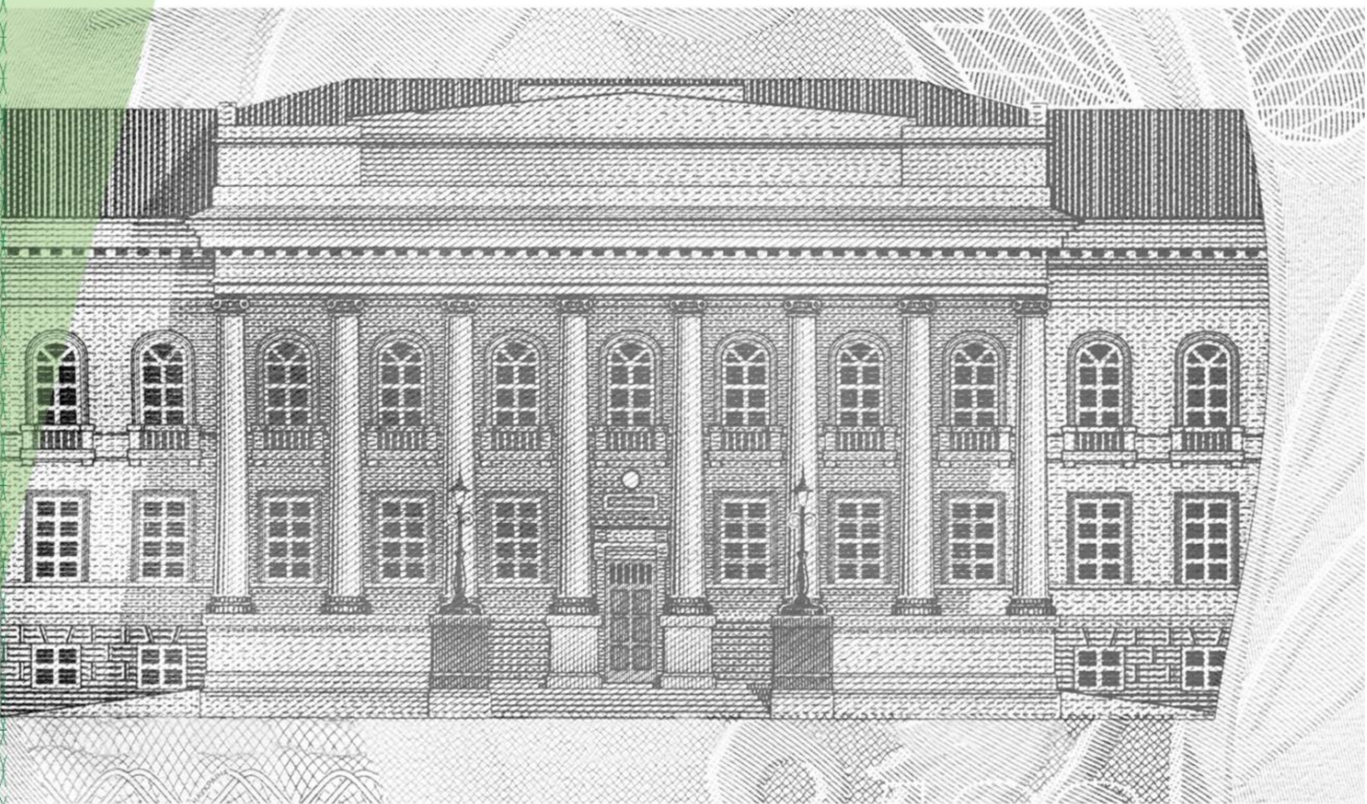
National Bank of Ukraine

Financial Stability Report

December 2019



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 primarily focuses on banking risks. The report makes recommendations to the authorities and banks 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. The report helps to understand better challenges that Ukrainian economy and financial system are facing as well as the impact that these challenges might have on financial stability in Ukraine. 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 report was approved for publication by the Financial Stability Committee of the NBU on 13 December 2019.

