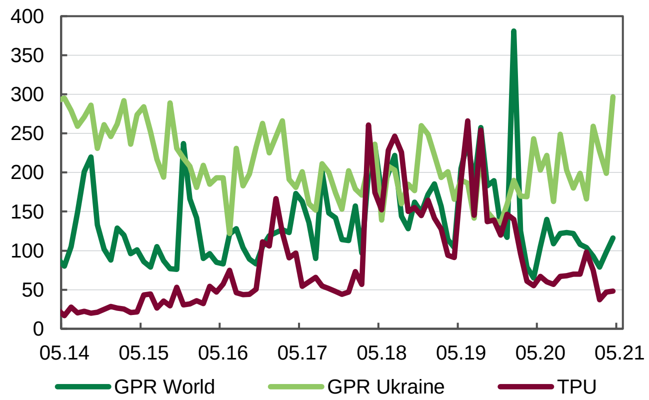
Figure 1.1.8. Global commodity prices*, Q1 2021 = 100%



* Oil – Brent; iron ore – China, iron ore fines 62%; steel – steel billet; wheat, corn – quarterly averages.

Source: NBU, Inflation Report, April 2021.

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



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

expectations and OPEC production cuts. On the other, they are restrained by a larger supply of oil from the United States and Russia, and by limited demand from India due to the coronavirus crisis. If an agreement with Iran regarding its nuclear program is reached, this may lead to an increase in supply and a decrease in oil prices. In the meantime, natural gas prices are rising, in particular due to tighter environmental requirements in the EU. This may pose a risk to the financial and economic stability of Ukraine.

Geopolitical risks rise again

Having declined in Q1, geopolitical risks have started to rise again. This has been caused by increased tensions between Russia and the West, Russian troops massing on Ukraine's borders, and the escalation of the Israeli–Palestinian conflict this spring. Relations between the Belarusian authorities and the rest of the world have become more difficult, especially after the forced landing of a plane belonging to Irish Ryanair airline in Minsk. Russia's influence on Belarus is becoming stronger. This may lead to reciprocal trade restrictions by Ukraine and Belarus, which accounted for almost 3% of Ukraine's exports. Trade policy uncertainty decreased across the globe, although the factor of a conflict in economic interests between the United States and China persists.

Russia escalates the situation on Ukraine's borders

In April, Moscow massed troops on Ukraine's borders. Further escalation was avoided thanks to the support shown by Ukraine's international partners. However, the troops were withdrawn only partially, new military units are being formed on Russia's western border, and the threat of new escalations persists. According to Russia, it handed out around 530,000 of its passports over two years to people in the non-government controlled areas of Donetsk and Luhansk oblasts. This complicates the conflict settlement.

As a Paris court of appeal has overturned a ruling by the International Tribunal on the case of Oschadbank versus the Russian Federation regarding compensation for losses incurred in occupied Crimea, the state-owned bank faced risks. Oschadbank appealed against this decision. At the same time, progress is being made in lawsuits against Russia in the European Court of Human Rights and the International Court of Justice in the Hague. Ukrainian companies that incurred losses because of Russian aggression in the east of Ukraine and the occupation of Crimea have filed a total of over USD 4.5 billion worth lawsuits for commercial arbitration.

Construction of Nord Stream 2 resumed

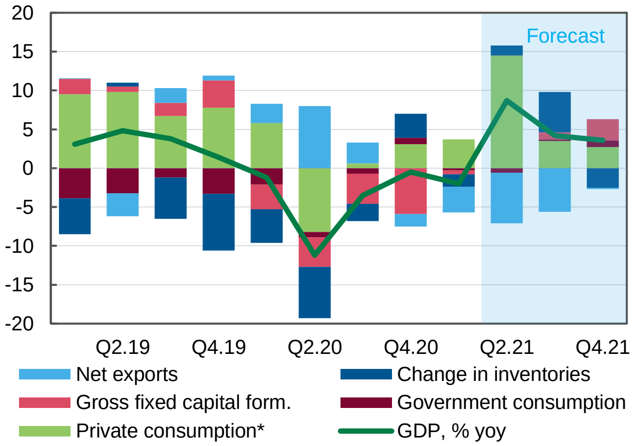
Russian vessels continued to lay the Nord Stream 2 gas pipeline in early 2021. In May, the U.S. president lifted sanctions against the pipeline's owner company in the hope of improving U.S. relations with the EU. In June, it was reported that the first string of the pipeline had been completed. This Russian project carries both economic and security threats for Ukraine. The U.S. Congress is considering re-imposing sanctions.

Part 2. Domestic Conditions and Risks

2.1. Macroeconomic and Fiscal Risks

High global prices and domestic demand are helping Ukraine's economy recover. However, the recovery is slower than expected. Monetary policy remains accommodative. At the same time, the NBU is starting to gradually phase out its anti-crisis monetary instruments. The main short-term risks include foreign-currency external debt repayments, which will peak in September. Cooperation with the IMF guarantees lower threats to financial stability, and must be continued. With the current credit ratings of Ukraine, the absence of continuous cooperation with international financial institutions would make the country very vulnerable to global economic shocks.

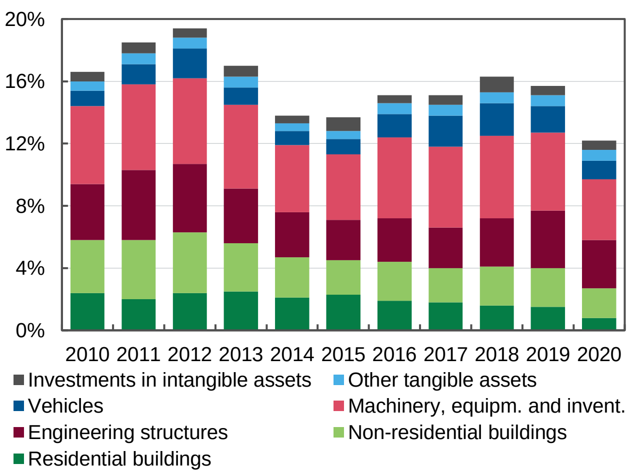
Figure 2.1.1. Contributions of final use categories in annual change of real GDP, pp



* Together with noncommercial organizations that serve households. Change over Q1 2021 is based on the SSSU estimate in May; estimates of contributions are provided by the NBU. The forecast for Q2–Q4 is based on the NBU's estimates, April 2021.

Source: SSSU, NBU estimates.

Figure 2.1.2. Capital investment by asset type in 2010–2020, % of GDP



Source: SSSU.

The economic recovery is slower than expected

According to current estimates, GDP declined by 2% yoy in Q1 2021. This result contrasts with the fast-paced recovery in consumer demand and the favorable situation in the majority of key economic sectors. GDP was negatively affected by lower volumes of goods exports, a rapid recovery in imports, and sluggish investment. Quarantine restrictions were an additional factor behind the decline.

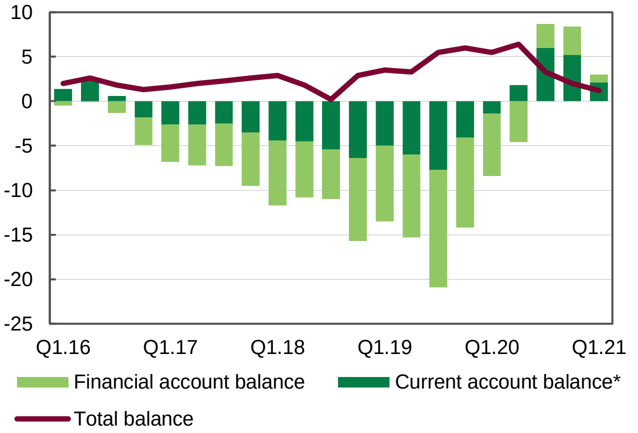
As in other countries, GDP growth yoy will be significant in Q2 thanks to the effect of the last year's low comparison base. All the same, the overall situation is improving: private consumption is surging, and trade conditions are very favorable for the main exporting industries. The risk persists that a new lockdown will be introduced if the number of COVID-19 cases starts to rise again. The vaccination campaign is still slow: only 4% of Ukraine's population had received at least one dose of the vaccine by mid-June. However, the economy has mostly adapted to working under the quarantine, while new restrictions are becoming more flexible for businesses. As of the end of the year, GDP should increase by 3.8%, and will be slightly less than in 2019. Investment activity is insufficient to boost growth rates.

Global prices contribute to the stability of the current account

A significant improvement in external economic conditions is supporting the growth in exports and thus also bolstering the economic recovery. In addition, high global prices have improved businesses' financial performance. In particular, the amount of profits reinvested by companies with foreign direct investment (FDI) was the highest since 2015. This component, which is reflected as payouts in the current account, caused a current account deficit in Q1 2021. At the same time, the growth in import volumes has been accelerating since the start of the year due to a recovery in consumer and investment demand and larger energy supplies. In such a way, the deficit in the trade in goods will widen by the end of the year, and the current account balance will remain negative.

The financial account recorded a small capital inflow in Q1. The inflow came from high reinvested earnings, which offset capital outflows from the private sector under other items. In turn, capital inflows continued to the government sector, although they were smaller than at the end of 2020. Their further dynamics will mostly depend on cooperation with the IMF, the situation on the international capital markets, and the

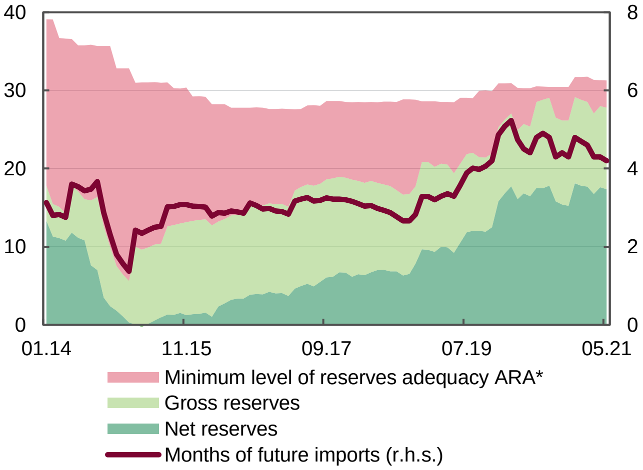
Figure 2.1.3. Balance of payments in 2016–2021, trailing twelve months, USD billions



* Current account and capital account.

Source: NBU.

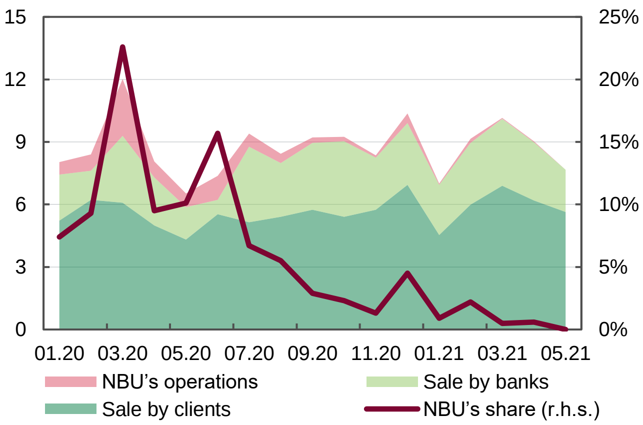
Figure 2.1.4. Gross and net international reserves, USD billions



* The minimum level of reserve adequacy ARA (Assessing Reserve Adequacy) is calculated by the IMF for countries with a floating exchange rate using the following formula: 5% × export volumes of goods and services + 5% × broad money + 30% × short-term external debt + 15% × other external liabilities.

Source: NBU.

Figure 2.1.5. Volumes of transactions to sell noncash foreign currency on the interbank market (USD billion, equiv.)*



* According to statistical reporting data provided by banks. Bank transactions on the terms of TOD, TOM, and SPOT; customer transactions on the terms of TOD, TOM, SPOT, and FORWARD; NBU operations – purchase and sale of currency; volumes of purchases/sales on the interbank FX market of Ukraine do not include internal transactions of banks with customers.

Source: NBU.

continuation of reforms. The baseline forecast envisages net capital inflows to Ukraine as of the end of the year – as a result of further growth in FDI, and an increase in borrowing by the government and private sectors.

Since the start of the year, the interbank foreign exchange market has been operating effectively almost without the participation of the NBU. Volumes of foreign currency purchased and sold by the NBU decreased several fold year-on-year. International reserves are at a relatively comfortable level. Their volume exceeds four months of future imports (while three months are considered sufficient), and is close to the minimum adequate level according to the IMF composite criterion.

Monetary policy remains accommodative

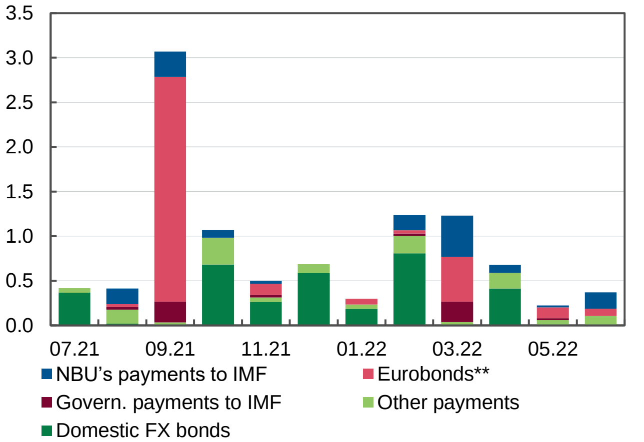
The rise in global prices – in particular, prices for food and energy – is one of the factors behind the higher inflation seen in Ukraine. Inflation deviated from the 5% ± 1 pp target range at the start of the year and continued to accelerate. The NBU forecasts inflation will return to its target range in 2022. Along with global prices, inflation is influenced by domestic consumer demand, which is actively recovering from last year's crisis, and rising administered prices. At the same time, prices for some raw foods started to decline in May, which will somewhat restrain inflation. Inflation is accelerating in most countries, including in the advanced economies. The acceleration is largely due to temporary factors and will be further constrained by increasing supply.

The NBU raised the key policy rate twice in H1, overall from 6% to 7.5%. However, monetary policy remains accommodative, with the real key policy rate being lower than its estimated neutral level. In June, the NBU kept the key policy rate unchanged. At the same time, the regulator decided to start unwinding anti-crisis monetary instruments such as long-term refinancing and interest rate swaps with the NBU, and stop providing them altogether on 1 October 2021 if there are no further significant shocks to the financial markets. The hikes of the key policy rate in March and April paused the cycle of reducing bank deposit rates. The impact of this spring's increases in the key policy rate on yields on newly placed domestic government debt securities was the most pronounced for short-term paper (three to six months). Concurrently, bonds with maturities of one year and more continue to be the most in demand. As the government has significant needs for financial resources, a decline in yields is unlikely in the near future.

The pause in cooperation with the IMF is a risk to macroeconomic stability

As yields on long-term securities in the United States increased at the beginning of the year, borrowing became more expensive for all issuers, including the Ukrainian government. High inflation in the United States may cause a new rise in long-term rates. This, in turn, may complicate Ukraine's access to borrowing from external markets. In the period when the effects of the crisis caused by the COVID-19 pandemic are still uncertain for financial markets, it is essential for Ukraine to have uninterrupted access to international official financing. The IMF program is a kind of

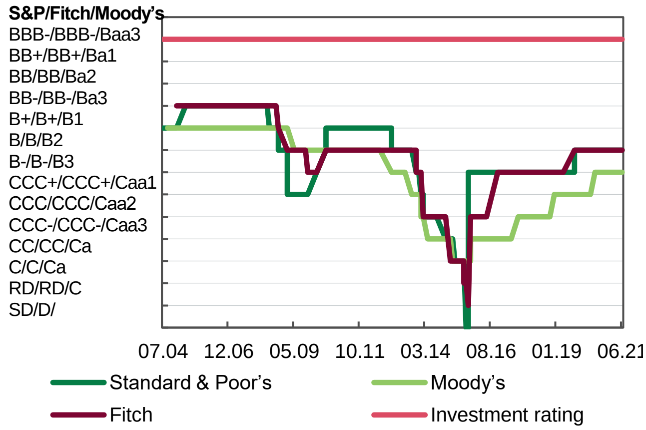
Figure 2.1.6. FX payments of the government and the NBU, USD billions equiv.*



* Including interests, ** including US-guaranteed Eurobonds worth USD 1 billion – to be repaid in September 2021.

Source: MFU.

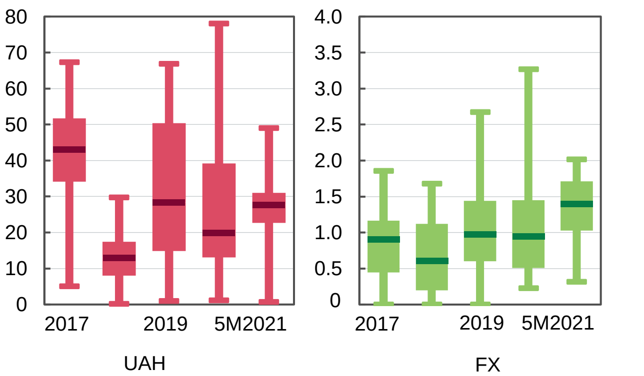
Figure 2.1.7. Dynamics of Ukraine's credit ratings*



* Ratings of long-term debt obligations in foreign currency in 2004–2021.

Source: NBU estimates.

Figure 2.1.8. Daily balances of Treasury's accounts in hryvnia and foreign currencies (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, MFU, NBU.

insurance policy for countries with low ratings, providing a guarantee that periods of repayments will be traversed orderly and with minimum risks to macroeconomic and financial stability. Under current conditions, Ukraine can raise funds from international capital markets even without the IMF program, although at a higher cost. However, the medium- and long-term planning of government finances should not be based on the assumption that markets will always remain favorable for non-investment-grade countries.

Debt refinancing and covering the budget deficit are the key fiscal risks

The schedule of debt repayments will remain tight for Ukraine in the coming years. In the next twelve months, FX repayments by the government and the NBU on public and publicly guaranteed debt will exceed USD 10 billion. In the hryvnia segment of the market, repayments of principal and interest in H2 will exceed UAH 130 billion. The repayments are distributed relatively evenly, which should not cause significant problems for the Ministry of Finance. However, average auction volumes should rise.

Financing needs could be moderated by the additional issue of Special Drawing Rights (SDRs) that is being considered by the IMF. The SDR issue would amount to USD 650 billion, and would be aimed at helping the global economy recover from the coronavirus crisis. If the IMF Board of Governors approves the issue, Ukraine will increase its international reserves by around USD 2.7 billion. Nevertheless, it is highly probable that the funds will be received after the period of peak repayments in September. It is also not clear if the funds could be used to finance the budget deficit.

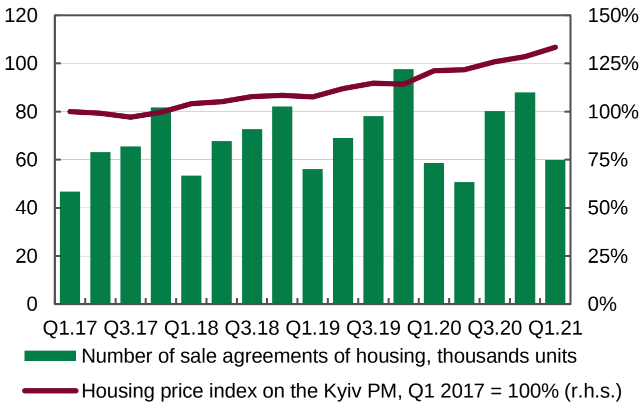
An increase in liquidity buffers is a necessary element of risk control

The government's liquidity improved slightly in the first five months of 2021. The average daily balances on the Treasury's hryvnia and foreign currency accounts were higher than or comparable with the balances of the previous three years. That said, the hryvnia balances were evidently more stable, which may indicate a certain improvement in budget governance. However, the liquidity buffer sometimes fell sharply below the minimum acceptable level. This points to the need for better forecasting of cash flows and an increase in the forecast horizon of the Single Treasury Account to 3–6 months. In particular, the forecast of annual transfers of the NBU's profit to the budget will be more accurate if it corresponds to the NBU's calculations. This will help avoid a recurrence of this year's situation, when the actual transfer turned out to be UAH 8.6 billion smaller than the amount approved by parliament.

2.2. Real Estate Market and Mortgage Lending

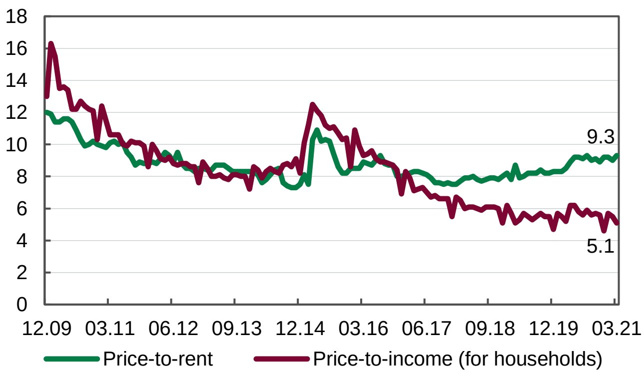
Demand for housing is gradually rising, fueled by the rebound in mortgage lending. Although prices are actively increasing, housing remains reasonably affordable by historical standards because house prices and household income are growing at comparable rates. In early 2021, new housing was commissioned at a fast pace, but the ongoing reform of the construction control system may slow the supply of new housing in the future. Mortgage lending is rallying rapidly, propped up mainly by lending for secondary market housing purchases. The primary housing market remains unregulated, which makes it less attractive to banks. Demand for commercial real estate remains sluggish, as the adverse impact of the pandemic continues.

Figure 2.2.1. Housing market activity



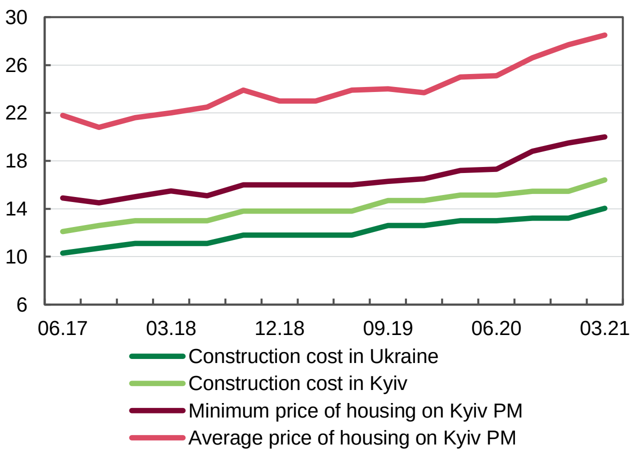
Source: Ministry of Justice of Ukraine, real estate agencies, NBU estimates.

Figure 2.2.2. Price-to-income and price-to-rent ratios of the primary real estate market of Kyiv



Source: SSSU, real estate agencies, NBU estimates.

Figure 2.2.3. Housing prices and construction costs, UAH thousands/sq. m



Source: Ministry for Communities and Territories Development of Ukraine, LUN website.

Demand for housing is rising

With the exception of 2020, which was an outlier, demand for housing in Ukraine has been rising slowly from year to year. Last year, this trend was interrupted by the weak Q2, the quarter in which the pandemic was spreading. Overall, the number of agreements concluded for the purchase/sale of residential property dropped by 7.8% in 2020 compared to 2019. In Q1 2021, purchasing activity on the housing market was almost one tenth higher than the first-quarter average for five years. Moderate growth in housing demand will persist in the years to come. This growth is being propelled by the gradual revival in mortgage lending and the rapid growth in household income. Housing demand is also being whipped up by lower deposit rates, which are encouraging some of those who have significant savings to look for alternative ways to invest.

Housing prices are on the rise: in April, price growth on both the primary and secondary markets in Kyiv exceeded 10% yoy. The growth resulted from several factors. First, construction costs are increasing: in April, the housing price index was 108.9 yoy. Second, the protracted reform of the construction control system may reduce the supply of new housing in the future, while the existing housing stock is relatively limited. Also, demand for housing is rising, partly due to the rebound in mortgage lending.

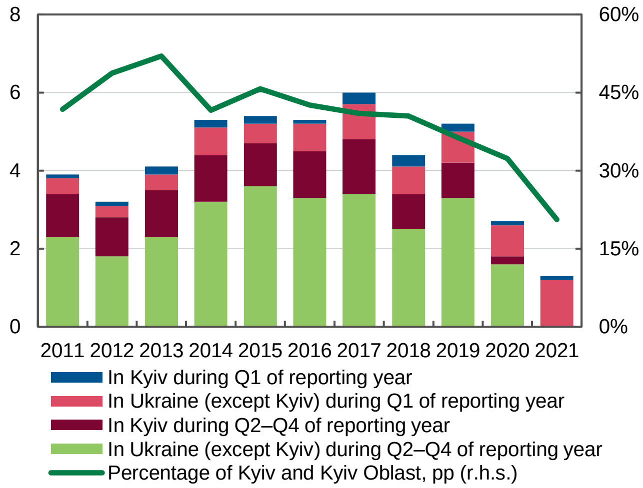
Although house prices are rising, housing remains affordable in relative terms. Prices and household income are growing at comparable rates. For over a year, the price-to-annual income ratio in Kyiv has been at its lowest in over a decade. Meanwhile, the price-to-annual rent ratio has increased by almost one point over the year, as rent prices have remained practically unchanged. As a result, housing has become slightly less attractive to buy-to-let investors. That said, the price-to-annual rent ratio in Ukraine is still rather low by international historical standards[2].

Housing construction has slowed in nominal terms

Last year the amount of commissioned housing decreased by one half on 2019. However, these data are not very informative. First, the long-lasting reform of the State Architecture and Construction Inspection of Ukraine (SACIU) limits growth in the supply of new housing. Second, last year the SSSU provided preliminary and incomplete data about new housing due to the transfer to the Single State Electronic Construction System. The new housing supply in Ukraine in Q1 2021 exceeded the first-quarter average over ten years by 1.5 times. It is likely that these data comprise some

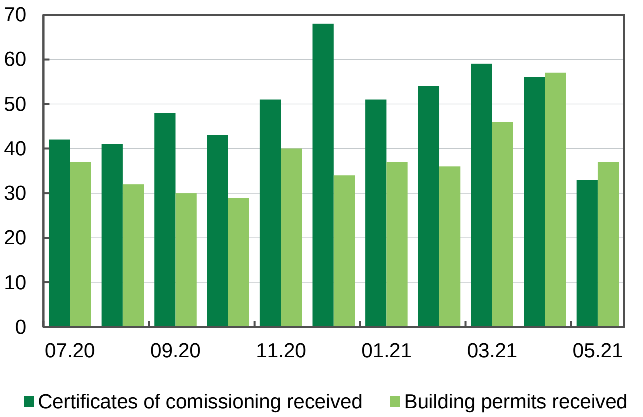
[2] According to international statistics, values below 15 indicate that it is more profitable to buy than rent housing. This means that house prices are relatively low.

Figure 2.2.4. Commissioned residential property in apartment blocks, millions sq. m



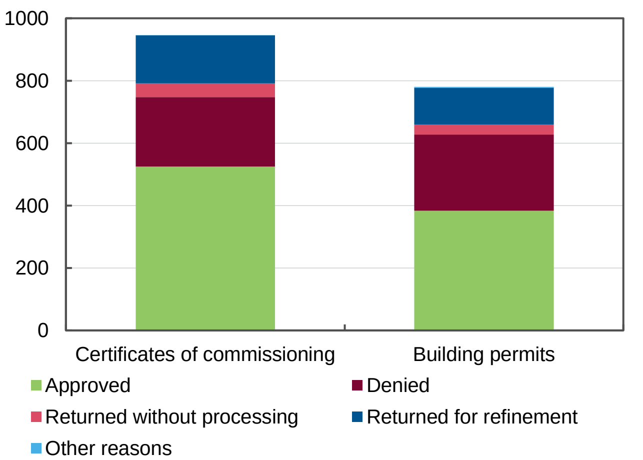
Source: SSSU.

Figure 2.2.5. Issued certificates of commissioning and permits to construct apartment blocks in Ukraine, units



Source: Single State Electronic Construction System.

Figure 2.2.6. Distribution of permissive documentation, submitted since May 2020* by status



* Data for May and June 2020 is incomplete.

Source: Single State Electronic Construction System.

completed facilities that were not included in the 2020 data. Housing commissioned in Kyiv in Q1 was still one fifth short of the ten-year average.

As of the end of May 2021, since the start of the year, Ukraine has issued 213 construction permits and 253 certificates commissioning new residential buildings. The average annual ratio of permits and certificates is about 3 to 4, which is rather low according to international standards[3], and could indicate a slower pace of commissioning of new housing in the future. An analysis of applications submitted over the last 12 months to obtain permits shows that only half of these documents are approved. The protracted reform of the control system of architecture and construction, which has been going on for over a year, prevents the real estate market from functioning properly. Any further delays in regulating the market will slow the creation of new housing supply in the future.

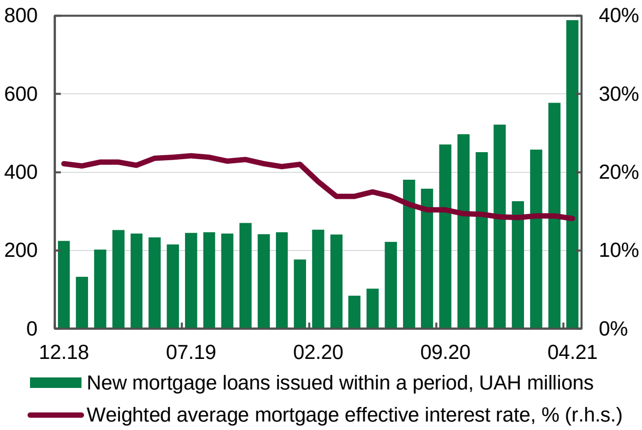
The current problems with the permit-issuing system are aggravating the underlying problem of the under-regulation of the primary real estate market. This results in tens of thousands of investors being defrauded and hundreds of construction projects being unfinished. In early 2021, parliament registered a draft law that strengthens the protection of investors' rights. If the law is adopted, Ukraine will have more reliable mechanisms for financing construction. Among other things, the law will introduce a guaranteed construction share, i.e. an area of housing that can only be sold after the construction is completed, and the procedure of registering ownership rights to uncompleted constructions. The next important step should be to make the market more transparent by requiring developers to disclose complete information, mainly on the number of their construction projects, their area, sources of financing, and the pace at which they are sold. Data on the state of the market should be up-to-date, exhaustive and publicly available.

Mortgage lending is rallying at a fast pace

Mortgage lending in Ukraine has been reviving actively since mid-2020. The revival was mainly driven by lower rates: the weighted average effective rate on mortgagees dropped by about 7 pp compared to the start of the previous year, and totaled 14.1% in April. In the first four months of the year, the number of new mortgages almost doubled, with the amount of mortgages nearly tripling yoy. Active mortgage lending in March and April is partly driven by the governmental support program. The growth in mortgage amounts was mainly fueled by loans for the purchase of secondary market housing. Over the last 12 months, only about 15% of new mortgages have been issued to purchase newly built property. In order to launch large-scale mortgage lending, it is crucial to ensure that the primary housing market is properly regulated and that the rights of creditors are better protected. The legal framework should guarantee a level playing field for both borrowers and creditors.

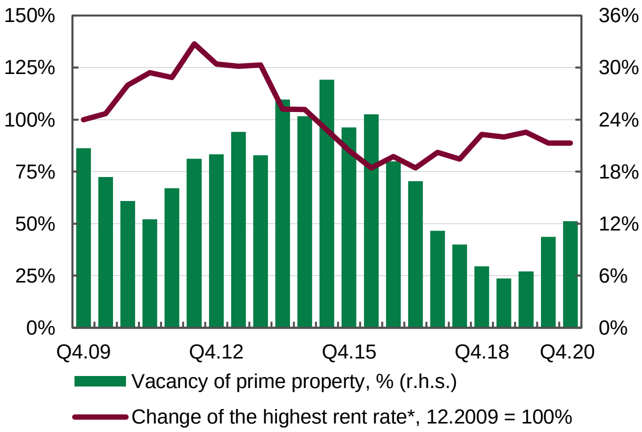
[3] Battistini, Niccolò, Le Roux, Julien, Roma, Moreno and Vourdas, John, (2018), The state of the housing market in the euro area, Economic Bulletin Articles, 7, issue , number 2, https://EconPapers.repec.org/RePEc:ecb:ecbart:2018:0007:2.

Figure 2.2.7. New mortgage disbursements and interest rates



Source: banks' data, NBU estimates.

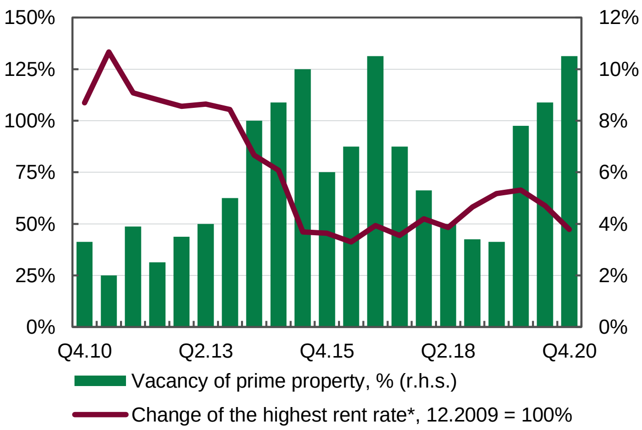
Figure 2.2.8. Performance indicators of office property market in Kyiv



* USD equivalent.

Source: consulting companies, NBU estimates.

Figure 2.2.9. Performance indicators of retail property market in Kyiv



* USD equivalent.

Source: consulting companies, NBU estimates.

In early 2021, the government launched the 7% affordable mortgage lending program, which offers reduced mortgage rates for borrowers. This program could boost demand for mortgages significantly. Since the banks alone bear credit risks under the program, they continue to apply their current approaches to assessing the creditworthiness of borrowers. The NBU assesses these approaches as being mostly conservative. One should bear in mind that a large increase in mortgages pushes house prices up. This is especially relevant in view of the problems with the primary housing market, which could speed this process up. Ensuring that a rebound in mortgage lending has only a moderate impact on house prices requires removing, in due time, barriers to the proper functioning of the market.

The commercial real estate market transformed during the quarantine

Only in May-June 2021 did the first signs of recovery on office premises market began to show. However, the market remains weak, as companies are returning to the office work format only gradually. Moreover, the supply of new premises has increased by 7% over the last year. Thus, the vacancy rate remains high, and tenants will therefore dominate the office market for a long time to come. Rent rates are below the levels seen before the crisis, but lessors are making increasingly fewer concessions to attract new tenants.

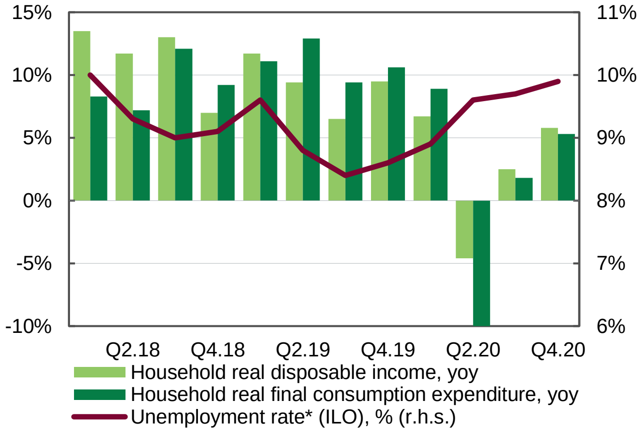
Full lockdown restrictions that were imposed on the sector of retail property on several occasions caused significant volatility in mall owners' incomes over the last 15 months. During the strict quarantine restrictions, lessors often had to set rent rates at their operating expenses level. That said, the market remains fundamentally sustainable, is recovering quickly and is expected to grow further. The key factor is high growth rate in retail turnover. New premises were brought to the market, albeit at a slower pace than previously expected. Vacancy rates on the market have not yet recovered to pre-crisis levels.

Commercial real estate market probably depends the most on further pandemic developments, which are still uncertain. Yet the impact of malls and business centers operations on the banking sector is limited. Total loans to the segment account for less than 2% of performing corporate loan portfolio.

2.3. Households and Related Risks

Household income is growing rapidly, as are wages, its main component. The rise is being driven by the post-crisis economic recovery. While households' perceptions of their well-being are still below pre-pandemic levels, consumer sentiment has already improved to pre-crisis levels. Consumer spending and loans are rising together with incomes and sentiment. However, the debt burden on households is still low. The propensity to save is high: deposits are growing, although a significant portion of savings are being held in current accounts.

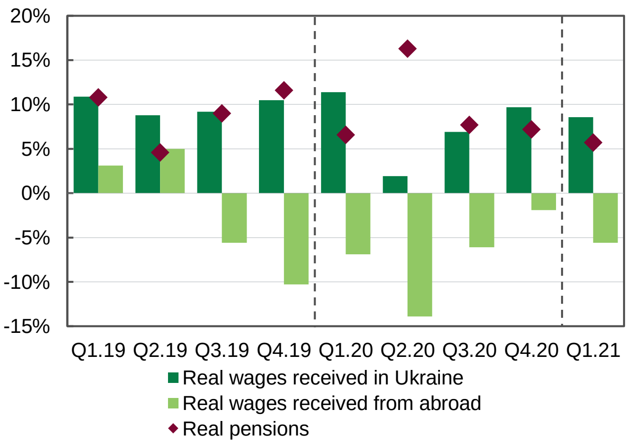
Figure 2.3.1. Change in real disposable income, consumer spending, and the unemployment rate



* Percentage of the economically active working age population.

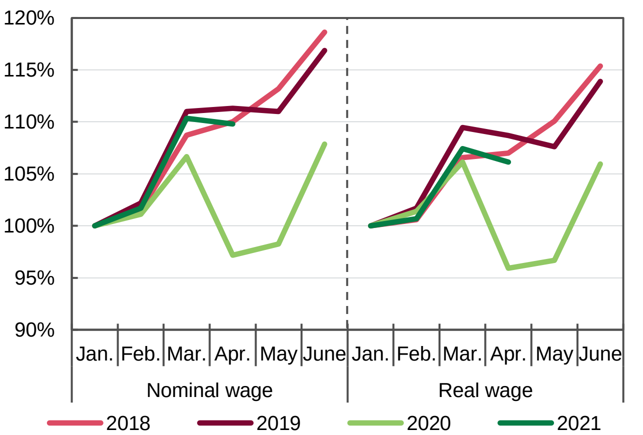
Source: SSSU, NBU estimates.

Figure 2.3.2. Change in real wage and pensions, yoy



Source: SSSU, NBU estimates.

Figure 2.3.3. Wage dynamics, January = 100%



Source: SSSU, NBU estimates.

Disposable income continues to grow

The major components of real disposable income have been growing since mid-2020. Specifically, its main component – wage – has increased. Nominal wages are rising at the same rate as was usual for this time of year before the pandemic. Real wage growth has been markedly slowed by inflation, which has accelerated in recent months. In the first four months of 2021, the average real wage increased by 11.3% yoy. Wages are being positively affected by the recovery of business activity amid the easing of quarantine. Remittances from migrant workers have been declining since 2020. However, this phenomenon is likely temporary: the recovery in the host economies, coupled with the simplification of border crossings as quarantine restrictions ease, will help revive migrant worker remittances.

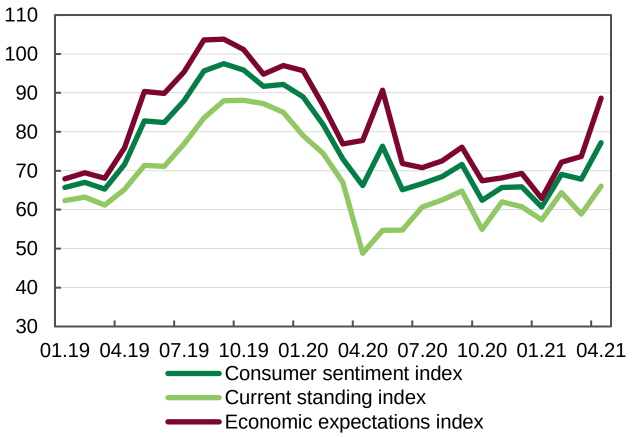
Having fallen during the crisis, the current household standing index is recovering slowly, according to an Info Sapiens survey. Only in April did it approach its pre-pandemic levels. Despite the growth in incomes, more than half of Ukrainian households consider their income insufficient to live on. This is evident from the results of the June express survey of the European Business Association (EBA). Respondents said that their income was enough for basic expenses, but not sufficient for vacations, luxury items, cars, or real estate. They said that they either would have to save over a long period of time to buy those things, or would never be able to afford them at all. This share increased by 10 pp for the year.

Real disposable income will continue to grow due to the economic recovery. According to NBU forecasts, real wages will grow by 8.6% yoy for the year, which will increase the income of employees, a key category of bank depositors and borrowers. However, slow vaccination and the instability of the epidemiological situation threaten to result in another tightening of quarantine measures. They, in turn, create difficulties for businesses, posing the risk of a slower rise in incomes.

Business sentiment deteriorated significantly

The fallout from the pandemic significantly affected the income of entrepreneurs, who account for a quarter of the households' disposable income. An EBA survey held in February 2021 showed a significant worsening of entrepreneurial sentiment due to weaker demand. During the year, the number of sole proprietors satisfied with the current standing of their business almost halved, to 24%. To support sole proprietors during the pandemic, the government introduced a number of tax breaks: some entrepreneurs were exempted from paying the single social contribution, they

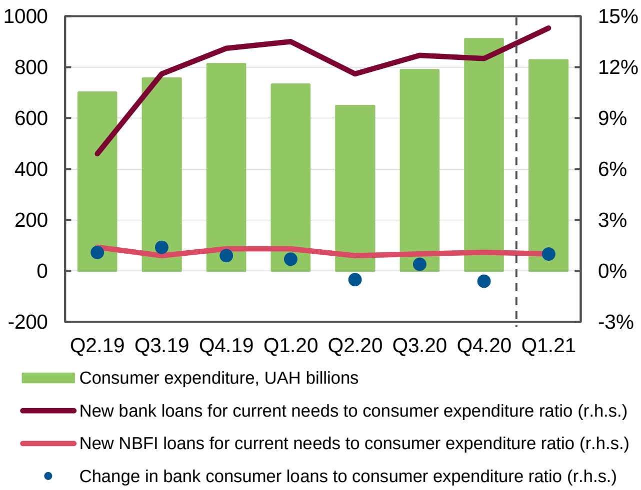
Figure 2.3.4. Movements in the consumer confidence and well-being index in Ukraine



A value of the index of 100 indicates neutral sentiments: equal shares of positive and negative assessments.

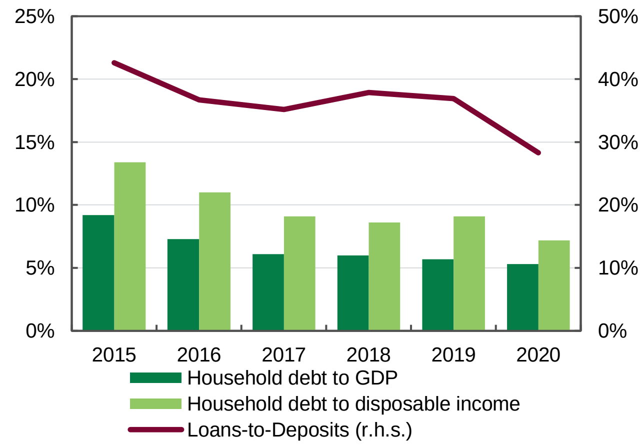
Source: Info Sapiens, monthly surveys of households (age 16+).

Figure 2.3.5. Impact of consumer lending on consumer spending



Source: SSSU, NBU estimates.

Figure 2.3.6. Household debt burden



Source: SSSU, NBU estimates.

were allowed not to pay fines or penalties, and their debts were partially written off. In addition, the preferential lending program “5–7–9” has been operating for about a year now. Moreover, about 340,000 sole proprietors and employees received one-off COVID-19 relief payments to reimburse them for the tightening of the quarantine in 2020.

Consumer sentiment fuels lending

According to Info Sapiens, consumer sentiment improved to its pre-quarantine level. It supports consumption and drives consumer lending. In annual terms, new hryvnia consumer loans from the banks grew faster than consumer spending. As a result, the ratio of new consumer loans from the banks to consumer spending reached an all-time high of 14%. For nonbank financial institutions (NBFIs), this figure is only 1%. Though still quite moderate, the impact of consumer credit on consumption is rising.

At the same time, the overall debt burden on households has continued to gradually shrink as the growth in nominal incomes has outpaced lending. The ratio of retail loans to GDP now approaches 5%. The loans-to-deposits ratio has fallen to a historic low. Such low rates indicate significant lending potential. The banks, for their part, perceive households’ demand for loans, especially mortgages, as high. They attribute the shift in demand to lower interest rates. Broken down by borrower group, the debt burden also remains acceptable, despite the crisis. (see Box 3. The debt burden on households remains acceptable).

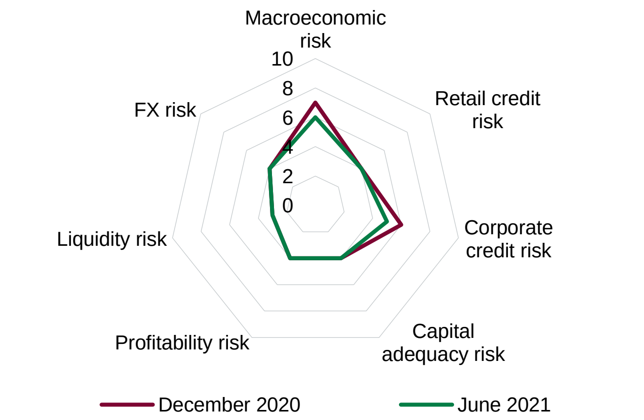
Households still have high propensity to save

Despite the recovery in consumer sentiment and costs, the supply of a number of goods and services remains limited. This is due to the periods of strict quarantine, as well as the slow recovery in services, especially tourism. Therefore, the unused portion of income generates savings. At the same time, instability in the labor market encourages low-income individuals to spend more cautiously. Driven by these factors, savings continue to grow.

Part 3. Conditions and Risks in the Banking Sector

3.1. Financial Sector Risk Map[4]

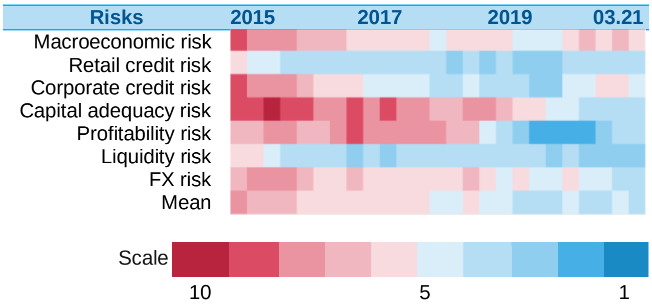
Figure 3.1.1. Financial Sector Risk Map*



* 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 heat map



Source: NBU estimates.