Contents

Summary

The banking sector remains in a good shape financially. The banks are highly profitable, with the sector's returns at all-time highs. Provisioning this year will be at its lowest in more than a decade. The cost of credit risk will remain low in the coming years, as macroeconomic environment is favorable, the real sector's debt burden is acceptable, and household incomes are rapidly increasing.

The stress tests of 2019 showed that there was still a few banks in the system, including two state-owned ones that potentially faced material problems. Under the adverse macroeconomic scenario, these banks may require large amounts of capital. Their financial resilience is weak, leaving them vulnerable to potential crises. The NBU focuses further on state-owned banks given their significance for the banking system. The NBU expects independent supervisory boards to make quick decisions to clear NPLs off the banks' balance sheets, to change their business models, and to optimize their operating expenses.

The key medium-term challenge for the banking sector will be the expected decline in profitability. The growth in the banks' operating income is slowing after a big surge in 2018. The NBU expects a further decline in interest margins and spreads, as well as a decrease in the growth in fee and commission income. The optimization of and control over transaction costs will therefore become crucial for Ukrainian banks.

The litigations involving the nationalization of PrivatBank are ongoing. The NBU will continue to take the necessary steps to safeguard the state's interests in the courts and to maintain financial stability. Going forward, the NBU will do whatever it takes to recover from the former owners of failed banks the losses incurred by the state and depositors.

Current macroeconomic environment is supportive to the stability of the financial system. Inflation has entered the target range determined by the NBU – a key achievement this year. The NBU's policy will continue to aim at keeping consumer price growth at the target level. This will enable banks to price their assets and liabilities more efficiently, thereby facilitating resumption of long-term lending to businesses and households.

The profitability of the real sector has stabilized, and the overall leverage is acceptable. The number of companies planning to borrow from bank is increasing. Interest rate cuts will promote the recovery of lending. Two key risks might impair the solvency of the banking sector in the medium term. The first is the rising labor costs, which are outpacing the growth in corporate revenues. The second is a drop in prices for some export goods. Metallurgy faced the worst price environment: it incurred operating losses in H1 2019.

For mortgage lending to recover, some of the fundamental problems in the primary real estate market need to be addressed. This market is highly opaque, and households that invest in it do not have effective mechanisms to protect their rights. As this market is socially important, its regulation should be as strict as that of the banking sector. Ownership structure of developer companies should become fully transparent; these companies should be held liable for construction works not done in due time. Without streamlining the primary residential real estate market, the recovery of mortgage lending will be extremely slow, despite the expected fall in interest rates.

Consumer lending is surging; the banks have been increasingly easing the criteria for approving loan applications. Some financial institutions are very actively expanding their presence in this segment and trying aggressively to boost their market share. The NBU believes that banks are not conservative enough in assessing the risks of unsecured consumer loans. The estimated probabilities of default (PDs) and loss given default (LGD) are low even under current macroeconomic environment. Although the penetration rate of these loans is currently below 5% of GDP, their growth rates are extremely high. In the first nine months of 2019, the ratio of new consumer loans to private consumption reached almost 9%. Lending is becoming a significant driver of domestic consumption. To prevent the build-up of systemic risks, the NBU is going to increase the risk weights for consumer loans starting in the beginning of 2021. The exact risk weights will be communicated shortly.

From the beginning of 2020, the banks should build the first portion of the capital conservation buffer at 0.625% and bring it to 2.5% over the next three years. The systemically important banks should build a systemic importance buffer by the end of next year. This will partially alleviate the NBU's concern about the financial soundness of the state-owned banks and reduce capital risks for the sector as a whole.

The financial system remains strongly dollarized. In its macroprudential policy strategy, the NBU identified dollarization as one of the systemic risks to the Ukrainian economy. In December, two important decisions were made to dedollarize bank balances. The reserve requirement ratio for FX deposits will be raised to 10%, and for hryvnia deposits it will be reduced to zero. The approaches to the credit risk assessment of FX domestic government bonds have also been changed. They will no longer be considered risk-free and will be assessed under the general rules. In fact, the banks will have to hold capital for these investments.