Description:

- Macroeconomic risk indicates the level of threats arising in the real economy or the fiscal area.
- Retail and corporate credit risks reflect 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

In Q1 2021, the macroeconomic risk returned to its pre-crisis level. This was facilitated by a favorable forecast for further GDP growth, the lower cost of five-year credit default swaps (CDS), and a sustained large surplus of the current account of the balance of payments.

Retail credit risk: unchanged

This risk has been moderate since H2 2020. Banks improved their expectations for the quality of their retail loan portfolios. The index of households' economic expectations also improved.

Corporate credit risk declined

The credit risk of corporate borrowers is moderate. Two opposing factors are influencing this indicator. On the one hand, the business outlook index and expectations for bank loan portfolio quality are improving. On the other hand, last year's crisis has weakened companies' financial performance.

Capital adequacy risk: unchanged

The capital adequacy risk is moderate, as evident from strong capital adequacy ratios. The decline in the ratio of common equity and assets of banks – the leverage ratio – has been the main drag on capital development recently.

Profitability risk: unchanged

The majority of profitability ratios, namely the rate of return and net interest margin, indicate that this risk is low. An increase in the ratio of operating expenses to income of banks in late 2020 had the most negative impact on the assessment of this risk.

Liquidity risk: unchanged

The liquidity risk remains at an all-time low. This is driven in particular by the rapid growth in retail deposits.

FX risk: unchanged

The FX risk remains moderate thanks to low exchange rate volatility, sufficient international reserves, and upbeat market expectations.

[4] The financial sector risk map was updated in 2021. In particular, its calculations are now based on quantitative indicators. Read more about the calculation methodology in Box 1. New Methodology for Building Financial Sector Risk Map.

Box 1. New Methodology for Building Financial Sector Risk Map

From June 2021, the NBU changed the methodology used to construct its financial sector risk map. The methodology is now based only on quantitative risk indicators. The list of risks has also been updated, with financial risks now including macroeconomic risk. The new risk map reflects risk assessments over a horizon of the next 12 months.

A risk map is an analytical tool for detecting, analyzing, and visualizing risks to the financial system. Around the world, regulators responsible for financial stability often develop and publish their own risk maps. However, the contents of each risk map differ, depending on the specifics of each country's financial system and the needs of the risk map's users. The NBU has been publishing its risk map since 2015. Formerly, the assessments relied heavily on expert judgments by NBU staff. In 2021, this tool has been reworked to take into account the risk map methodology used by other central banks. Thus, the assessments will from now on depend only on quantitative indicators.

Since Ukraine's financial system is bank-centered, and only banks carry systemic risks, the risk map is based on banking sector risks. The updated risk map also includes assessments of macroeconomic risk.

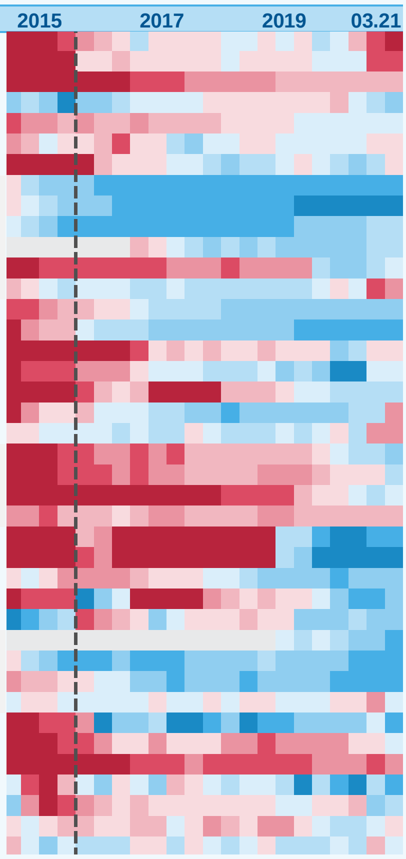
When building the risk map, the NBU referred to a wide range of indicators used by other central banks, supplemented by indicators that are specific to Ukraine. The final list of indicators is made up of those able to provide an early signal that risks will build up and materialize in the next year. Each risk group contains four to seven indicators.

The values of multi-format indicators were normalized to conform to a common scale, with the various risk assessments being marked in different colors. The highest assessment is 10 (dark red), which signals that the risk is major. The lowest assessment is 1 (dark blue), which indicates that the risk is negligible. Each indicator was assigned ten ranges of values, which correspond to the relevant assessments. The ranges were set in a way that ensures an even distribution of the historical values of indicators within the ranges. In order to improve assessment accuracy, data from peer countries (emerging markets and trading partners) were sometimes used, following the same principle. The resulting color pattern makes it easy to interpret the level of risk for each indicator.

Finally, the assessments of the indicator groups were averaged in order to obtain a score for each type of risk. The aggregated mean average for all of the risks was then calculated in the same way. In future, the risk map will be used in the usual abbreviated format, presented as a breakdown by risk.

Table 1. Risk map indicators

Risk	Indicator
Macroeconomic risk	Real GDP change, yoy
	Real GDP change forecast, yoy
	Gross external debt to GDP
	Current account balance to GDP
	Public and publicly guaranteed debt to GDP
	Budget deficit to GDP
	Price of 5-year CDS sovereign Eurobonds
Retail credit risk	Gross retail bank loans to GDP
	Gross retail bank loans to disposable income
	Debt service-to-income ratio
	Share of loans past due for more than 30 days
	Index of economic expectations
	Expected change in the quality of retail loans*
Corporate credit risk	Net corporate bank loans to GDP
	Gross debt to EBITDA
	Return on capital
	Interest coverage ratio
	Share of company defaults
	Business outlook index
	Expected change in quality of corporate loans*
Capital adequacy risk	Regulatory capital adequacy ratio
	Core (Tier 1) capital adequacy ratio
	Net nonperforming loans to capital
	Capital to net assets
Profitability risk	Return on capital
	Return on assets
	Net interest margin
	Cost-of-risk
	Cost-to-income ratio
Liquidity risk	LCR (all currencies)
	Share of high-quality liquid assets
	Net loans to deposits
	Expected change in liquidity risk*
FX risk	Volatility of UAH/USD exchange rate
	International reserves to imports
	Share of bank FX loans issued to corporates
	Net open currency position to regulatory capital
	Depreciation expectations of businesses
	Depreciation expectations index of households
	Change in FX risk of banks*



Scale 1 2 3 4 5 6 7 8 9 10
− ← lower risk higher risk → +

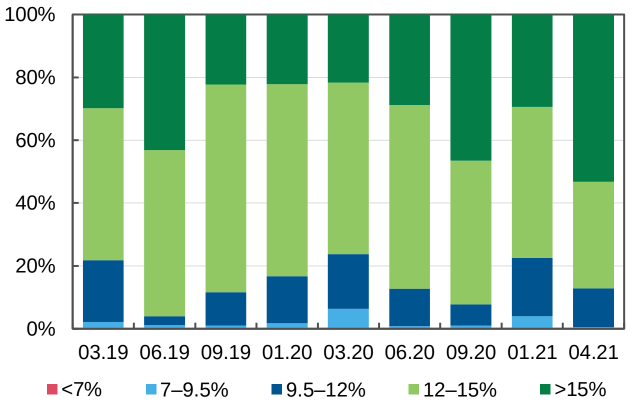
* According to the Bank Lending Survey.

Source: NBU estimates.

3.2. Capital Adequacy Risks

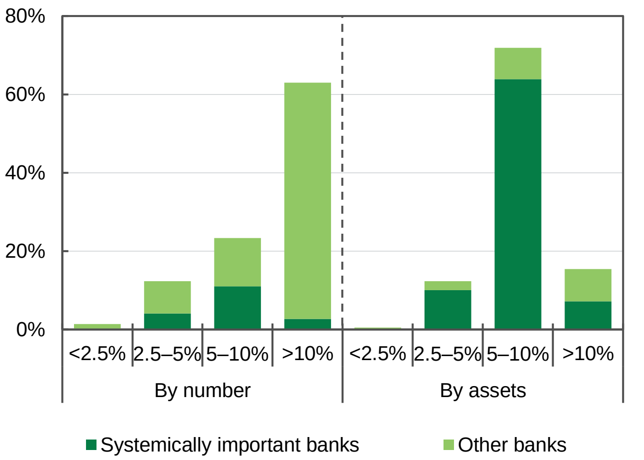
The crisis has not shaken the financial resilience of the banks, as they have retained substantial capital cushions sufficient to cover the main risks. Of course, certain risks to capital persist, but they are not systemic in nature and arise from the inefficient operations of some institutions. At the same time, given the economic recovery, the re-introduction of the capital requirements – the implementation of which was postponed last year – is back on the agenda. The main requirement is to re-impose capital buffers. As can be seen from the current high profitability of the sector, most banks can easily build capital conservation and systemic importance buffers within a year. The banks already have capital cushions that exceed minimum requirements. Therefore, the NBU will soon decide on a convenient schedule for the banks to build capital buffers.

Figure 3.2.1. Distribution capital adequacy ratio by banks' assets



Source: NBU.

Figure 3.2.2. Banks' distribution by the core capital adequacy ratio above the minimum requirements, as of April 2021



Source: NBU.

The banks' capital adequacy remains high

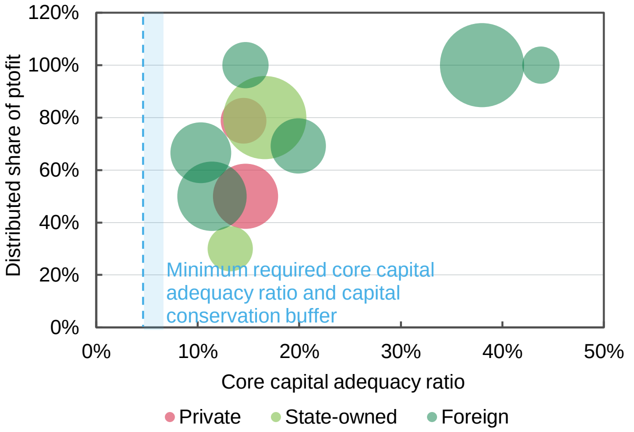
The banking sector's capital adequacy has been well above the minimum level for several years running. In May, the weighted average core capital adequacy ratio stood at 17.9%, having increased by 1.2 pp since the start of the year. Profits have been the main source of the banks' capital in recent years. Capital growth, generated by large profits, markedly exceeded the growth in risk-weighted assets. The solvency margin of most banks did not decrease even in the face of the crisis. The state-owned Ukreksimbank was the only large bank that had to raise funds from shareholders. That said, the bank's insufficient capital was the legacy of previous crises, rather than fallout from the coronavirus crisis.

The banks should hold capital in excess of minimum requirements

Before the onset of the coronavirus crisis, Ukrainian banks had to gradually build capital buffers in excess of minimum requirements. These were the capital conservation buffer of 2.5% of risk-weighted assets for all banks, and the systemic importance buffer of 1% to 2% for systemically important banks. These buffers, built of core capital instruments in good times, can be used by banks to absorb losses in bad times. The capital conservation buffer decreases the risk that a bank fails to meet the minimum capital adequacy requirement in the future. The additional systemic importance buffer enhances the ability of systemically important banks to absorb losses, thus reducing the probability of crises and the extent of their consequences for the system. The banks must hold these buffers at all times: according to generally accepted practices regulators do not deactivate such buffers in bad times. At the same time, these buffers can be used to absorb losses. If a bank breaches the buffers due to heavy losses it incurred in a crisis, no sanctions are imposed on the bank. However, the breach triggers tight restrictions on capital distributions, in particular dividend payments. In this light, the buffers act as a soft stimulus for banks to augment their capital by retaining their profits.

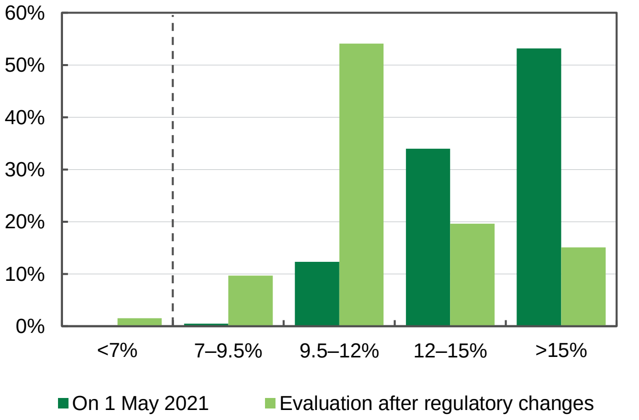
In early 2020, the NBU cancelled the requirement that the banks build both buffers because of the economic crisis. The introduction of the buffers was postponed until better times. The banks were recommended to retain their capital rather than distributing it as dividends.

Figure 3.2.3. Share of 2020 profits, distributed as dividends, and core capital adequacy ratio less declared dividends



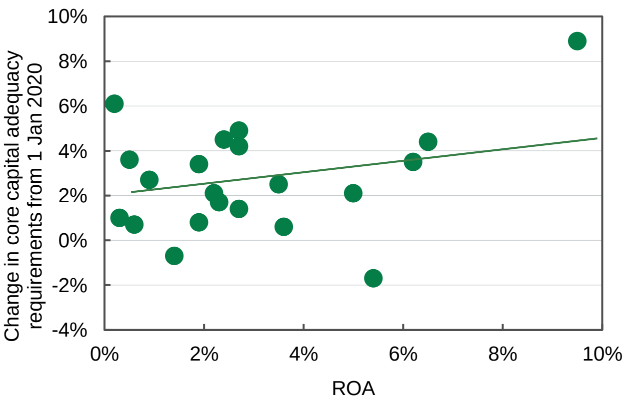
The size of the circle corresponds to the return on equity (ROE).
Source: NBU.

Figure 3.2.4. Banks' distribution in terms of the core capital adequacy ratio before and after the planned regulatory changes* by the share in the sector's net assets



* Planned regulatory changes include capital requirements for operational risk and higher risk weights for unsecured consumer loans.
Source: NBU.

Figure 3.2.5. Change in the core capital adequacy requirements from January 1 2020 to May 1 2021 and the average return on assets for 2019–2020



Data of 25 largest banks (excluding Russian banks).
Source: NBU.

The banks effectively have the required capital buffers, despite the buffers being postponed

Although there is currently no requirement that the banks build and hold capital buffers, 88% of Ukraine's banks in effect have capital conservation buffers. What is more, the current capital adequacy of all systemically important banks exceeds the total of the minimum required amount and the two buffers: the capital conservation and systemic importance buffers. This indicates that the banks are applying reasonably conservative approaches to capital planning, which they should retain in future.

The banks' dividend policies also show that the banks have a well-established practice of holding capital above the required minimum amounts. The economic recovery that started in H2 2020 enabled the banks to more accurately assess the credit losses they incurred because of the crisis. This also enabled the banks to update their capital needs estimates. Given the updates, some banks decided to pay out dividends. Nevertheless, even those banks that distributed their profits as dividends retained substantial capital cushions in excess of the minimum regulatory requirements. This means that when planning their capital, the banks are already trying to set aside capital as buffers.

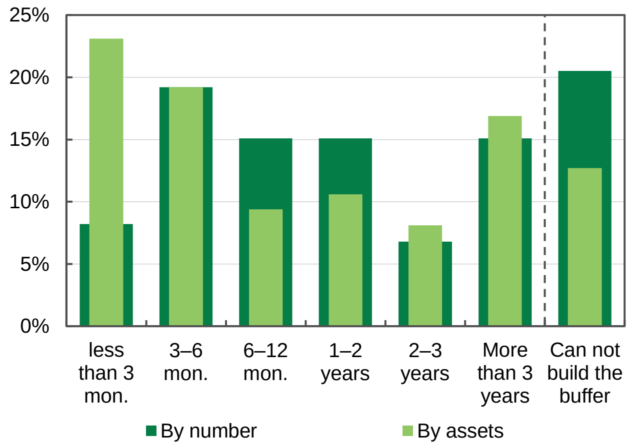
The banks will need the capital cushions they have accumulated to meet the revised regulatory requirements. Already starting from 1 July, risk weights for unsecured consumer loans will increase from the current 100% to 125%, and will rise to 150% from 1 January 2022. In addition, on 1 January 2022, the NBU will introduce minimum capital requirements to cover operational risk. The fact that the banks were able to navigate through the crisis smoothly, coupled with their high profitability, signifies that the introduction of these new requirements is properly timed, and will not put any excessive pressure on the financial institutions. Moreover, the banks' capital adequacy will be well above the minimum requirements even after the introduction of the above changes.

High profits are enabling the banks to meet buffer requirements while also actively lending

It is important to ensure that during the economic recovery, when the economy needs additional credit resources, the banks are able to increase their capital buffers without slowing down lending. That is why the NBU calculated how much time the banks need to build their capital conservation buffers while also expanding their loan portfolios by 15% every year. The calculations assumed that the banks' ROA would remain at the average level of the last two years. For the system as a whole, this figure exceeds 3%. It was also assumed that the estimated profit for each year was used exclusively to increase the capital, and that no dividends were paid out.

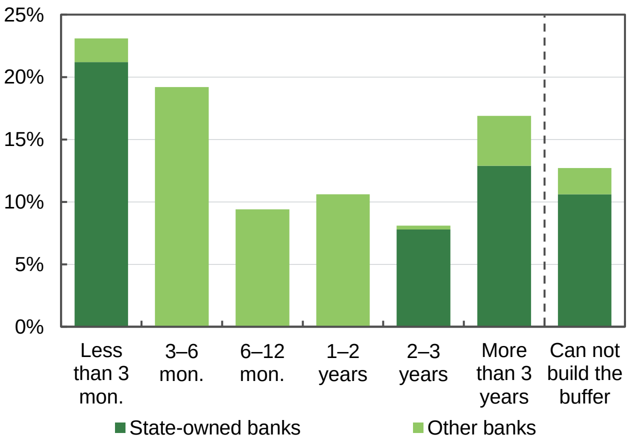
Most banks will not require more than one year to form their capital conservation buffers in full. These banks account for 51% of the sector's total assets. Banks that account for 30% of the sector's assets will either be unable to build capital

Figure 3.2.6. Banks' distribution by timespan needed for building a capital conservation buffer



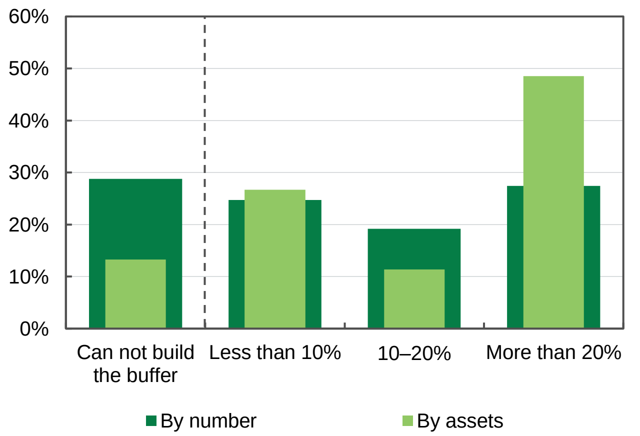
Source: NBU.

Figure 3.2.7. Banks' distribution by net assets depending on the time needed to build the capital conservation buffer



Source: NBU.

Figure 3.2.8. Banks' distribution by the acceptable loans' annual growth rate with a 2-year capital conservation buffer accumulation



Source: NBU.

buffers themselves due to incurring losses, or will need more than three years. This category comprises two state-owned banks. However, the estimates for these banks are less relevant, as they are based on their historically low profitability, and do not take into account the ongoing transformations of these banks' business models. The remaining banks will need from one to three years to build capital buffers. Therefore, on average, the banks will be able to build their capital conservation buffers in 15 months, maintaining their current profitability and ensuring portfolio growth much higher than it is now. The difficulties some banks might have with building their capital buffers arise neither from the state of the banking sector nor the macroeconomic environment. Rather, they result from their perennial problems: low asset quality and operational inefficiency.

In this light, the NBU will soon be in the position to decide on the schedule for reintroducing buffer requirements. In future, the central bank will follow common practice, which does not provide for the deactivation of buffers during crises.

The NBU continues to introduce new elements to the banks' capital management system

The challenges that the banks will face in the coming years will require them to hold sufficient capital to cover their operational and market risks, as well as increased risk weights for unsecured consumer loans. The banks will also be required to deduct the value of noncore assets from their capital and to adopt a new capital structure. Constant losses, low efficiency and large concentrations of noncore assets pose a threat to the capitalization of some banks, preventing them from generating capital on their own.

This year's stress tests, the results of which will come out in late 2021, will identify potential threats to the banks' capital. As usual, the stress tests will include two scenarios – the baseline and adverse ones – and will cover credit, interest rate and FX risks. Because of the crisis seen in 2020, the adverse scenario assumes a moderate but prolonged economic downturn. For the first time, the stress tests will include the risk that the banks sustain losses from a fall in the value of domestic government debt securities due to a rise in securities' yields under unfavorable macroeconomic conditions. The NBU will take stress test results into account when deciding on the schedule for introducing capital buffers.

The banks should now start factoring in future requirements when planning their capital. These requirements mainly consist of increased minimum capital requirements and capital buffers. On top of the regulator's requirements, the banks should also factor in specific risks when planning their capital. The internal capital adequacy assessment process (ICAAP), which is planned to begin in test mode in 2022, will enhance the effectiveness of capital planning.

Box 2. The Internal Capital Adequacy Assessment Process (ICAAP)

The NBU continues to implement European capital requirements. The banks' implementation of the internal capital adequacy assessment process (ICAAP) is an important element of these requirements. The ICAAP will be launched in test mode in 2022. Further on, the ICAAP should enhance the effectiveness of the banks' capital planning, while also improving the quality of banking supervision.

The Basel Committee on Banking Supervision (the BCBS) laid down the basic principles of modern banking supervision in standards it set in 1988. These standards set out uniform minimum capital requirements. Over time, the development of the banking sector and the greater complexity of banking operations revealed shortcomings in these requirements. For one thing, meeting the minimum requirements does not cover the specific risks faced by individual banks. That is why in 2004 the BCBS proposed revised requirements, known as Basel II, which comprises three pillars. Pillar I sets out minimum requirements. Pillar II outlines the process of banking supervision (the SREP according to the EU approach), during which the regulator assesses the risks of a bank, and can set additional capital and liquidity requirements for individual banks. Pillar III established standards for market discipline and the transparency of banks' activities.

According to SREP methodology, supervisors focus on four areas when assessing banks. First, supervisors assess the viability of a bank's business model and development strategy. Second, regulators look closely at a bank's corporate governance and internal controls. Third, they assess whether a bank has sufficient capital to comply with regulatory and supervisory requirements and to absorb all substantial risks, apart from those covered by Pillar I. Fourth, supervisors assess liquidity risks.

When assessing whether or not a bank has sufficient capital to cover all material risks, a regulator must ensure that:

- the minimum capital requirements adequately cover the bank's credit, market, and operational risks
- the bank has sufficient capital to cover all of its other material risks
- the bank will have enough capital to remain solvent even if adverse events materialize
- the bank's capital risk management system has no serious shortcomings, or the bank holds sufficient capital to minimize any adverse effects from such shortcomings.

A bank's own assessment of its capital is an important input of the supervisory assessment of capital adequacy. The ICAAP is an internal exercise whereby banks assesses the amount of capital they need to implement their strategy over a three-year horizon, taking into account all substantial risks and stress scenarios. In addition, banks assess the effectiveness of some of their business lines, factoring in the risks that arise from them, and can reallocate available capital between business lines most effectively. If necessary, banks can plan to raise capital in advance. Therefore, the ICAAP provides significant inputs for the effective implementation of the SREP, while also being important for effective capital management and a bank's understanding of its risks.

The ICAAP integrates two perspectives – the economic and the normative ones. Under the economic perspective, banks quantify all of their risks. This means that banks calculate the amount of capital that can adequately cover their potential losses from risks over a one-year horizon with a high level of confidence. Banks can select the methodology and relevant assumptions for their assessment, while also being required to take into account significant planned changes in their risk profile. Apart from making an assessment under a baseline scenario, banks must assess their risks under stress conditions. Then banks sum up the assessment of all material risks made separately under the baseline and shock scenarios, with the larger assessment determining the required capital under the economic perspective. This required amount must be fully covered by available core capital.

Under the normative perspective, banks assess their ability to meet regulatory capital adequacy requirements over a three-year horizon. This assessment is based on two scenarios: a baseline one (envisaging the implementation of a bank's strategy) and an adverse one. Adverse scenarios, which are developed by banks, must assume the materialization of low-probability crisis events that are relevant for a specific bank, while also identifying the bank's material risks. Banks must hold sufficient available capital to meet regulatory requirements under both scenarios.

Therefore, the economic perspective is more bank-specific, with the capital calculated under this perspective being sufficient to cover unexpected losses with a high confidence level. In contrast, the normative perspective provides a rougher assessment of a bank's ability to meet regulatory requirements under any conditions. The perspectives are interrelated, and their assessments of risks and losses should be comparable. If a bank identifies a certain level of risk under the economic perspective, it must show a comparable sum of losses from this risk under the normative perspective. Significant discrepancies between assessments of the same risks may indicate that the models used were of poor quality, or that underlying assumptions were flawed. Therefore, banks must compare the outputs under both perspectives, ensuring they are consistent.

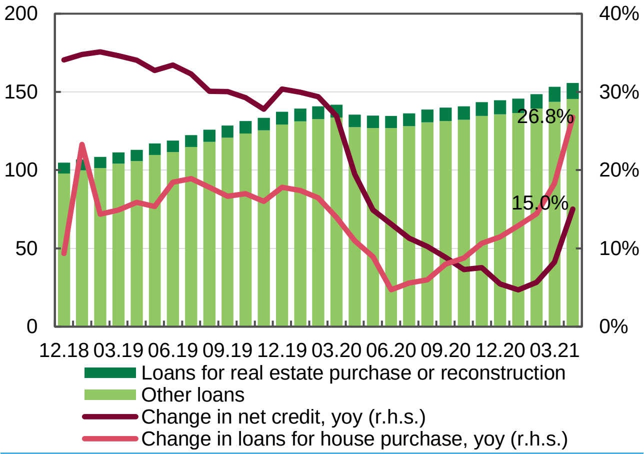
As part of the ICAAP, banks are required to draw up plans to maintain sufficient capital under both perspectives. The ICCAP also provides for the following capital management measures: the assessment of risk-adjusted return on business processes, the allocation of capital between business lines depending on this return, setting justified limits on operations, and other measures. The ICAAP is essentially a continuous process, as capital adequacy must be constantly monitored, and all calculations must be updated in a timely manner.

In Ukraine, the ICAAP will be launched in test mode starting in 2022. The banks will be given about a year to prepare for the full introduction of the requirements from 1 January 2023. After that, ICAAP outcomes will feed into the SREP.

3.3. Retail Lending Risk

Having shrunk during the crisis, the retail portfolio of the banks is growing significantly. Its monthly growth rate now even exceeds its pre-quarantine pace. Most noticeable is the surge in mortgage lending, although this portfolio is still quite small. Despite the effects of the crisis, the quality of the portfolio remains acceptable, while the NPL ratio is actually declining. In the retail lending market, the segmentation of financial institutions is noticeable. Those working mostly with unsecured loans for current needs are now seeing the highest returns, but are also facing higher risks. Several banks are already placing a particular focus on mortgage lending. The rest are focusing on several areas at once.

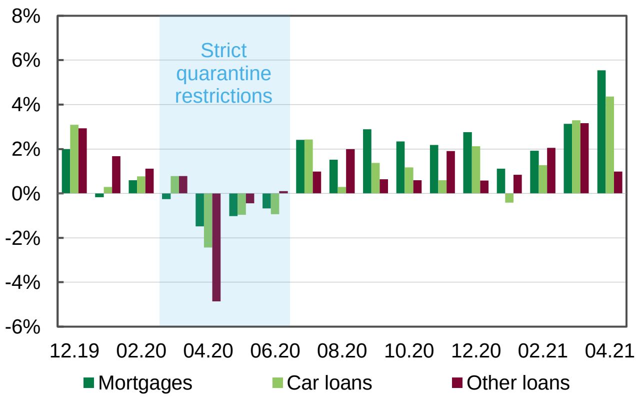
Figure 3.3.1. Net hryvnia retail loans, UAH billions



At solvent banks as of 1 May 2021.

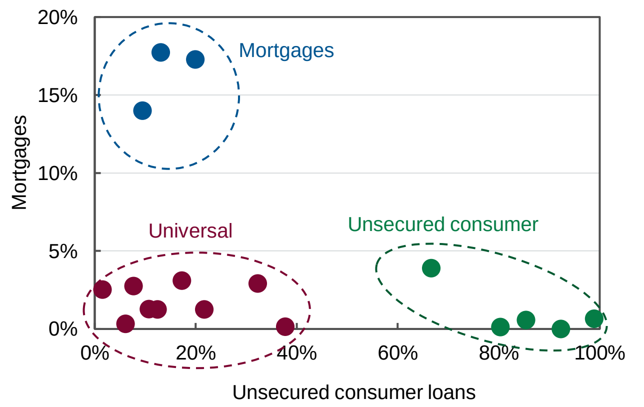
Source: NBU.

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



Source: NBU.

Figure 3.3.3. Distribution of banks* by share in loan portfolio (retail and corporate) of unsecured consumer loans and mortgages, as of 1 May 2021



* At 17 largest banks in terms of net retail loans.

Source: NBU.

Retail lending is picking up

The breakdown of the retail loan portfolio has been stable for a long time. As before, most of it is made up of unsecured consumer loans. These account for 85%. Car loans make up a further 9%, and the remaining less than 7% are mortgages. All three segments actually grew during the crisis, and this growth has accelerated since the start of 2021. The monthly growth rate of the unsecured portfolio recently approached its pre-quarantine level. However, these indicators fall significantly during the periods of strict quarantine. In April, this part of the retail portfolio grew by 15% yoy. The car loan portfolio is also growing at a similar pace. Mortgages are growing even more dynamically.

Today, the prerequisites are in place for the retail portfolio to continue to grow rapidly. The banks note an increase in the demand for loans, including record-high demand for mortgages. In the mortgage segment, this trend is driven by lower interest rates and expectations of the development of the real estate market, while in the retail lending segment demand is fueled by upbeat consumer sentiment.

The retail lending market remains clearly segmented

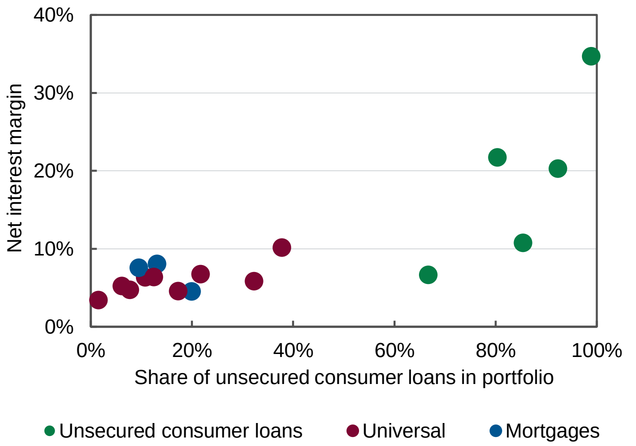
The banks that actively lend to households fall into three groups. The first specializes in unsecured consumer loans – mostly card-based and cash ones[5]. This group's portfolio has almost no other products. PrivatBank is also in this group. This bank also leads the way in mortgage lending, but its volume of mortgages is still too small in comparison to its total portfolio, and does not determine its business model. The second group of banks focuses on mortgage lending. For the most part, they combine mortgages with car loans. These banks also have unsecured consumer loans in their portfolio, or loans secured by titles to unbuilt real estate. The third group includes banks that are active in both the retail and corporate lending markets. Mortgages as a share of their portfolio are not significant: The core of their portfolio is made up of unsecured loans, or car loans. In group three, only the state-owned Ukrgasbank and Oschadbank are actively increasing their share of mortgages.

Banks' focus on segments defines their operating and financial priorities

The breakdown of the loan portfolio largely determines the profitability of the banks. Unsecured consumer loans come with the highest interest rates. The banks for which these loans make up most of their portfolio have the highest net interest margin. In 2020, this margin actually increased: the rates on these loans practically did not decline, while the cost

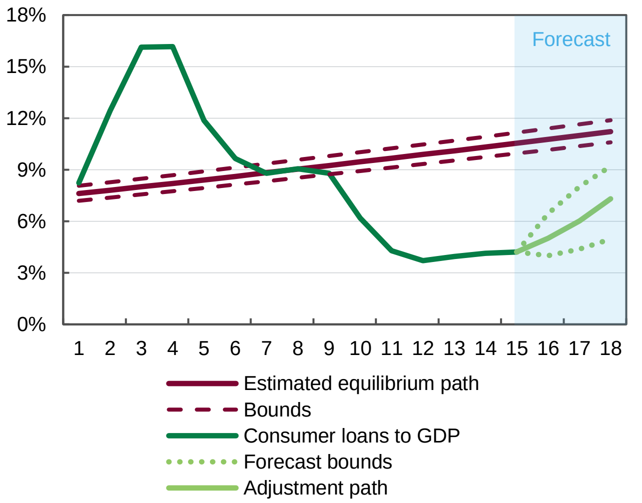
[5]A cash loan is a loan whereby a bank issues a one-off amount of cash or noncash credit, as specified in a loan agreement

Figure 3.3.4. **Distribution of banks* by share of unsecured consumer loans in portfolio (corporate and retail) and net interest margin, as of 1 May 2021**



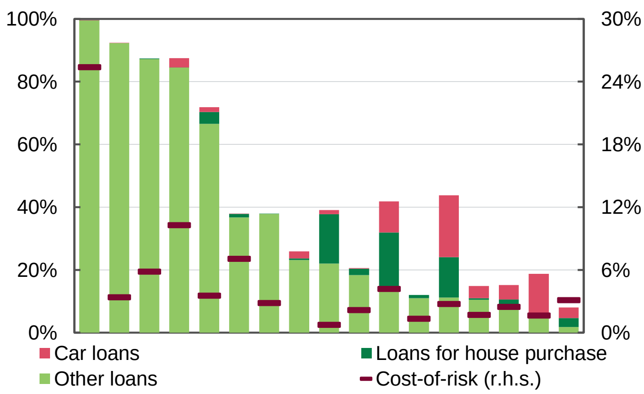
* At 17 largest banks in terms of net retail loans.
Source: NBU.

Figure 3.3.5. **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.

Figure 3.3.6. **Composition of retail loan portfolio and cost-of-risk ratio, by individual banks***



* At 17 largest banks in terms of net retail loans.
Source: NBU.

of funding fell significantly. The higher margin is in part due to the need to cover higher credit risks: last year, average loan loss provisions were significantly higher for the banks focusing on this segment. These loans are mostly short, so the banks need to constantly issue new loans to maintain the size of their portfolio and earn a stable income. In EU countries, the ratio of unsecured consumer loans to GDP approaches 10%. In Ukraine, it stands at about 4%. Therefore, there is significant potential for an increase in loans made by both the banks already operating in this segment, and by the ones that are planning to enter it. However, this segment may reach saturation in a few years, significantly reducing room for its long-term growth.

Rates on mortgages and car loans are much more sensitive to macroeconomic conditions and the overall level of market interest rates. The decline in lending rates over the past year has significantly increased demand for these loans. The financial institutions dealing with mortgages and car loans have a much more modest net interest margin. As these loans usually have longer maturity, they provide banks with a more stable income, although they carry higher interest rate risks. At the same time, mortgage lending offers significant potential. Ukraine's ratio of mortgages and car loans to GDP is less than 1%. Even with the current high rate of portfolio growth, it will take decades to bring this figure closer to the EU average.

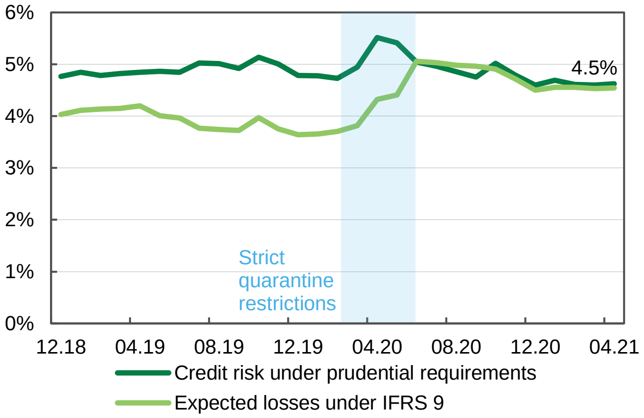
Retail loan portfolio quality is acceptable

Despite the crisis, the quality of the retail loan portfolio remains acceptable. The NPL ratio has significantly declined since October 2020: the banks are writing off their NPLs and actively replenishing their portfolios with new loans, the quality of which is mostly high. There is no significant migration of loans between IFRS 9 stages or between prudential classes. Such a migration would have indicated a deterioration in portfolio quality. Provisioning, which increased significantly at the peak of the crisis, has declined slightly since then. In recent months, it has remained at about 4.5%, which is almost the same as the assessment of credit risk under prudential requirements.

When the pandemic broke out, the NBU allowed banks not to recognize as nonperforming those loans that had been restructured by the banks due to the financial difficulties of debtors. According to surveys of the financial institutions, such loans accounted for 8% of the portfolio. This share depended largely on the type of loan. Loans for the purchase of home appliances and card overdrafts made up the smallest portions of the portfolio. The average size of restructured loans is 1.5 to 2 times higher than the average loan size in the portfolio. Effective May 2021, the banks must assess the risk of these loans in line with the general rules. Therefore, the attention of the financial institutions should be focused on the quality of this essential part of the portfolio.

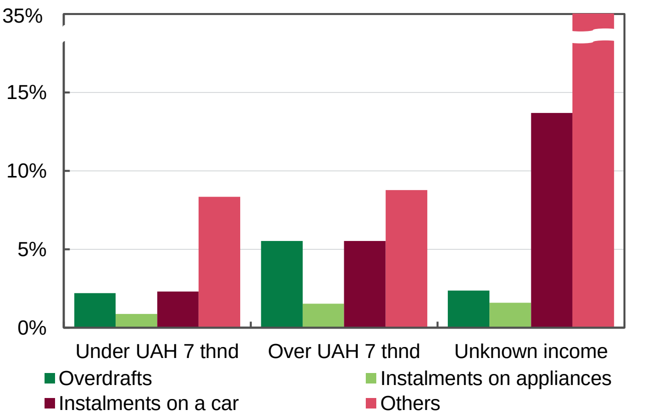
Given the economic recovery and income growth, a significant increase in credit risks in the retail portfolio should not be expected in the near future. This is evidenced by the acceptable debt burden of borrowers and the more moderate

Figure 3.3.7. Credit risk of the performing retail portfolio



Source: NBU.

Figure 3.3.8. Share of loans restructured due to the fallout from the pandemic, by borrower income group



Source: banks, NBU estimates.

post-crisis lending standards (see Box 3. Household Debt Burden Remains Acceptable). Starting 1 July, the requirements for higher risk weights for the retail portfolio's most risky part – unsecured consumer loans – will take effect. These weights will first be raised from 100% to 125%, and then, on 1 January 2022, to 150%. As a result, the banks will build up an additional capital to cover the risks of this segment. The credit risk of the portfolio will be assessed in the annual stress test, the results of which will be published at the end of the year. Perhaps the most important tool for mitigating the risks today is for the banks to properly assess them, and to pursue a prudent credit policy. This is especially true for banks that hold the bulk of their portfolio in retail loans, and earn most of their income from such loans.

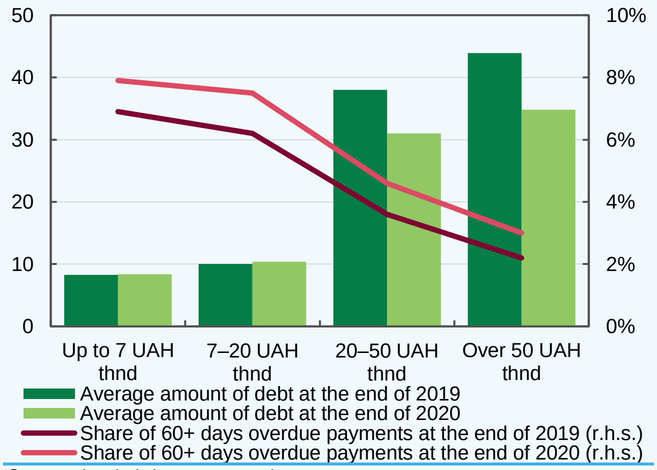
Box 3. Household Debt Burden Remains Acceptable

In Q1 2021, the NBU conducted another regular survey of banks to assess the characteristics of their customers, in terms of their level of income[6]. The survey focused on unsecured consumer loans. It covered 25 banks, which together issued 95% of this type of loan. The survey showed that banks are shifting toward lending to borrowers with higher incomes, with the debt burden remaining mostly acceptable.

The coronavirus crisis significantly slowed the growth in consumer lending. The number of borrowers decreased. In particular, writing off old, nonperforming loans reduced the number of borrowers about incomes of which banks had no information. The number of active borrowers who have provided banks with the necessary information about their income grew by only 2% over the year. The average amount of debt grew unevenly for borrowers with different income levels. The average loan amount increased the most for borrowers earning UAH 7,000 to UAH 20,000. At the same time, the average loan amount declined markedly for customers with higher incomes.

In early 2020, lending was subdued by a worsening in consumer confidence and a temporary decline in consumption. In addition, the banks enhanced their consumer lending standards at that time, which they reported in the Bank Lending Survey in Q1 and Q2. During the crisis, financial institutions were concerned about a potential deterioration in borrower solvency. Therefore, the banks revised down their credit limits and approved fewer loan applications. Overall, the share of loans past due for more than 60 days grew across all borrower groups in 2020. This growth was quite even, at around 1 pp for each customer income group. The category of low-income borrowers had the largest share of past due loans.

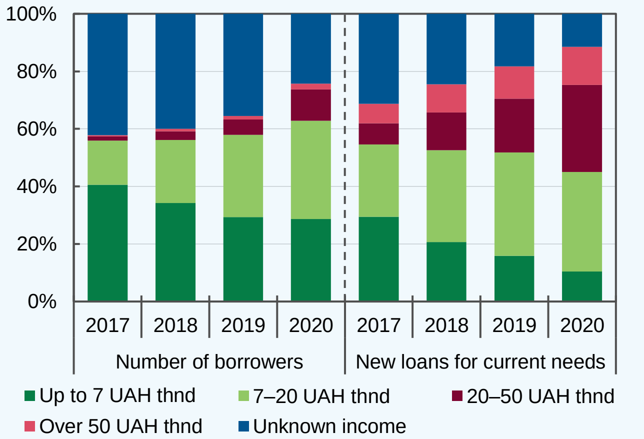
Figure B.3.1. Average amount of a loan for current needs per borrower depending on income, UAH thousands



Source: banks' data, NBU estimates.

In recent years, the banks have shifted to lending to borrowers with higher incomes. This tendency strengthened during the coronavirus crisis. In 2020, the share of loans issued to borrowers earning more than UAH 20,000 per month increased from 30% to 43% of the total. The number of the loans also rose noticeably, although it is still small compared to other categories. On the other hand, the volume of loans issued to customers with a monthly income of less than UAH 7,000 dropped to a record low. In part, this was explained by an increase in borrowers' income and their moving into the next group. The number of debtors in this group fell by 23% over the year.

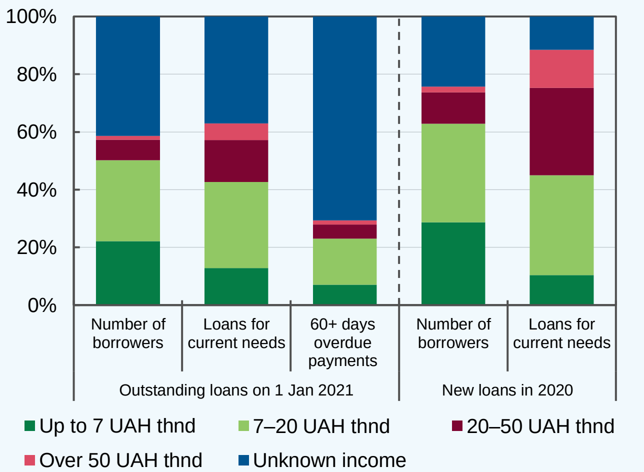
Figure B.3.2. New loans for current needs by income groups of borrowers



Source: banks' data, NBU estimates.

At the same time, the share of new loans issued without information about borrowers' income and the volumes of such outstanding debts decreased. In this borrower category, 27% of loans were past due for more than 60 days.

Figure B.3.3. Loan portfolio for current needs by income groups of borrowers



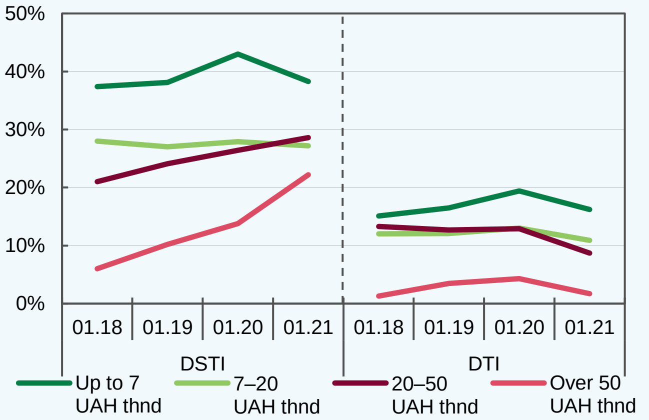
Source: banks' data, NBU estimates.

Before the crisis, the debt burden increased across the majority of groups. The main measure of the debt burden is the ratio of monthly debt servicing expenses to monthly income – the Debt-Service-to-Income (DSTI). This indicator was the highest for borrowers earning less than UAH 7,000. It even exceeded 40% in 2019, but returned to a lower level

[6] Respondent banks provided information about their borrowers as a breakdown by the following income groups: under UAH 7,000, UAH 7,000–20,000, UAH 20,000–50,000, and over UAH 50,000. The borrowers' income reflected in the breakdown had to be confirmed by the relevant documents. If the documents were not available, banks placed borrowers in a separate group with "unknown income."

last year. The debt burden of borrowers earning more than UAH 20,000 increased the most. Nevertheless, their debt servicing expenses are acceptable, accounting for less than one third of their declared income.

Figure B.3.4. Debt burden on borrowers by income group

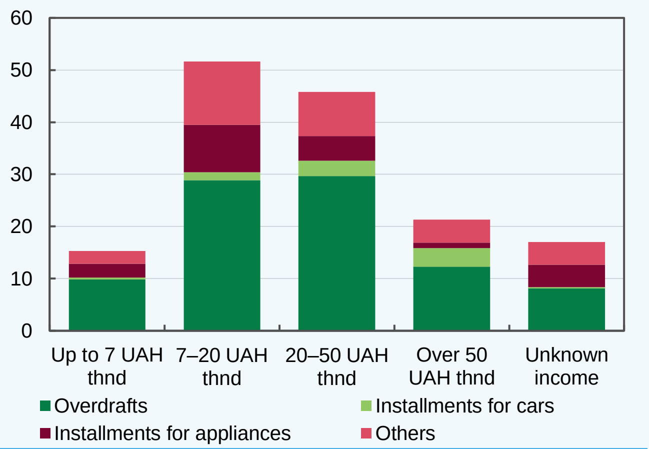


The Debt-Service-to-Income ratio (DSTI) is the ratio of monthly debt servicing expenses to average monthly income.
The Debt-to-Income (DTI) ratio is the ratio of debt to annual income.

Source: banks' data, NBU estimates.

Over the year, the share of overdrafts on credit cards increased markedly across all borrower income groups. This is the main type of loan in the consumer loan portfolio. Car loans are mostly taken by customers with higher incomes. On the other hand, borrowers who earn less borrow money to buy home appliances more often. The average sizes of overdrafts and consumer loans to buy home appliances are comparable, at UAH 12,000–13,000. The higher a borrower's income, the larger is the average debt. Car loans averaged UAH 370,000.

Figure B.3.5. New loans portfolio by income groups of borrowers, UAH billions



Source: banks' data, NBU estimates.

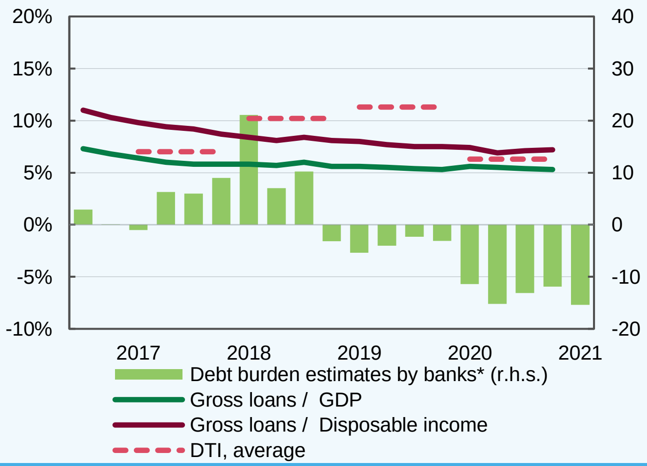
As usual, the majority of borrowers are employees. Retired people and the unemployed are only prominent in the category of borrowers earning less than UAH 7,000 – they account for a third of this group. The share of sole proprietors who took out loans for current needs not related to their entrepreneurial activities also decreased over the year.

Figure B.3.6. Distribution of borrowers number by employment category

Source: banks' data, NBU estimates.

The latest portfolio developments show that the banks have become more attentive to their borrowers' incomes and debt burden. This is evident from the drop in the share of borrowers about incomes of which banks had no information, the shift toward customers with higher incomes, and the persistence of acceptable borrower debt burden. According to the Lending Survey, the banks have significantly improved their estimates of the household debt burden since the start of 2020.

Figure B.3.7. Actual indicators and banks' estimates of household debt burden



* The values reflect the balance of responses to the question "What was the debt load of households in the quarter that has just ended?" in the questionnaire of the quarterly Bank Lending Survey. Positive values mean a high debt load.

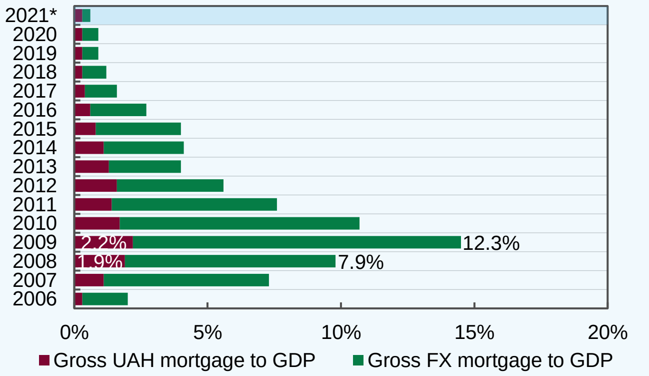
Source: banks' data, NBU.

Box 4. New Impetus to Resolving the Issue with FX Mortgages

The banks have been tackling the problem of legacy FX mortgages for over ten years. In April 2021, parliament passed a law requiring lenders to restructure loans at a borrower's request. Although the law offers favorable conditions for borrowers, the extension of the moratorium on FX mortgage foreclosures is discouraging borrowers from repaying their debts.

In April 2021, the banks had FX mortgages worth slightly over USD 400 million on their balance sheets, 95% of which had not been serviced for a long time. The low quality of that portfolio resulted from two crises: the one in 2008–2009, and the one in 2014–2016. Before the first crisis, mortgage lending was rising rapidly. Most customers were taking FX loans, as interest rates on such loans were lower. However, FX risk was underestimated and materialized when the crisis struck. The depreciation of the hryvnia increased the debt burden of borrowers. During the 2008–2009 crisis, the percentage of NPLs in this segment moved up from 1% to 13%. Consumer FX lending has been prohibited since 2009.

Figure B.4.1. Mortgage portfolio to GDP ratio



* GDP estimates for 2021 from the NBU's April 2021 Inflation Report.
Source: SSSU, NBU.

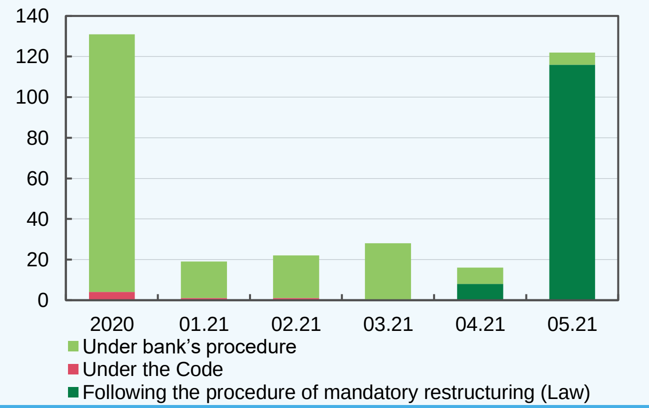
Over the next five years, the FX mortgage portfolio shrank by almost three times, mainly due to the repayment of performing loans. In early 2014, the banks still had FX mortgage loans worth about USD 4 billion on their balance sheets, of which only half were performing loans. The depreciation and the fall in income seen in 2014–2016 caused another wave of defaults on these loans. At that time, parliament imposed a moratorium on FX mortgage foreclosures to prevent insolvent borrowers being evicted from their houses. The moratorium discouraged borrowers from servicing their loans and looking for ways to pay off their debts. The banks had to recognize almost all loans as non-performing and to report losses. The banks cleared their balance sheets of these loans by writing them off or selling them at large discounts. Since 2014, the FX mortgage portfolio has contracted by almost ten times.

The moratorium was supposed to last until special legislation on restructuring FX loans was passed. In October 2019, parliament adopted a bankruptcy code (the code), which sets out the restructuring procedure. It required the banks to calculate unpaid loan portions and to multiply them by the current housing price to obtain a new amount of outstanding debt. The difference between the debt amounts before and after restructuring was to be forgiven. The code also established the date on which the moratorium was to be lifted – October 2020. However, this mechanism turned out to be unpopular because the moratorium was still in effect and the forgiven portion of the debt was taxed. Thus, effectively no restructurings were conducted. Parliament extended the moratorium until April 2021.

In April, parliament adopted a law that established the mechanism for mandatory restructurings of FX mortgages, and amended the code. The amendments optimized the existing mechanism, while also maintaining the balance between the interests of the parties. The restructuring procedure created preferences for borrowers by:

- requiring lenders to restructure debts
- converting the debt at an exchange rate that is the average of the exchange rate that was in effect when the loan was issued and that in effect when the loan is restructured
- reducing the debt by the amount of previously paid fines, and by the difference between the interest accrued earlier at the initial interest rate and that accrued at the UIRD
- requiring lenders to also restructure loans secured with land plots.

Figure B.4.2. Number of applications for restructuring submitted, units



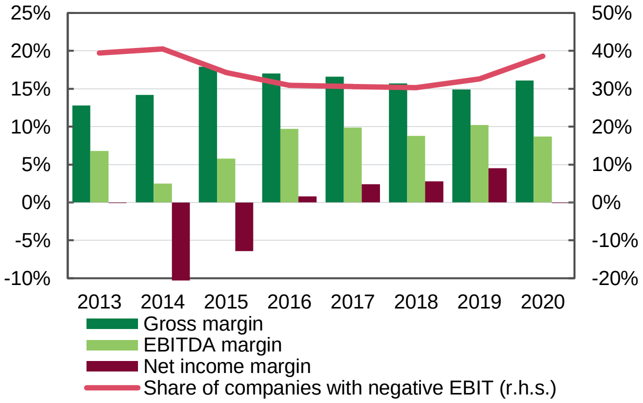
Source: banks' data.

Although poorly accounting for the banks' interests, this new legislation could finally put an end to the perennial problems with FX mortgages. That said, the restructuring process started off sluggishly. In May, the banks received only about 120 applications for restructuring. This makes up only half a percent of all FX mortgages. The small number of applications for restructuring submitted proves that the moratorium discouraged most borrowers from engaging in dialogue with the banks. Applications for restructuring can be submitted within three months of the law coming into effect – until 23 July. This means that borrowers still have the opportunity to submit an application for restructuring, decrease their debt burden significantly, start servicing their loans again, and completely eliminate the risk of having their houses foreclosed on. In turn, the banks should communicate with their clients, encouraging them to settle their outstanding debts.

3.4. Real Sector and Corporate Loan Portfolio Quality

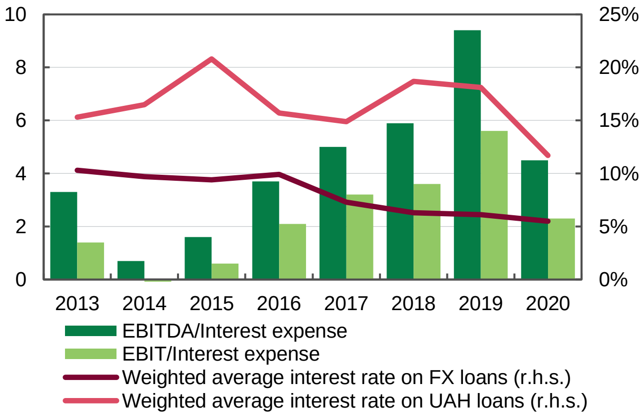
A moderate recovery of the real sector is continuing. Although production volumes in the majority of industries have not reached pre-crisis levels, the financial performance of companies is mostly acceptable. The banks are rather slow in increasing their corporate lending, mostly being oriented toward high-quality borrowers and maintaining high lending standards. This approach enabled the banking system to pass through the coronavirus crisis quite smoothly. For lending to continue growing, real sector companies must do some homework – enhance the transparency of their businesses and improve the quality of their information disclosure.

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



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

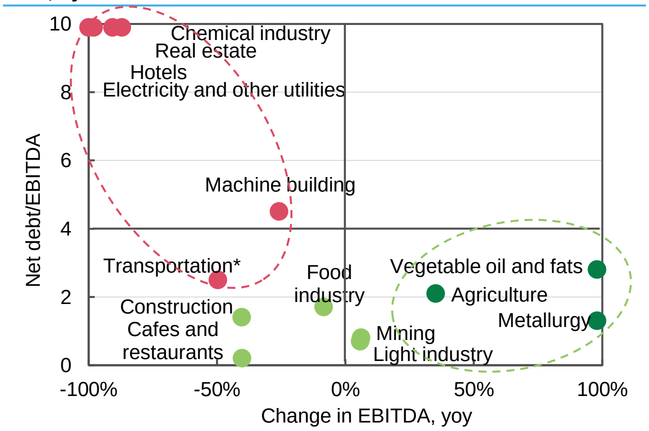
Figure 3.4.2. Non-financial corporations' interest coverage by operating profit and EBITDA*, interest rates on new loans



* Data adjusted for outliers.

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

Figure 3.4.3. Debt burden in 2020 and EBITDA change from 2019 to 2020, by industries



Data adjusted. * Excluding pipeline transportation.

Source: data.gov.ua, NBU estimates.

The recovery in the real sector is uneven

The global pandemic and the tight lockdown caused a sharp fall in the revenues of real sector companies in H1 2020. After restrictive measures were eased in Ukraine and abroad, sales started to recover, reaching pre-crisis levels for the majority of industries as early as Q3 2020. Revenue growth seen in H2 2020 entirely offset the fall that occurred during the most acute phase of the crisis, pushing total sales of goods and services up by 4% over the year. However, companies' revenues exceeded last year's levels mostly on account of the price component, as production physical volumes were lower than in 2019 across the majority of industries.

The key drivers of the post-crisis growth in revenues are strong domestic consumer demand propped up by higher household income, and favorable terms on global markets. At the same time, the occasional introduction of tight quarantine measures and changes in consumer behavior[7], including lower mobility, are restraining the recovery of revenues in the services sector. Weak domestic investment demand is affecting some heavy industry sectors. The real sector is thus recovering unevenly. A large part of the corporate sector is stable and profitable, but the temporary crisis is transforming into long-term structural problems for many companies.

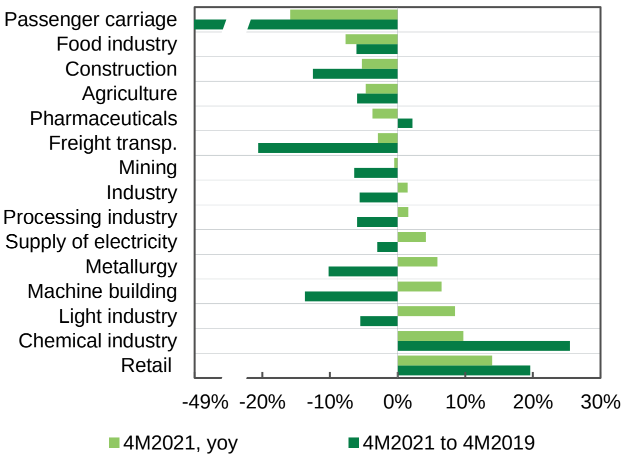
In 2020, the average ratio of gross debt to EBITDA increased to 2.7x, compared to 2.0x last year[8]. Despite the increase, the debt burden of most companies is acceptable. This contrasts with previous crises, when the debt burden was extreme. The deterioration in the debt burden last year was driven by the revaluation of foreign currency debts on the back of a moderate hryvnia depreciation, and by lower corporate profits. The real sector's aggregated EBITDA margin was 8.7% in 2020, which is 1.5 pp lower than in 2019. The main reason behind the decline in operating profitability was that output dropped while fixed costs remained unchanged. Nonrecurring expenses, especially from revaluation, also played a negative role. Although the average debt load is acceptable, it is still too high for machine-building, real estate, hotel business, chemical industry, and the supply of electricity and other utilities.

Consumer demand and high commodity prices are the key factors for the real sector recovery

Despite the crisis, sectors that directly depend on final consumer demand increased their revenues last year. Businesses have adjusted to working under the adaptive quarantine, which also contributed to a larger turnover of

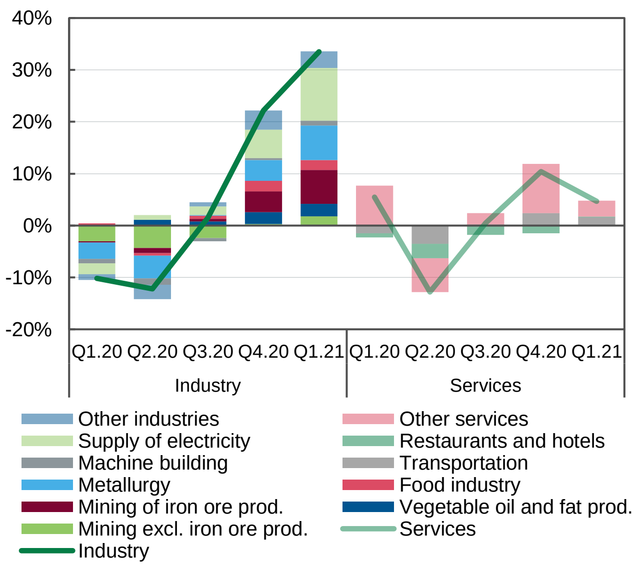
[7] https://www2.deloitte.com/ua/uk/pages/press-room/press-release/2021/2020-consumer-behavior-in-ukraine.html
[8] These data do not capture small companies.

Figure 3.4.4. Production in key economic sectors



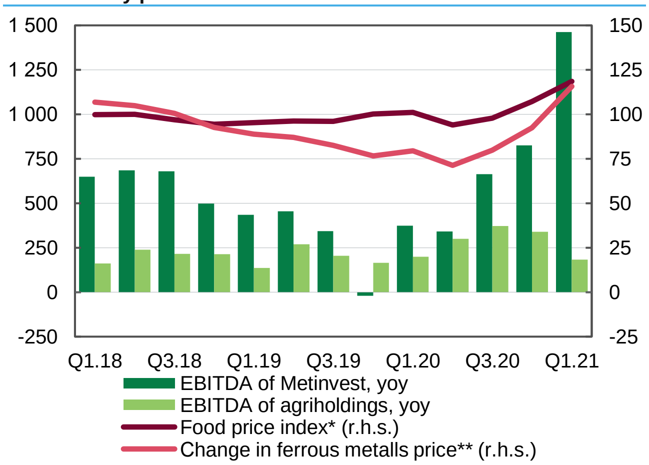
Source: SSSU, NBU estimates.

Figure 3.4.5. Sector contribution to the annual change in sales of industry and services



Source: SSSU, NBU estimates.

Figure 3.4.6. Quarterly EBITDA of the largest exporters and change in commodity prices



* 12.2017 = 100.
** Steel Billet Exp FOB Ukraine (12.2017 = 100).
Source: companies' data, FAO, Thomson Reuters, NBU.

goods. The retail trade, food industry, and pharmaceutical industry increased their revenues over the year. The pandemic has become the driver of growth in online retail and delivery services.

The sharp rise in commodity prices significantly increased the profitability of the two largest exporting sectors in 2020. EBITDA margin grew by 10 pp, to 8% in the metallurgy, and by 5 pp, to 23% in agriculture. The positive tendency has continued up until now. In Q2 2021, the prices of iron ore, steel, grain and oilseed crops doubled compared to last year's minimum values, reaching record highs not seen for many years.

The positive price trend already affected the financial performance of the mining and metallurgy in Q1 2021. The largest producer boosted its EBITDA by more than four times compared to the previous year. The higher prices for agricultural output have not yet fully passed through to corporate profits due to the long production cycle of the industry. Conditions on global commodity markets are the decisive factor for Ukrainian exporters (read more in Impact of Exchange Rate Fluctuations on Exporters). If prices remain at their current levels, 2021 could be a year of record-high profits for producers of exported goods.

Some services sectors will not be able to restore their revenues to pre-crisis levels

The services sector, in particular cafes and restaurants, shopping malls, passenger transport, tourism, and the hospitality sector, were affected the most by the quarantine. Passenger transportation has not yet fully returned to normal due to regional quarantine restrictions. Hotels' revenues shrank last year and in Q1 2021. These sectors might not be able to fully recover until all of the quarantine restrictions are lifted. On the other hand, the majority of cafes and restaurants were open during the adaptive quarantine. Visits to cafes and restaurants dropped significantly, but food delivery volumes increased. This positively impacted sales, which rose by 11% yoy in Q1 2021. Revenues of mobile operators and internet providers also grew.

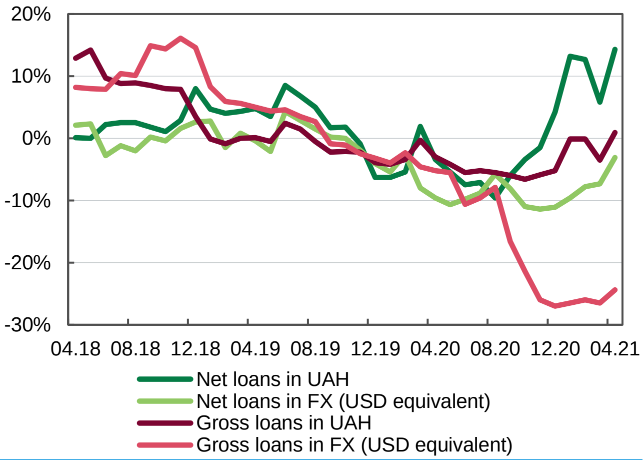
Demand for loans is increasing thanks to small businesses

In the aftermath of the active phase of the crisis, lending volumes have been rising moderately but steadily. Since the start of the year, hryvnia corporate loans increased by 6% gross and 10% net. Volumes of foreign currency corporate loans remained almost unchanged. The smaller difference between hryvnia and foreign currency interest rates contributes to the dedollarization of corporate portfolios. If financial stability lasts, the share of foreign currency lending will continue to decline.

The pace of lending was the fastest in the segment of small and micro businesses. Volumes continued to increase during the coronavirus crisis. Over the past 12 months, the net portfolio of these customers grew by 26%, to UAH 93 billion[9]. The state program of interest compensation and the

[9] The indicator does not include small companies that belong to large business groups or with outstanding amount of over UAH 100 million.

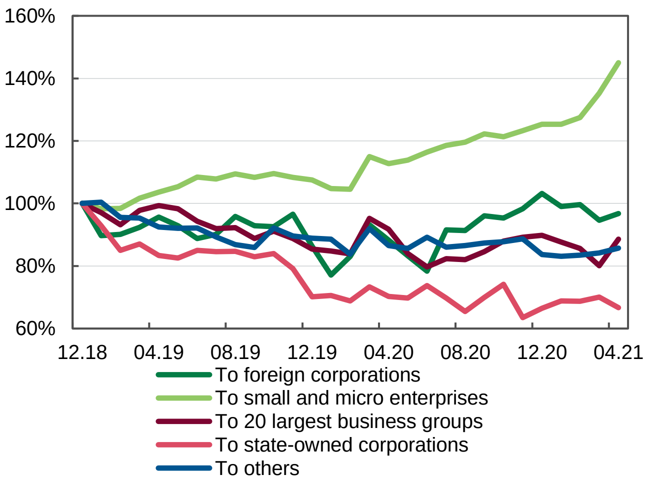
Figure 3.4.7. Gross and net corporate loans, yoy



In solvent banks as of 1 May 2021.

Source: NBU.

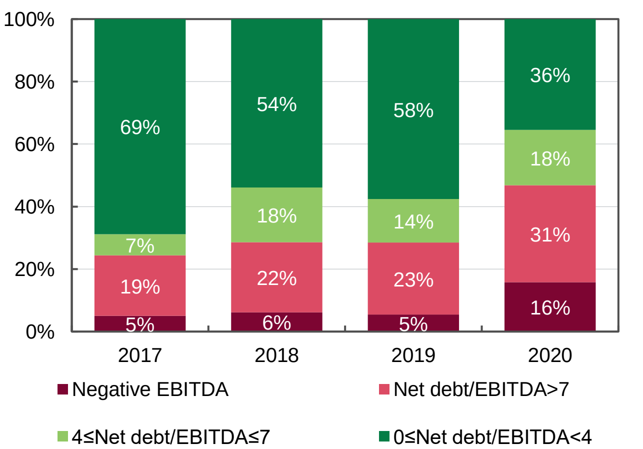
Figure 3.4.8. Net corporate loans by groups of non-financial corporations, December 2018 = 100%



In solvent banks as of 1 May 2021.

Source: NBU.

Figure 3.4.9. Breakdown of corporate borrowers* by debt load



* Performing loans as of 1 Jan. 2021 with outstanding amount of over UAH 2 million.

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

overall decline in interest rates were the main drivers of the increase in lending in this segment (read more in Drivers of Lending to Small Businesses).

On the contrary, lending to large corporate borrowers has been decreasing. Banks are gradually getting rid of the legacy loans of the largest business groups with bad credit histories (read more in Box 5. Concentration of Banks' Corporate Loan Portfolio Declining). Lenders usually have to provision for these poor-quality loans, or write them off. Meanwhile, new loans to large borrowers are not sufficient to replace the assets that have been disposed of. The banks have tightened their lending standards and mostly try to attract transparent borrowers with good credit histories. The new practice of assessing large exposures is a positive change, as it reduces the probability that systemic risks will build up.

State-owned enterprises borrowed from banks because of the crisis

The four largest state-owned enterprises – Naftogaz, Ukrainian Railways, Ukrenergo, and Energoatom – are among the largest bank borrowers. All of them made significant losses in 2020. Ukrainian Railways' revenues fell by 17% due to the decline in transportation resulting from quarantine restrictions and lower business activity. Ukrenergo and Energoatom incurred losses because of the energy market crisis, which continues to affect the sector. Naftogaz's losses were caused by the debts of gas suppliers being written off. Performance of other large state-owned transportation companies was also weak.

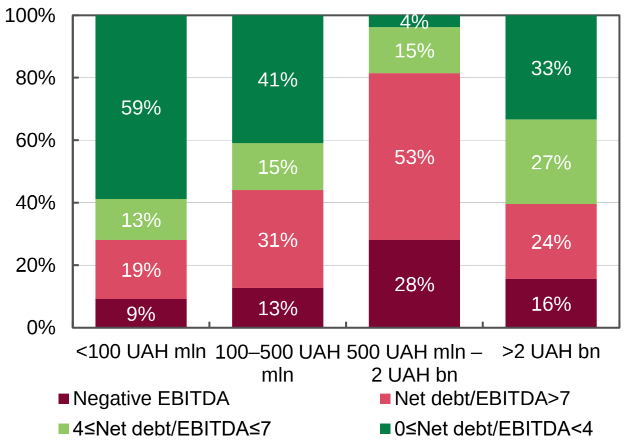
State-owned companies almost halved their borrowing during the two years before the pandemic. However, they started to actively borrow from banks again during the acute phase of the pandemic. As of the end of H1 2020, the share of state-owned enterprises in the net corporate portfolio reached 15%. The most affected companies sought support from state-owned banks. With the active phase of the crisis over, the share of the portfolio of loans issued to state-owned companies is declining again, and is now at 13%.

The financial performance of corporate borrowers is mixed, but generally acceptable

The financial performance of corporate borrowers deteriorated due to the crisis. Last year the weighted average ratio of net debt to EBITDA grew to 4.9x, up from 3.8x a year ago. The debt burden was the largest in those sectors that were severely hit by quarantine restrictions: real estate, hotels, and restaurants. The growth was not critical for other industries – the debt metrics of some even improved. The deterioration in the debt burden was partially the result of one-off or noncash expenses of several large borrowers.

Indicators varied greatly according to borrower size. The largest decline in profits and worst deterioration in debt metrics occurred in the segment of large borrowers. This was due to two reasons. Firstly, the profits of state monopolies – which account for a large share of the loan

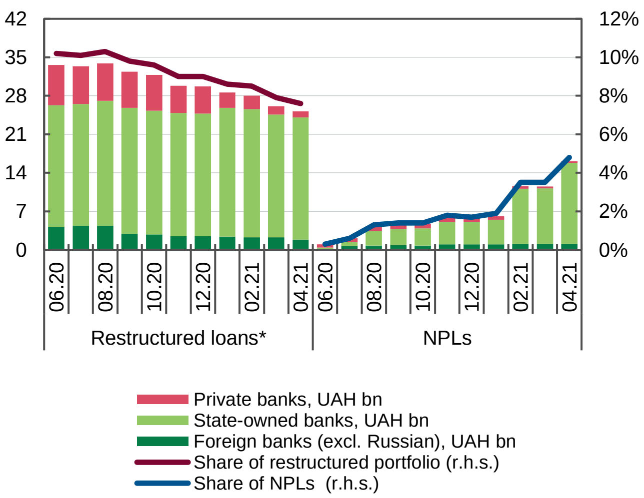
Figure 3.4.10. Breakdown of corporate borrowers* by debt burden and loan amount



* Performing loans as of 1 Jan. 2021 with outstanding amount of over UAH 2 million.

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

Figure 3.4.11. Performing corporate loans as of 1 March 2020, that were restructured and recognized as non-performing since the beginning of the crisis



* Restructuring in accordance with the requirements of the NBU resolution No. 160 of 21 December 2020 (previously – No. 39 of 26 March 2020).

Source: survey of the 22 largest banks, NBU estimates.

portfolio – dropped. Secondly, there was a deterioration in the financial standing of companies that belonged to large business groups and have old restructured debts.

Legacy problems influence loan portfolio quality the most

The default rate of corporate loans is lower than the NBU predicted at the start of the coronavirus crisis (read more in Quality of Corporate Loan Portfolio). The share of total number of borrowers that defaulted on their loans in the 12-month period running up to the end of April 2021 was 4%. However, risks rose significantly in the segment of large borrowers. Therefore, the amount of debt that migrated to default was 6%.

Only a few borrowers defaulted in the sectors of real estate, the hotel business, and electricity supply. However, migration indicators are high due to the substantial concentration of loans. Overall, the problems with large exposures primarily concerned the legacy debts of the largest business groups. Since the start of the crisis, UAH 8 billion in loans issued to large business groups defaulted, and UAH 25 billion were restructured due to the crisis. State-owned banks were the most active in such restructuring. However, even after several rounds of restructuring and concessions from banks, timely debt repayment by several large problem borrowers is still in question.

Table 2. Corporate loan portfolio as of 1 May 2021

No	Sector	Performing loans*, UAH billions	NPL ratio*, %	Migration to NPL in 12 months*		ICR**		Net debt/EBITDA**	
				by quantity, %	by loan amount, %	2019	2020	2019	2020
1	Agriculture	57	8	3.5	2.0	2.9	2.4	3.9	4.8
2	Mining	8	33	8.0	0.4	9.5	7.7	0.3	0.9
3	Food industry	39	46	4.1	2.8	2.3	3.3	5.7	4.9
4	Light industry	2	7	4.7	0.7	2.7	2.1	3.2	4.1
5	Chemical industry	17	22	2.6	4.0	4.2	3.9	2.8	3.4
6	Constr. materials production	4	2	1.5	0.3	4.4	5.0	3.7	4.0
7	Metallurgy	18	17	4.5	3.7	2.8	3.5	4.6	4.0
8	Machine building	15	64	3.4	4.0	3.6	2.8	3.6	4.4
9	Electricity and other utilities	65	14	6.5	6.8	3.1	1.1	2.6	5.5
10	Construction	19	42	6.9	4.1	2.7	1.9	4.8	6.2
11	Trade in vehicles	4	18	0.5	0.2	4.1	4.1	2.1	3.1
12	Wholesale	95	33	3.5	5.3	4.8	3.6	3.2	4.0
13	Retail	20	83	2.0	0.0	2.9	2.9	3.9	4.7
14	Transportation	27	27	4.0	1.4	4.2	1.3	2.2	4.8
15	Hotels	1	85	20.0	88.5	2.9	0.0	5.3	9.8
16	Cafes and restaurants	0.5	15	5.3	1.3	1.3	1.6	8.7	8.8
17	Real estate	30	49	5.0	13.1	2.7	1.5	6.4	8.6
18	Other	30	37	5.1	3.5	3.5	3.6	3.1	3.4
	Total	**451**	**41**	**3.9**	**6.0**	**3.7**	**2.8**	**3.8**	**4.9**

In solvent banks as of 1 May 2021.

* Loans with outstanding amount of more than UAH 2 mln.

** Borrowers with performing loans as of 1 January 2021. Weighted by the loan amount.

Box 5. The concentration of the banks' corporate loan portfolio is declining

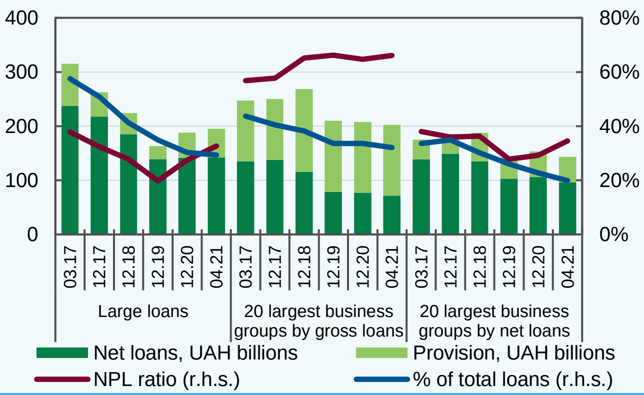
Loan concentrations pose significant risks to the stability of the banking system, and to financial stability in general. The risks associated with lending to large borrowers and business groups largely materialized during the 2014–2016 crisis[10]. Concentrations of large exposures[11] have since materially declined across the system, but in some banks the problem persists. Most corporate banks have an excessive share of large debtors in their portfolios. These banks need to diversify their lending.

In recent years, the concentration of large exposures and loans to large business groups in the corporate portfolio of the banks has decreased. The level of credit concentration in the banking system today is acceptable: large exposures make up 29% of the total net corporate loan portfolio. However, the risks have not completely disappeared. The level of concentration in some banks is still high. The share of the 20 largest borrowers in the net corporate portfolio of the 10 largest banks is in the 25%–52% range.

The NBU limits the credit risks from large borrowers and groups of connected clients by imposing prudential ratios on individual banks. However, it is also important to control the credit concentration risk of the entire banking system. The high concentration of business group loans poses elevated risks: operational or financial troubles at one of a group's companies in a particular industry often lead to the termination of debt servicing by all companies in the group. This can create problems for many banks.

Loans to the 20 largest business groups[12] represent 32% of the corporate portfolio of all banks. Over the past four years, this share has decreased by 12 pp. A significant portion of these are NPLs, mainly of state-owned banks. These NPLs are almost completely provisioned. According to the NPL management strategy, banks should remove such loans from their balance sheets in the coming years. At the same time, the 20 largest in net loans terms business groups account for 20% of the corporate portfolio. This share has declined over the past four years by 14 pp. The reduction in credit concentrations due to the writing-off of legacy large NPLs and active lending to small and medium-sized businesses has led to the diversification of risks.

Figure B.5.1. Share of large loans and loans of the 20 largest business groups in the corporate portfolio of banks



Source: NBU.

The decline in credit concentration and the improvement in the quality of large corporate loans are the results of changes in the banks' lending policies and regulatory reforms. Over the past few years, the NBU has encouraged the banks to assess the credit risks of large borrowers and business groups more conservatively. In particular, the banks should rely on the consolidated audited financial statements of groups under joint control. Companies that take out loans of more than UAH 200 million must have their financial statements audited. To better monitor credit risk, the NBU stress-tests the largest bank borrowers. The regulator has also created and updated a register of business groups.

Figure B.5.2. Net loans of the 20 largest business groups from the 20 largest banks, April 2021

The fringe nodes around the network represent 20 largest banks in terms of net corporate loans. Nodes inside the circle show 20 largest business groups relative to net exposure to these business groups. Links between the nodes reflect net exposures of the banks to business groups; thickness of lines is proportionate to the loan size.

Source: NBU.

The NBU is working on new approaches to assessing large exposures, which will widen the scope of their coverage.

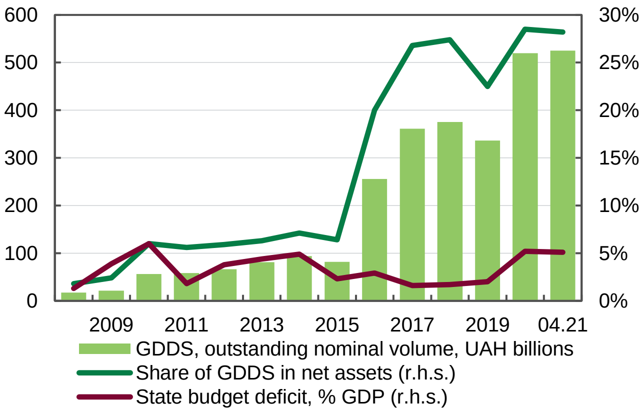
The regulator will continue to constantly monitor the quality of large exposure assessments and the level of debt concentrations so as to prevent the accumulation of systemic risks. The banks must diversify their portfolios, avoid large concentrations, and take into account the financial statements of the whole group and not just individual companies when assessing credit risks.

[10] Financial Stability Report, June 2017. Box: Loan concentration risks require stricter controls.
[11] Loans to a single debtor or a group of connected companies or counterparties that exceed 10% of the bank's regulatory capital.
[12] The 20 largest business groups do not include the groups of companies that are related to the former shareholders of CB PrivatBank JSC and their affilia tes.

3.5. Banks' Risks of Investing in Domestic Government Debt Securities

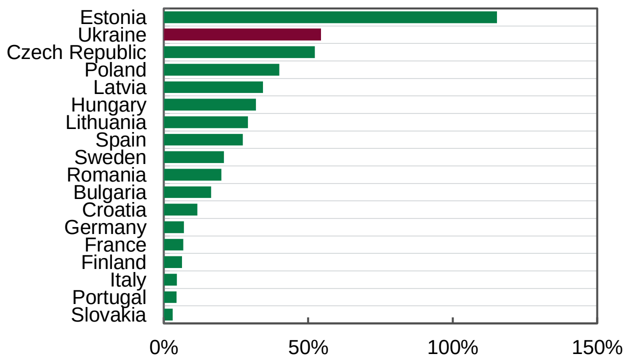
As in the majority of other countries, Ukraine's deficit widened during the pandemic. Banks were active in financing the deficit by investing in domestic government debt securities, the yields of which rose. The growth in holdings of domestic government debt securities was fueled by the sector's high liquidity, weaker demand for loans, and the launch of NBU long-term refinancing. At the same time, the purchasing of government bonds did not replace lending: the largest banks combined the expansion of their loan portfolios with investing in government debt. In 2021, the share of government debt securities in banks' assets may fall. A gradual decline in the fiscal deficit and more opportunities for the government to raise funds will reduce the banks' role in financing the budget.

Figure 3.5.1. Government domestic debt securities (GDDS) by outstanding nominal volume, share in net assets and State budget deficit



Source: NBU, since 2014 – at solvent banks.

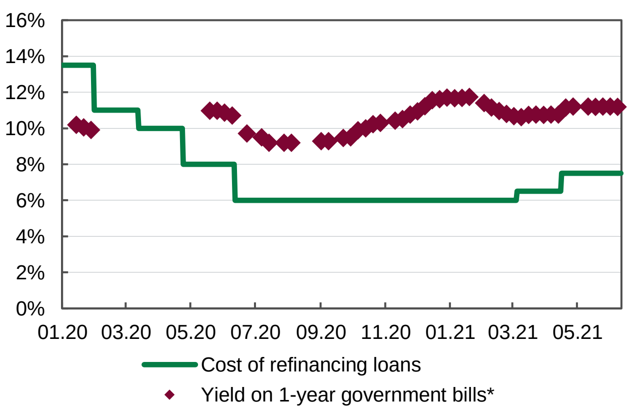
Figure 3.5.2. Government debt held by banks (growth rate in 2020)



Ukrainian data based on government domestic debt securities.

Source: ECB, NBU.

Figure 3.5.3. Average weighted cost of NBU refinancig and yields on Ukrainian government domestic debt securities, % per annum



* Maturity of these bills was close to one year at the moment of placement. There were no issues of these bills during certain periods.

Source: NBU.

Banks' holdings of domestic government debt securities (T-bonds) grew during the crisis

In 2020, the government had to incur large expenditures to overcome the consequences of the COVID-19 pandemic. It also scheduled implementation of large-scale infrastructure projects for this period. The state budget deficit thus reached a record high for the past decade. At the same time, official foreign financing was limited, in particular due to the delay in the IMF program, while nonresidents' demand for domestic government debt securities was weak. The need for financing increased over the year, which naturally raised the expected yields on government debt instruments.

Part of the required financing came from banks buying domestic government debt securities. The banks had large liquidity buffers, while demand for loans weakened markedly as the pandemic started. Moreover, demand for government bonds increased as their yields rose. Overall, in 2020, volumes of hryvnia domestic T-bonds on the banks' balance sheets increased by 68% in terms of principal[13]. As a result, the share of principal outstanding for T-bonds grew by 6 pp, to 28.5% of the banks' total assets. A small The share of this growth is small, at 4.1% of the total, due to an increase in the capital of one of the state-owned banks.

Bank investment in government debt instruments grew significantly during the coronavirus crisis in other countries as well. This was the main source of financing for the increased budget deficit. In Ukraine, as in the majority of countries, banks' investment in government securities peaked last year, and then stabilized or declined in 2021.

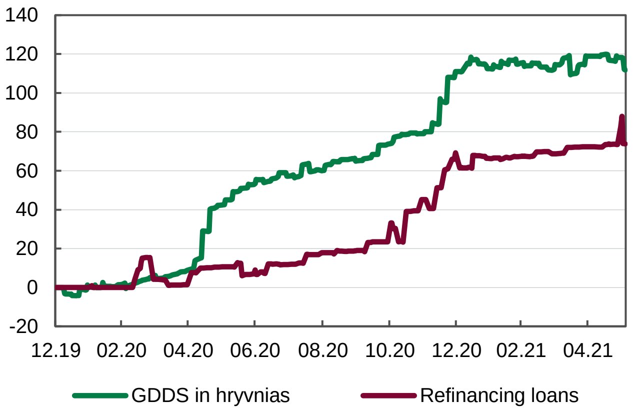
Refinancing loans spurred the buying of domestic government debt securities

In order to counter the effects of the epidemic on the economy and the financial sector, the NBU in April 2020 launched long-term refinancing for a term of one to five years. Through this, the banks gained access to stable long-term funding, which they could use at their own discretion – in particular for lending or buying T-bonds. Overall, since April 2020, the share of refinancing loans in the banks' liabilities has grown from 0.6% to 4.4%. At a fifth of banks, primarily small ones, NBU refinancing accounts for more than a third of liabilities.

The growth in refinancing loans accelerated at the end of last year. In Q4 2020, the spread between yields on hryvnia T-bonds and interest rates on refinancing loans temporarily increased from 3 pp to 5 pp. Taking advantage of the market conditions, many banks started to increase their T-bonds portfolios. At present, in 35 banks – one of which is state-owned

[13] This section contains data on domestic government debt securities in circulation by outstanding nominal volume.

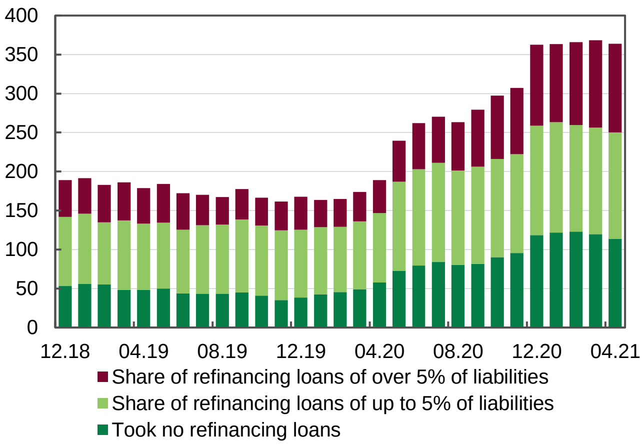
Figure 3.5.4. Change in refinancing loans and banks' investment in hryvnia government domestic debt securities (GDDS)*, UAH biilions, end-2019 = 0



* Change in debt principal. Excluding GDDS issued to recapitalize state-owned banks.

Source: NBU.

Figure 3.5.5. Government domestic debt securities* owned by banks in nominal terms by share of the loans in their liabilities as of 1 May 2021, UAH billions**

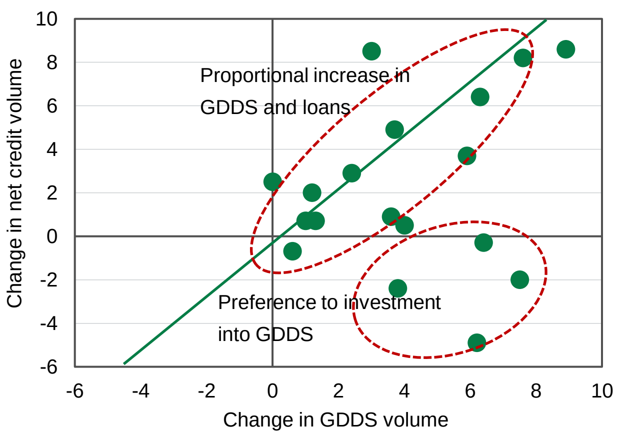


* Excluding government debt securities issued to recapitalize state-owned banks.

** In all currencies at the exchange rate fixed as of 1 January 2020.

Source: NBU.

Figure 3.5.6. Change in Government domestic debt securities* and net credit to clients at Top-20 banks, UAH billions**



* Excluding government debt securities issued to recapitalize state-owned banks. The change is measured from May 2020 to April 2021.

** All currency exchange rate fixed on 01.01.2020. Excluding two largest state-owned banks.

Source: NBU.

– the share of refinancing loans in liabilities exceeds 5%. These banks account for 88% of all NBU refinancing loans and almost tripled their T-bonds portfolios during the crisis, in part funded by refinancing loans.

In 2021, the spread between the yields on domestic government debt securities and refinancing loan rates narrowed noticeably. This reduced demand from the banks, especially from small ones, which had viewed such investments as one of their main sources of income. In general, financial institutions' T-bonds holdings has remained almost unchanged since the start of the year.

While investing in domestic government debt securities, the banks did not curtail their lending

The banks' investment in government debt did not limit their ability to lend to the economy. Financial institutions had large liquidity cushion and received access to refinancing loans. This allowed them to invest in domestic government debt securities while not reducing their lending appetite. The increase in loan portfolios of large banks was mostly proportionate to the growth in their holdings of government securities. In the long term, lending is much more beneficial for banks, because on top of interest income it brings additional advantages: proceeds from servicing customer transactions and cash inflows to current accounts. The growth in corporate hryvnia lending has been accelerating, albeit insignificantly. Among the 20 largest banks, only at 5 banks did loan portfolios not grow in parallel with their T-bonds holdings.

Growth in the portfolio of domestic government debt securities will be moderate

As in the rest of the world, Ukraine will gradually reduce its budget deficit as the economy recovers. According to the Budget Declaration, the deficit will gradually narrow to 2.7% of GDP in 2024, thus reducing the government's financing needs. A decline in risks related to the coronavirus crisis will gradually widen the opportunities for deficit financing from other sources. The government's need to attract bank financing will thus decline substantially this year. Furthermore, the NBU is to phase out its emergency measures for bank support in the near future – in particular its long-term refinancing. In such a way, the banks' T-bonds portfolios are expected to stabilize in size, and their share in the banks' net assets should decline.

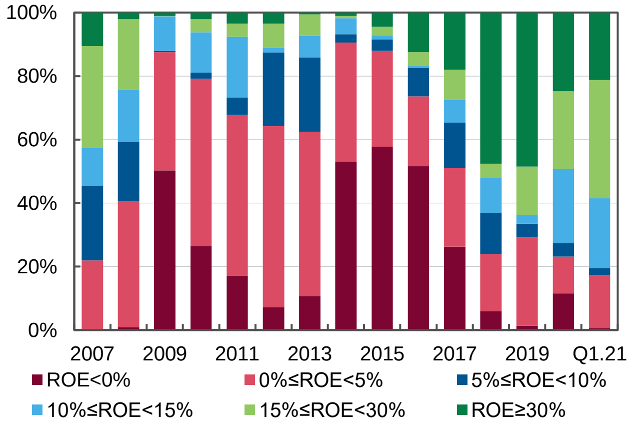
Investing in T-bonds carries interest rate risk

Banks have traditionally viewed domestic government debt securities, especially hryvnia-denominated ones, as risk-free instruments, as they pose no credit risk and there are no requirements to cover them with capital. However, the T-bonds price is susceptible to changes in market conditions, in particular interest rates. The latter usually surge in periods of stress, leading to a fall in prices of securities and causing losses for investors. This year, the NBU will take this risk into account for the first time when conducting its annual stress testing of banks. This is in line with established European approaches to stress testing and to the IMF's methodology.

3.6. Profitability Risk

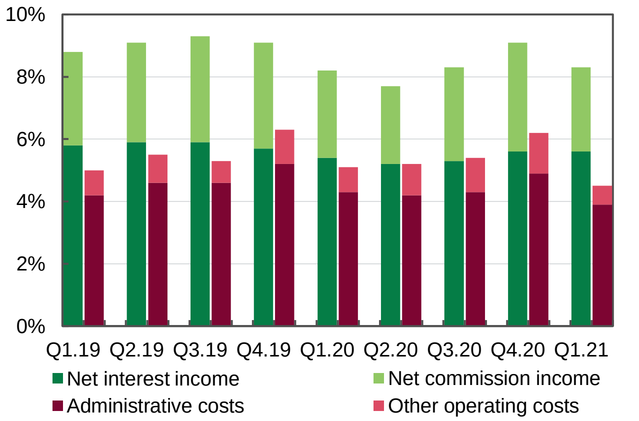
The banks' profitability remained resilient to the coronavirus crisis. The sector retained its operating efficiency mainly due to decreased funding costs. The quick adaptation of the banks to working under the quarantine restrictions and the rapid recovery in demand for banking services spurred an increase in fee and commission income. Expenses on loan loss provisioning were moderate. Going forward, the major profitability risk stems from an expected squeeze in net interest margins. The effect from decreased funding costs has been exhausted, and loan rates will fall in future.

Figure 3.6.1. Distribution of banks' assets by ROE



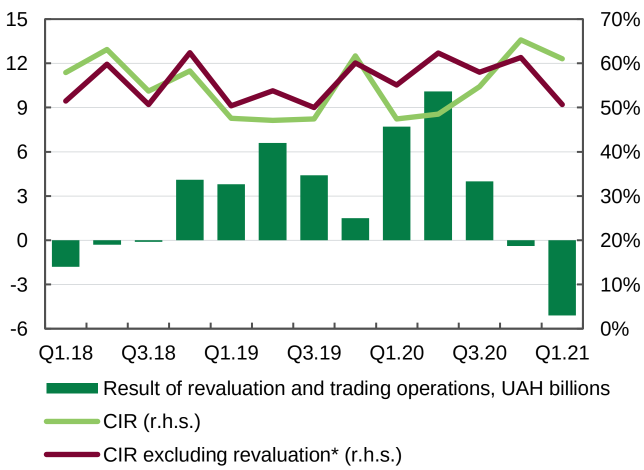
Data adjusted since 2017.
Source: NBU.

Figure 3.6.2. Ratio of operating income and costs components to net assets



Source: NBU.

Figure 3.6.3. Banks' operational efficiency



* Of securities, foreign currency and financial derivatives.
Source: NBU.

The sector remained highly profitable

Despite the crisis, the sector's financial performance remains strong. In January – April 2021, 26 banks that own almost two-thirds of the sector's assets had an ROE of more than 15%. That said, the sector's average ROE dropped compared to the pre-coronavirus crisis period. There was a decrease in the profits generated by several large banks, including Privatbank. On the other hand, financial institutions saw their capital rise.

The sector's substantial profits resulted from rapid growth in net interest and net fee and commission income. Over the first four months of 2021, the total increase in this income was 20% year-on-year. The ratio of this income to assets remains high, exceeding 8%. Operating expenses also increased, albeit at a much slower pace, and decreased compared to assets. As a result, the sector's operating efficiency remained high. This year's financial performance has been adversely affected by a revaluation of the indexed domestic government debt securities held by state-owned banks. But for this factor, the banks' operating income for the first four months of 2021 would have increased. The CIR stood at 55.1%. However, net of the revaluation effect, the ratio reduced to 49.6%, being close to last year's figure.

Low funding costs will support the interest margin

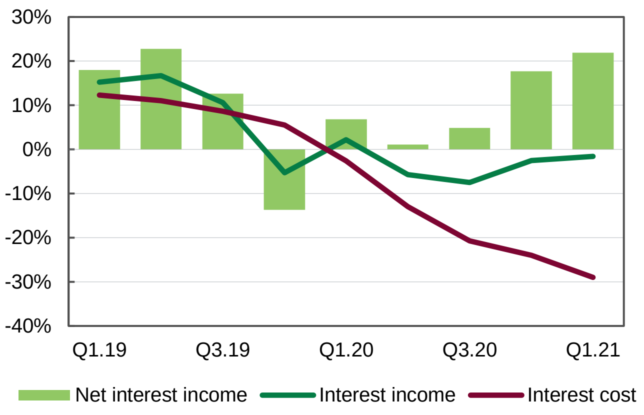
Over the past few quarters, the banks have achieved a significant decline in their interest expenses. For instance, in Q1, interest expenses dropped by almost one third in annual terms. The sharp decline in interest expenses was brought about by the fall in interest rates on corporate and retail funding that began in 2020. The banking sector's high liquidity and steady inflows of customer deposits contributed to the drop in interest rates. The cost of the banks' liabilities fell along with interest rates because of the short maturities of retail and corporate deposits. The larger share of demand deposits in total funding also helped reduce interest expenses, as these deposits normally bear no interest.

The downward trend in hryvnia interest rates halted in March. The NBU raised its key policy rate twice in response to higher inflation risks. With rising inflationary pressures and higher interest rates on risk-free instruments, the banks are likely to keep their current interest rates on hryvnia retail deposits unchanged for a long time. Thus, the long-lasting effect of lower interest rates on funding will wane this year.

Only some segments are facing profitability risks

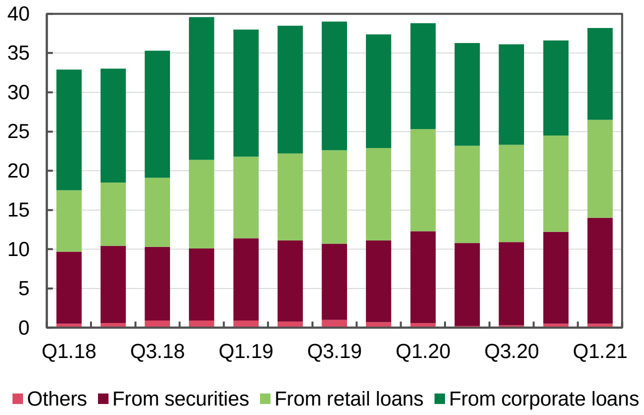
The structure of the sector's interest income has changed over the last year. The share of income from securities has risen markedly since late 2020, driven by an increase in the portfolio of domestic government debt securities. Meanwhile, the share of interest income from corporate loans has

Figure 3.6.4. Change in interest income and interest costs, yoy



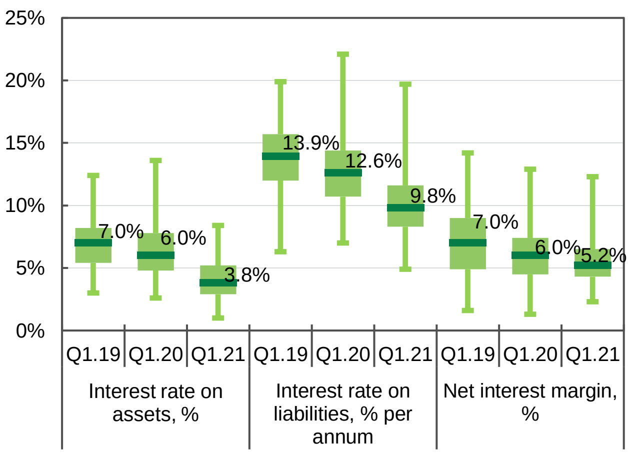
Source: NBU.

Figure 3.6.5. Interest income components



Source: NBU.

Figure 3.6.6. Interest rates on assets and liabilities of banks and net interest margin



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

Source: NBU.

declined. Interest rates on these loans fell rapidly, while the portfolio of these loans has grown slowly. The long-term rise in the share of interest income from retail loans came to a halt, mainly as a result of reduced retail lending during the crisis.

The banks' net interest margins depend on the main types of credit products they offer. Unsecured consumer loans remain the largest source of profit for the banks. The profits generated by corporate loan portfolios are significantly lower, as they have been affected by a long-lasting cycle of interest rate cuts. Nevertheless, the simultaneous decrease in funding costs enabled practically all banks, regardless of their business model, to maintain high net interest margins, despite these margins decreasing somewhat. Net interest rate margins will narrow more quickly as the effect of falling liability costs wears off. The narrowing in net interest margins will result in part from growth in the segments targeted by state support programs: mortgages and loans to small and medium businesses.

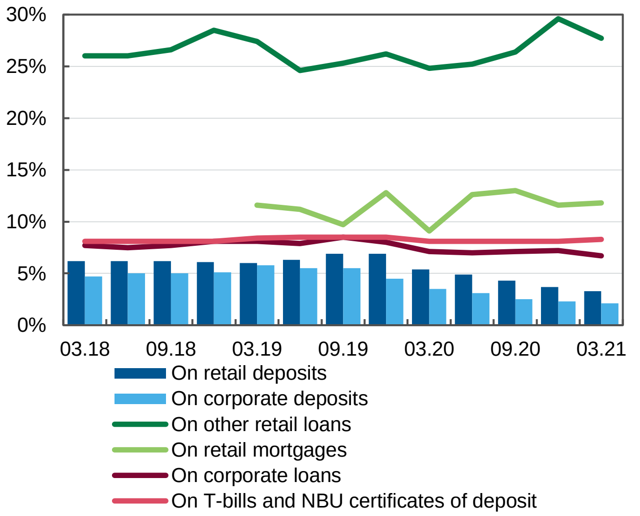
Banks focusing on corporate lending that have historically high funding costs and a large share of long-term deposits will be at risk over time. This category currently comprises several non-systemically important banks and one state-owned bank. Reliance on refinancing loans is an additional risk factor for some banks. The NBU plans to curtail refinancing loans in the near future, compelling the banks to look for alternative funding sources to ensure further growth. What is more, current interest rates on refinancing loans are higher than average interest rates on corporate and retail deposits.

Fee and commission income will rise in the long run

For a long time, receipts from payment transactions have been the main source of the banks' fee and commission income. Other services, such as lending and FX transactions, generate less than one fifth of the banks' net fee and commission income. Corporate clients settled their transactions mostly online even before the crisis, therefore these transactions were practically unaffected by quarantine restrictions. In contrast, the restrictions impacted payments made by retail clients, in particular, those made with payment cards.

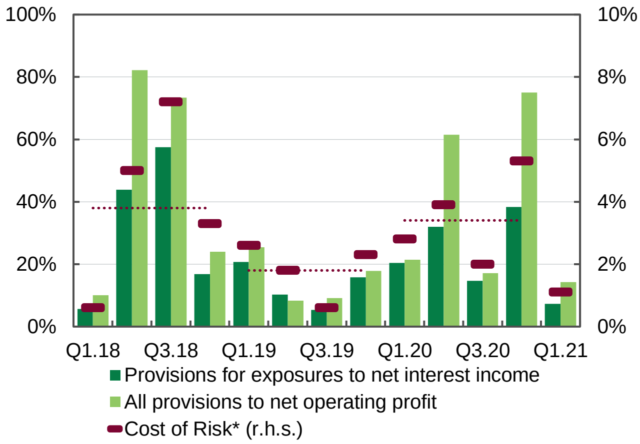
Each time stricter quarantine restrictions were imposed, there was a decrease in transactions that required customers to be present in shopping outlets, such as POS terminal transactions. Conversely, e-commerce surged, propelled, among other things, by P2P payments. Demand for contactless payment technologies and payments using mobile payment instruments continued to grow. The diversity of payment transactions enabled the banks to offset the losses they sustained in some segments by expanding transactions in other segments. Therefore, the January lockdown had a weaker impact on fee and commission income than the shock that occurred at the onset of the pandemic. With households already used to the advantages of remote servicing, the risk of a slump in fee and

Figure 3.6.7. Interest rates on assets and liabilities



Source: NBU.

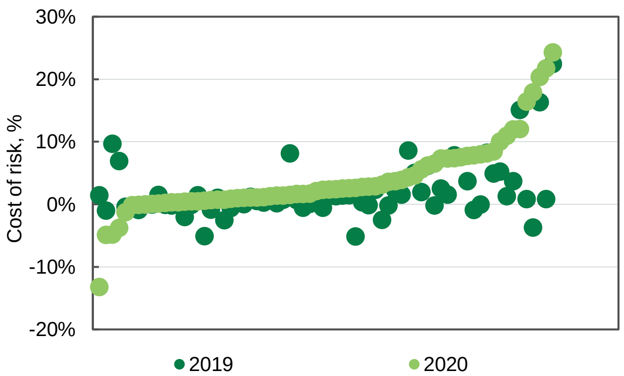
Figure 3.6.8. Cost of Risk



* Annualized loan loss provisions to the net loan portfolio. The dotted line shows the average value of the Cost of Risk for the corresponding year.

Source: NBU.

Figure 3.6.9. Distribution of banks by Cost of Risk*



* Annualized provisions for loans to net loan portfolio.

Source: NBU.

commission income during quarantine is now significantly lower than a year ago.

Over the first four months of 2021, net fee and commission income grew by 23% yoy. As the economy recovers further, the variety of transactions on which fees are payable will become greater. Certain risks to fee and commission income are posed by legislative initiatives to amend the rules for setting interchange fees. The drop in these fees is set to decrease the banks' income, especially that of those banks most active on the payment card market. The banks are most likely to offset this negative impact through unwinding bonus programs, including cashback programs. Going forward, the change in terms on card products may affect the banks' growth indicators in the retail segment.

Provisioning has returned to its pre-crisis levels

During the 2020 crisis, most banks reported a drop in the quality of their assets and made additional provisions. The ratio of provisions to the banks' net loan portfolio (CoR) almost doubled last year, hitting 3.4%. That said, some banks have made practically no adjustments to their expected credit losses compared to the pre-crisis period. Several banks even improved their assessments of expected losses. Conversely, some banks reported CoR values of above 20%. However, some of these banks increased their provisions for their legacy bad loans, which were not linked to the current crisis.

An asset quality review in early 2021 revealed that most banks accurately assessed last year's credit risk. The rebound in economic activity expected this year will enable the banks to improve their assessments and even release some of their provisions. Over the first four months of 2021, the banks' total credit risk losses were on average 1.9% of the loan portfolio. In the absence of new macroeconomic shocks or any significant delayed effects of the pandemic on certain sectors, provisioning will on average remain moderate, and will have no profound effect on profitability.

Box 6. Post-Covid "Normality" in the Global Financial Sector

The coronavirus crisis has accelerated changes in the financial sector: the number of bank branches has been reduced, clients have been shifted to remote servicing, employees have been moved to working remotely, cyber threats have increased, and the role of cash has fallen. This is shaping a "new normal".

The coronavirus crisis has sped up certain financial sector trends that were emerging before the crisis. These trends will have a significant impact on the banks' business models, expenses and operational risks, thus shaping post-crisis working environments in the sector.

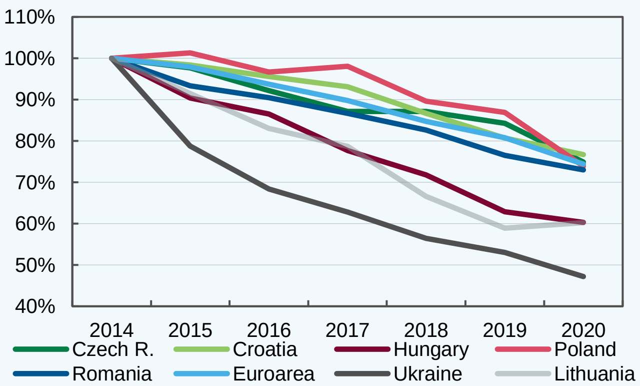
The reduction in the number of branches and pivoting to working and providing services online

The decrease in financial institution branches, which began globally a decade ago, is continuing. The pandemic has given fresh impetus to this process.

High health and safety requirements and some restrictions on physical contact with customers are likely to remain. This will complicate the operation of small financial institutions, especially those that cannot offer online services. It will also promote the consolidation of such institutions and the wider supply of comprehensive financial services. For instance, Poland's Financial Stability Committee is encouraging Polish credit unions to consolidate.

Remote working practices will persist in the financial and other sectors. 43% of chief information officers surveyed globally[14] said they intended to continue having employees work remotely when the pandemic is over.

Figure B.6.1. Index of number of branches of EU credit institutions and banks of Ukraine, 31 Dec 2014 = 100%



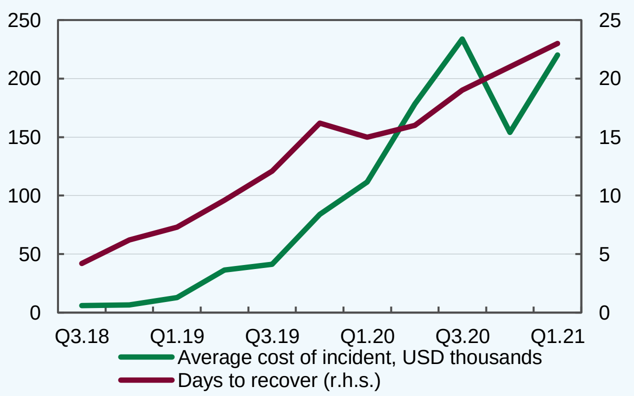
Source: ECB, NBU.

At the same time, new remote channels, mainly digital ones, for handling customers are developing. The IT component of financial institutions' expenses is rising. These trends, which began before the coronavirus crisis, accelerated in 2020. It is expected that banks will work together more with fintech companies. Despite a decline in the number of agreements entered into in H1 2020, over 2020 as a whole, global investment in fintech exceeded USD 105 billion, according to KPMG estimates. Alternative payment platforms could compete with banking payment systems in the future.

The rising frequency and gravity of cyber threats

41% of chief information officers surveyed last year (Harvey Nash/ KPMG CIO Survey) said there had been an increase in cyber attacks, mainly through phishing and malware[15]. According to data provided by the Bank for International Settlements about a quarter of cyber attacks are launched on the financial sector. The Fed Chair recently rated cyber risks as second only to a new pandemic wave in terms of seriousness. The rising number of online payments, simplified identification procedures, and remote work are attracting the interest of attackers. Fraud victims are losing increasingly more time and money to cyber attacks. Large companies and state authorities are being targeted ever more frequently. Totalitarian regimes or terrorist groups are often behind such attacks. Examples of large-scale attacks include four systemically important banks in Greece having to replace 15,000 payment cards in January 2020 following a hacker attack on a tourist company, a DDoS attack on Hungarian banks and communications systems in September, and the Colonial Pipeline cyber attack in May 2021, which resulted in the halting of the largest U.S. oil pipeline and a ransom of USD 4.4 million being paid to the attackers. This threat can be addressed in the main by strengthening cybersecurity and enhancing financial literacy.

Figure B.6.2. Average cost of ransomware incidents globally and average recovery time from such incidents



Source: Coveware Global Ransomware Marketplace Report.

Cashless payments are on the rise

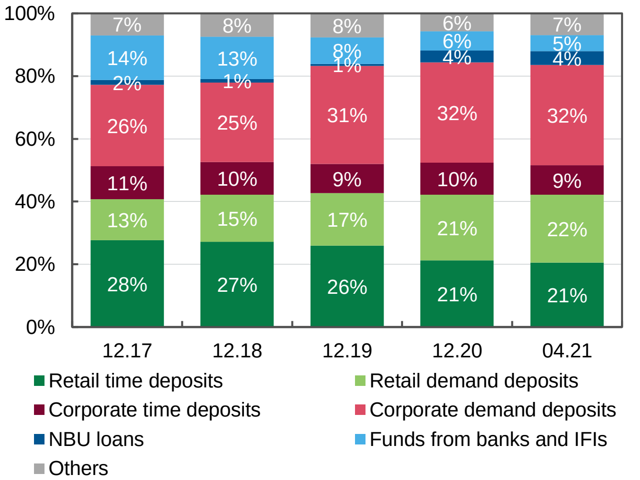
The increase has been facilitated by the perception of cash as a vector of infection, especially at the start of the pandemic, and the rise of instant 24/7 payments. In actual fact, 2020 saw a strengthening of existing trends: McKinsey estimates that the share of cash payments in total payments declined from 2010 through 2020 by an average of 10 pp in emerging markets, while shrinking even more in advanced economies and in China. Ukraine witnessed an almost 23% increase in the amount of cashless payment card transactions last year (compared to a rise of 38.6% in 2019 and 55% in 2018). The share of such payments in Q1 2021 hit 90%.

[14] Harvey Nash/KPMG CIO Survey of chief information officers (CIOs) from 4,219 leading companies in 83 countries.
[15] Phishing is a type of fraud used to steal sensitive data. Malware is malicious software that blocks a computer, provides attackers with access to that computer, and collects data.

3.7. Funding risk

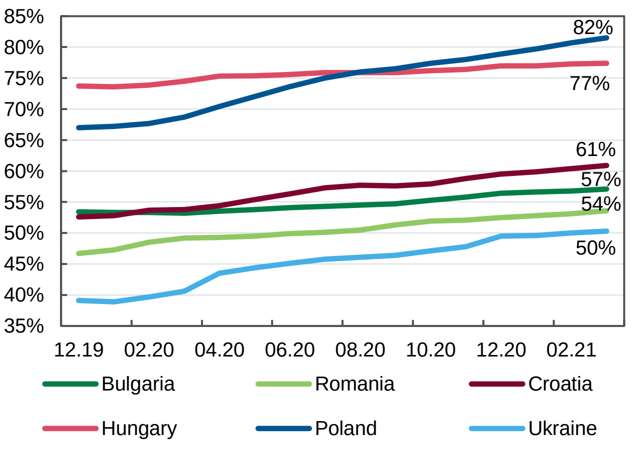
The cost of the banks' liabilities has decreased over the last year-and-a-half. Time deposits are losing popularity with households because of low term premiums, while the share of funds on demand deposits is rising. This is pushing funding costs down. Although the banks offer very low interest rates on FX deposits, they have limited opportunities to invest these funds. A substantial share of funding being held in current accounts is a new reality the banks will have to face in the coming years. Nevertheless, such funding remains stable. The banks can rely on this funding when lending, and this was taken into account, among other things, when setting the new net stable funding ratio (NSFR) requirement.

Figure 3.7.1. Composition of liabilities



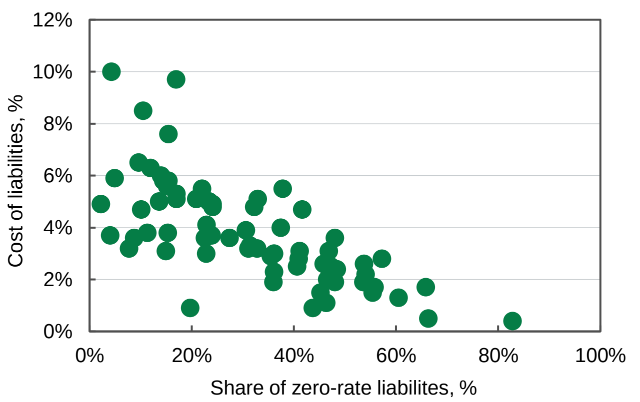
Source: NBU.

Figure 3.7.2. Share of demand deposits in retail deposits



Source: ECB, NBU, Central banks.

Figure 3.7.3. Cost of liabilities and share of zero-rate liabilities by banks as of 1 May 2021



Source: NBU.

Low interest rates and the pandemic have changed the structure of the retail deposit market

For a long time, the banks have been raising practically all of their funding on the domestic market. Currently, 84% of the sector's total liabilities are split equally between retail and corporate deposits. The last year-and-a-half has seen sweeping changes in the maturity composition of funding, in particular that of retail deposits. The share of time deposits started to decline noticeably in early 2020, with growth in demand deposits outpacing that of time deposits markedly. The main reason for this was a sharp drop in interest rates on time deposits.

Rates, especially those on FX deposits, are currently at historic lows, discouraging customers from making long-term deposits. This has decreased funding costs, driving the banks' profits up. Retail banks that actively work with card products and have a significant share of demand deposits have the lowest interest rates on household deposits.

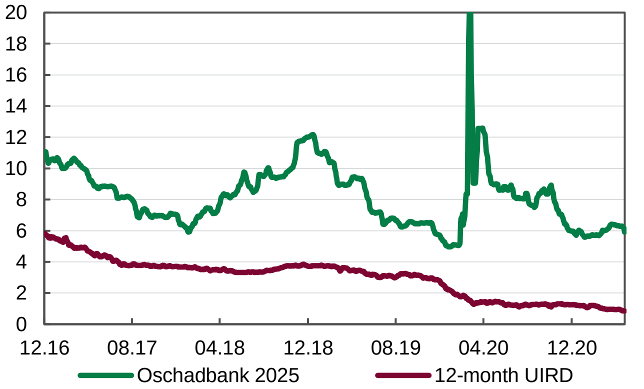
The shift in households' preferences also contributed to the change in the maturity composition of retail funding. Households starting keeping larger portions of their funds on current accounts to make online payments, among other things. What is more, during quarantine, households did not spend the money in their payroll accounts on travel, entertainment and other non-basic needs. Fear that they may lose their source of income and the desire to create a safety cushion against the possibility of illness or the loss of a job encouraged households to accumulate money on their current accounts.

As a result, the share of demand deposits in retail deposits soared to 51.5% in April 2021, up from 39.1% in late 2019. The flight of funds to current accounts is also seen in many other European countries, where interest rates dropped earlier and where the share of demand deposits is even greater than that in Ukraine.

The cost of FX funding is very low

Interest rates on FX deposits fell most of all. Banks owned by foreign banking groups cut their interest rates almost to zero in 2020, with state-owned banks following suit in early 2021. Interest rates on time FX deposits seldom exceed 1% per annum, as a result of which practically all new FX receipts to customer accounts remain in demand accounts. Over the year, the share of these funds in retail FX deposits grew by 11.2 pp, to 44.9% in April 2021, and it continues to rise.

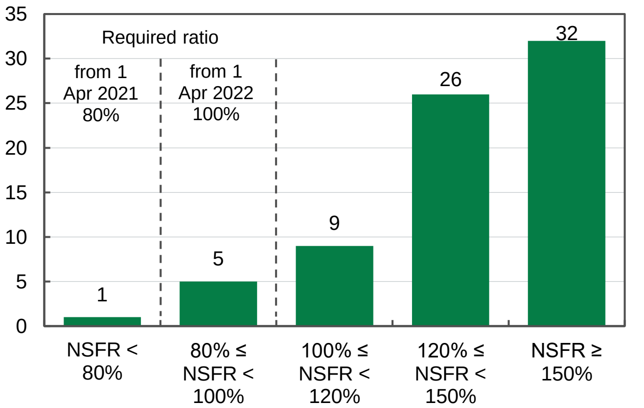
Figure 3.7.4. Yield to maturity (YTM) of Oschadbank eurobonds and 12-month Ukrainian Index of Retail Deposit Rates (UIRD) in USD*, % per annum



* 5-day moving average. Eurobonds maturing on 20 March 2025 were placed on 1 September 2015 with 9.625% coupon. Currently, USD 200 million-worth securities are in circulation. Yield-to-maturity (YTM) of coupon bonds – Internal rate of return (IRR) of a bond – depends on purchase price, nominal value, coupon payments, time to maturity.

Source: Thomson Reuters, CBonds, NBU estimates.

Figure 3.7.5. Distribution of banks by NSFR reading as of 1 April 2021, number of banks



Source: NBU.

Table 3. Available stable funding (ASF) ratios for retail deposits

ASF ratios (Basel)	ASF ratios depending on the residual maturity (NBU)			
	Demand	Up to 6 months	From 6 to 12 months	Over one year
90–95% (up to 1 year) 100% (over 1 year)	40%	55% (up to 3 months), 75% (3–6 months)	85% (6–9 months) 90% (9–12 months)	100%

Source: BIS, NBU.

As the banks can only invest their FX funds in low-interest instruments, they must offer low interest rates on FX deposits to maintain their interest margins. Since the cost of the funding the banks can raise on the external markets is relatively high, they are raising practically no foreign funding. In April 2021, the share of external funding in the banks' liabilities was only 5%, and consisted of Eurobonds and the funds of international financial institutions.

The banks will rely on short-term funding

Decreasing maturities of retail deposits is a trend that is unlikely to change in the foreseeable future. This raises a key question of whether this funding base is stable. In international practice, funding from households, in particular that held in current accounts, is considered stable. This is reflected in the methodology for calculating two liquidity ratios developed by the Basel Committee. The liquidity coverage ratio (LCR) has a relatively low outflow ratio (of 3% to 10%) for retail deposits, while the net stable funding ratio (NSFR) assumes that 95% of households' current accounts can fund long-term assets.

This was not the case in Ukraine during the two previous crises, when customer fund outflows were significant and sometimes even paralyzed the operations of some banks. However, the reform of the banking sector instilled customers with trust in financial institutions. The previous year of crisis has shown that funding from households is stable, despite being short-term. The pandemic did not result in the materialization of liquidity risk, as outflows of hryvnia deposits were seen for less than two weeks at the onset of the pandemic. Since then, outflows have resumed, with their pace rising sharply. Although outflows of FX deposits were also short-lived, their further growth was moderate.

A new requirement – the net stable funding ratio – encourages the banks to rely to a considerable extent on funding from households. To calibrate this ratio, the NBU chose a more conservative approach to available stable funding (ASF) ratios than is envisaged by the relevant Basel standard. In contrast to the Basel standard, the NBU differentiated available stable funding ratios for retail deposits with maturities of up to one year. These parameters leave the banks sufficient stimuli to attract funds for longer periods, for instance, by offering additional term premiums.

The NSFR requirement was introduced on 1 April 2021. All of the banks, except one, have exceeded the minimum required level of 80%. Over a year, the required minimum amount will be gradually increased to 100%. However, a third of banks already have ratios 1.5 times in excess of the required amount.

3.8. Changes in the Regulatory Environment

In H1 2021, parliament adopted laws that are important for the financial sector and that aim to protect consumers, in particular borrowers who took out FX consumer loans. The NBU approved new rules for taking corrective action against non-banks and the requirements that financial service providers disclose their ownership structure. It also introduced the net stable funding ratio.

Parliament passed important financial sector laws designed to:

- **protect consumers during the course of past due debt workout** (No. 1349-IX), which will come into effect on 14 July 2021. According to the new rules, the activity of collection agencies that recover past-due consumer loans for financial institutions will be strictly regulated. The operation of debt-collectors will be supervised by the NBU. Lenders (banks and finance companies) will be required to monitor the behavior of the debt collectors they engage. They will also be prohibited from contracting entities that are not on the list of registered collection agencies. The law regulates all stages of the process: from designating and registering debt-collectors, to their dealings with consumers. In May, the NBU launched a special web page about the future registration of collection agencies. All operating collection agencies are required to submit a packet of documents to the NBU to be listed in the register;

- **restructure FX loans and simplify insolvency proceedings for FX loan borrowers** (No. 1381-IX, No. 1382-IX, and No. 1383-IX), which came into effect on 23 April 2021. Among other things, law No. 1381-IX sets forth that those borrowers who were not in arrears on their FX consumer loans as of 1 January 2014 or who had repaid their past-due loans by the day of restructuring may use the restructuring terms provided for in this law. Their FX debt will be converted at the average exchange rate of the hryvnia to the relevant foreign currency. This exchange rate will be calculated as the arithmetic mean of two NBU official exchange rates: the one in effect on the day the loan is restructured and the one that was in effect when the loan was issued. After having their loans restructured, borrowers will be given ten years to repay their loans; they will also be allowed to repay their debts before the ten-year period is up. What is more, this law lifts the moratorium on foreign currency mortgage foreclosure from 23 September 2021. Laws No. 1382 and No. 1383 streamline insolvency proceedings for borrowers of FX loans and decrease the tax burden on households that arises when a portion of their debt is forgiven.

Approved requirements for the ownership structure of financial service providers

In April 2021, the NBU approved the requirements for the ownership structure of financial service providers, while also setting clear-cut criteria for their transparency (NBU Board Resolution No. 30). All non-bank financial institutions (apart from credit unions), lessors, and also postal operators that have been authorized to provide some financial services, are required to provide the NBU with information about their ownership structures and post it on their websites by 17 June 2021. In addition, all companies that apply to the NBU for a license will also be required to provide information about their owners and the relationships between them. Companies with non-transparent ownership structures are required to change their ownership structures so as to comply with the new requirements by 17 October 2021. The NBU has also launched a dedicated webpage that provides detailed information about the stages of disclosing ownership structures, common schemes used to conceal who the real owners are, explanations and examples of filled out documents for market participants, and a FAQ section about how to prepare documents.

A new long-term liquidity ratio introduced

The central bank made the decision to introduce the net stable funding ratio (NSFR) and approved the method for calculating it in late 2019. The initial NSFR requirement and the transitory period for its introduction were determined on the basis of test calculations conducted since mid-2020. The banks will be required to comply with the NSFR in all currencies and ensure that the NSFR calculation and monitoring are done separately in the domestic and foreign currencies. Under the NSFR implementation timeframe, the banks must ensure that their indicators meet the required ratios, which will be at least:

- 80% – from 1 April 2021
- 90% – from 1 October 2021 and
- 100% – from 1 April 2022.

The main purpose of the NSFR is to encourage the banks to rely on more stable and long-term funding sources. This will address the maturity mismatch and help mitigate a systemic risk to financial stability that is posed by reliance on short-term bank funding.

Setting temporary requirements for licensing non-bank financial service market participants

In March 2021, the NBU approved temporary licensing conditions for non-bank financial institutions and lessors. The document sets out the requirements for obtaining a license that grants the right to provide financial services, as well as the requirements license holders must comply with when providing financial services. It also outlines a list of documents to be submitted to obtain a license, and the procedure for revoking (cancelling) a license. In actual fact, the approaches to licensing nonbanks introduced by the previous regulator remain unchanged, with the licenses issued by the National Commission for State Regulation of Financial Services Markets continuing to be in effect after the above document came into force. The revised licensing requirements set out the procedure for revoking (cancelling) licenses at an institution's request, cancel the requirement that entities submit their financial statements to obtain a license to provide leasing services, while also requiring non-bank financial institutions to submit annual reports based on the results of a mandatory audit of their annual financial statements.

After approving the temporary licensing conditions, the NBU started developing a new regulation on licensing and registering financial service providers, and on requirements for providing financial services. Among other things, the new rules will change the procedures for issuing licenses, approving acquisitions of qualifying holdings, assessing the eligibility criteria of institutions' top managers, and assessing the financial health of institutions.

New rules approved for taking corrective action against non-bank financial institutions

The NBU has set out the procedure for taking corrective action against non-bank financial service market participants for failing to comply with applicable laws and regulations, including those that protect the rights of financial service consumers.

The central bank introduced a proportionate approach to corrective action. The new rules stipulate procedures for the following types of corrective action: the requirement to rectify the violation, the requirement that a financial institution call an unscheduled meeting of its shareholders, the imposition of a fine, the suspension or cancellation of an institution's license, removing a company from the register, and entering into an agreement in writing. The rules also provide for additional corrective actions for high-risk market participants (insurers and credit unions), such as approving a recovery plan, suspending an institution's top managers, and appointing a provisional administration. There are also corrective actions for non-bank financial groups. If the NBU identifies non-compliance with consolidated supervision laws, the central bank will have the right to raise certain mandatory ratios and limit some transactions.

Remote inspections of banks during quarantine introduced

The NBU has ensured the continuity of banking supervision under quarantine, while also reducing risks to the health of its staff and the staff of other banks. During quarantine, inspection group members will be granted remote access to documents and information of the inspected entity and use removable data storage media. Paperwork drawn up during inspections can be submitted as electronic documents signed with an e-signature by an authorized person.

The list of systemically important banks updated

Pursuant to the Regulation on the Procedure for Identifying Systemically Important Banks (SIBs), the NBU identifies such banks on an annual basis, using data available of as 1 January of the relevant year. In February 2021, the NBU approved the current list of systemically important banks, which comprises 13 financial institutions. The methodology for identifying SIBs is based on recommendations made by the European Banking Authority. Detailed information about SIBs is available on the NBU's new web page list of SIBs, which, among other things, contains infographics and links to the relevant regulations.

SIBs, together with the NBU, were included in the list of critical infrastructure entities of the Ukrainian banking system, which was drawn up for the first time pursuant to the Ukrainian Law *On the Basic Principles of Cybersecurity in Ukraine*.

Recommendations

Financial stability requires coordinated work between all financial market participants – the NBU, banks, nonbank financial institutions, and market regulators – as well as the active support of the state authorities. The NBU makes recommendations to government 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
Ukraine has thus far managed to receive only the first tranche of around USD 2.1 billion of its USD 5 billion Stand-by Arrangement with the IMF. Under the initial schedule, the third review of the program was to have taken place on 15 May, and the total amount received was to have reached USD 4.2 billion. To receive the remaining funds, the state must meet all of its commitments under this and previous programs. The program with the IMF guarantees that Ukraine will orderly repay its external debt, with minimal risks to macroeconomic and financial stability.

Pass legislation aimed at promoting financial sector development:
amendments to the **Law of Ukraine *On Banks and Banking*** (No. 4367) intended to improve the system of corporate governance and internal control at banks, and to further harmonize capital requirements with EU legislation, including changes to the structure of capital. Furthermore, this bill clarifies certain provisions concerning the consolidated supervision of banking groups, bank licensing, approval of the acquisition of a qualifying holding in a bank, and requirements for bank ownership structures.

draft laws ***On Financial Services and Financial Companies*** (No. 5065), ***On Insurance*** (No. 5315), and ***On Credit Unions*** (No. 5125). The current legislation is outdated and does not correspond to global standards or the risks of the sector. The new draft law are based on the NBFI regulation practices used in the EU. Specifically, the bill on insurance has at its core the EU's Solvency II Directive. This legislation is intended to ensure a transparent ownership structure and a risk-based approach to supervision, streamline licensing, improve corporate governance requirements, and regulate the market behavior of market participants. These bills have already passed first reading.

on improvement of mechanisms for the resolution of banks (No. 4546). This draft law aims to strengthen the DGF's mandate to resolve the banks, making resolution more effective. The document has passed first reading. Its adoption will help preserve the bank's assets, prevent the loss of these assets, and satisfy claims of as many creditors of insolvent banks as possible.

draft law on payment services (No. 4364), aimed at bringing up to date the regulation of Ukraine's payments and transfers market and establishing a legal framework for integrating the Ukrainian payments market into the European market. This bill has already passed first reading.

Create conditions for transactions with agricultural land and for its use as collateral in bank lending
The land market was launched from July 2021. In the initial years, the law limits the purchase of land to 100 hectares, so that small farmers will be the market's main participants. Loans partially guaranteed by the government should become an important tool for the financing of these businesses. The Law *On the Partial Guarantee Fund for Agricultural Loans* (No. 3205–2) should be passed to provide guarantees for loans to small- and medium-sized agricultural producers. This will reduce the banks' risks and simplify lending to farmers for purchasing land and financing production.

Resolve the Deposit Guarantee Fund's solvency problem
The Financial Stability Council (FSC) has approved the mechanism for restructuring the debts of the Deposit Guarantee Fund (DGF), which aims to restore its solvency and the resilience of the deposit guarantee system. The FSC has recommended that the DGF's current liabilities

to the government and future interest payments be converted into contingent liabilities. A draft law that reflects the FSC's recommendations has already been drawn up. This document has received a positive response from international financial institutions. To improve the protection of depositors, the guaranteed amount of deposit is slated to gradually increase to UAH 600,000, starting in 2023 (No. 5542–1). In addition, Oschadbank is expected to join the deposit guarantee system.

Enhance the regulation of the primary real estate market and ensure its transparency
The primary real estate market remains unregulated and opaque. The situation is complicated by the protracted reform of the architectural and construction control system. 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 construction site ownership. It is also important to increase the transparency of the market for new buildings through the full disclosure by construction participants.

Carry out judicial reform and restore confidence in the judiciary
Currently, financial sector practitioners view the activities of law enforcement and the judiciary as key systemic risks. 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. This will also facilitate reduction of the cost of loans. At present, the high cost of borrowing is partly the result of the inadequate protection of the creditor rights, who cannot rely on the judiciary when seeking justice.

Recommendations to the banks

Most of the recommendations to the banks made in the previous issues of the Financial Stability Report remain relevant. In addition, it is recommended that the banks do as follows.

Continue to work on reducing the NPL portfolio
The process of resolving NPLs has slowed recently. State-owned banks need to keep pursuing their NPL reduction strategies.

Update recovery plans
The NBU has processed the resumption plans first submitted by the banks in late 2020. The experiences of drawing up these plans were summarized, and the banks have been provided with recommendations on the components of the plans that may require additional refinement. The NBU expects that the banks will follow these recommendations when updating their plans, which they must do by 1 October.

Prepare for the imposition of new capital requirements
In H2 2021, the risk weights for unsecured consumer loans will increase. At the start of 2022, capital requirements for operational risk are to be introduced, and the ICAAP/ILAAP implementation requirements will take effect. The NBU will also set the schedule for activating the capital conservation buffer and the systemic importance buffer. Preliminary estimates show that banks are generally prepared for the new requirements, and that the additional burden on capital ratios will be negligible.

Step up efforts to restructure FX mortgages
In April 2021, three laws were passed to regulate the process of restructuring FX mortgages. At the same time, the moratorium on foreclosure on FX mortgages was extended until September this year. Financial institutions should speed up the process of clearing their balance sheets of FX mortgages, in particular through restructuring. These laws stipulate that restructuring must be initiated by borrowers. However, the banks need to actively communicate with their borrowers, explain the new laws, and encourage the settlement of bad debts.

Recommendations to Nonbank Financial Institutions

Ensure a transparent ownership structure
The deadline granted to nonbank financial institutions to disclose their ownership structures expired in June. If their ownership structures do not meet the requirements, financial

institutions must also submit action plans to eliminate the discrepancies. These plans must be implemented by mid-October. Going forward, market practitioners who are in breach of ownership structure requirements may come under sanctions.

Ensure the timely filing of reports

Despite a long transition period, a number of nonbank financial institutions are still not reporting to the NBU. Some of them have not reported at all since July 2020. At the same time, the reports that have been filed sometimes contain inconsistencies and errors. The poor quality and incompleteness of this information hinder effective regulation and supervision. Therefore, institutions that have technical and organizational difficulties with reporting need to speed up the process of resolving them. All financial institutions must file reports, even if they are dormant. If they plan to close down, they must voluntarily return their licenses.

Meet solvency requirements

As of 1 April 2021, 44 insurers and 9 credit unions were in breach of minimum solvency requirements. Since the start of the year, some non-bank financial institutions have been subject to various corrective measures for violating solvency requirements. These measures ranged from requests to eliminate violations to suspensions of licenses. Currently, the solvency requirements for all nonbank financial institutions are moderately conservative, take into account the market conditions, and do not create an excessive regulatory burden. Rather, compliance is intended to minimize the risks to consumers of financial services.

The NBU's plans and intentions

Start phasing out long-term liquidity support for banks

The NBU will gradually unwind its emergency liquidity support measures introduced in response to the COVID crisis, including long-term refinancing and interest rate swaps. Maturity of deposit certificates will roll back to 14 days, the pre-crisis level.

Enhance capital requirements in line with international standards

- In H2 2021, risk weights for unsecured consumer loans will be raised to 150% from the current 100%. When the requirements for the implementation of ICAAP/ILAAP (assessment of internal capital adequacy and internal liquidity) take effect, this will be the final step in the introduction of new standards for setting up risk management systems in banks.
- The introduction of minimum requirements for capital coverage of operational risk is scheduled for 1 January 2022.
- Starting 1 January 2022, the next stage of raising the risk weights for FX domestic government debt securities will begin. The risk weights will first increase to 50% and then, on 1 July 2022, to 100%.

Complete the stress testing of banks, publish the results at the end of the year

After a one-year break due to COVID-19, the NBU has resumed annual stress testing. Ukraine's 30 largest banks are now undergoing the tests. Stress testing is being carried out under two scenarios: baseline and adverse. The adverse scenario simulates the materialization of credit, interest rate, and currency risks. A feature of this year's stress testing is the inclusion of a shock to the yield on government securities that leads to losses. Stress testing will be completed in the summer, and the results will be published by the banks at the end of the year.

Finalize the requirements for banks to calculate market risk

The development of a relevant regulation based on the Basel Standards will be completed this year. Market risk will be assessed by four components: interest rate and stock risk of the trading book, and currency and commodity risk of the banking and trading book. Ukraine will implement a Simplified Standardized Approach to calculate the risk, given the small volume of banks' trading books and the low complexity of financial instruments. The introduction of this approach to market risk assessment will not lead to a significant tightening of bank capital requirements.

Abbreviations and terms

BIS	Bank of International Settlements
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
DTI	Debt 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
FAO	Food and Agriculture Organization
Fed	US Federal Reserve System
FX	Foreign currency/exchange
GDP	Gross Domestic Product
ICAAP	Internal Capital Adequacy Assessment Process
ICR	Interest coverage ratio
IFI	International Financial Institutions
IFRS	International Financial Reporting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
ILO	International Labor Organization
IMF	International Monetary Fund
LCR	Liquidity coverage ratio
NBFI	Non-bank financial institution
MFU	Ministry of Finance of Ukraine
NBU	National Bank of Ukraine
NFC	Non-financial corporations
NSFR	Net stable funding ratio
NIM	Net interest margin
NPL	Non-performing loan
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"
ROA	Return on assets
ROE	Return on equity
SREP	Supervisory Review and Evaluation Process
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
T-bonds and bills	Domestic government debt securities
UIIR	Ukrainian index of interbank rates
UIRD	Ukrainian Index of Retail Deposit Rates
US	United States of America

th	thousand
mln	million
bn	billion
sq. m	square meters
EUR	euro
UAH	Ukrainian hryvnia
USD	US dollar
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