The NBU continues to update its approaches to banking regulation in order to enhance the sector's financial soundness. Rules for calculating the new NSFR liquidity ratio and minimum capital requirements to cover operational risks will be approved shortly. Plans for 2020 include harmonization of the regulatory capital structure with EU directives and development of a regulation on capital requirements to cover market risks. It will take a transition period of several years to implement all of the new rules. This will allow banks to plan their capital needs and adjust their dividend policy accordingly.

Building institutional capacity to regulate the nonbank financial services market will be a key challenge for the NBU next year. The newly adopted Split Law states that starting in July 2020, the NBU will become the regulator, in particular, of insurance, leasing, and financial companies, credit unions, and credit bureaus. Regulations for the nonbank institutions will be developed taking into account the provisions of the EU *acquis*. The NBU will pay special attention to such key issues as the disclosure of owners of financial sector companies, the quality of their corporate governance, and their compliance with consumer protection laws and AML legislation.

Financial Stress Index

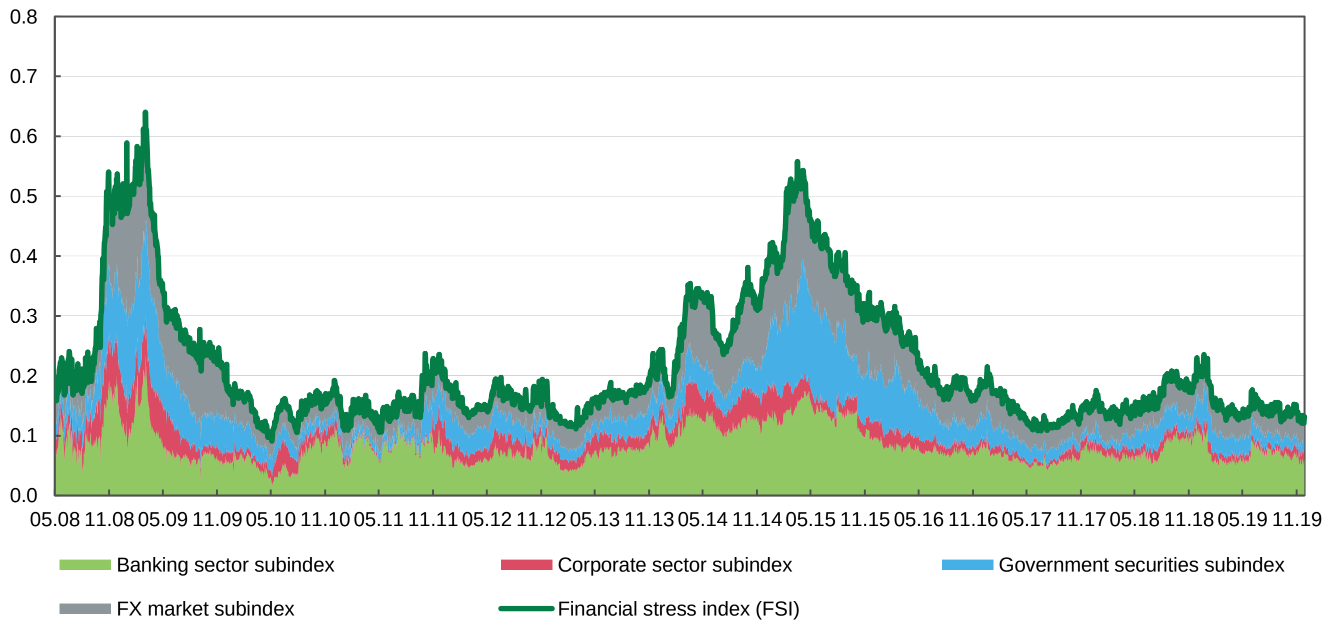
The Financial Stress Index (FSI)[1] has been relatively low for almost a year now. However, after a court of the first instance ruled in late April to overturn PrivatBank's nationalization, the FSI increased for a while, in part due to a worsening of banking sector liquidity. The corporate securities sub-index also rose slightly in H2 as prices for agricultural companies' stocks edged down in the fall months. The government securities sub-index has gone in the opposite direction. It has declined over the past year, signaling lower sovereign risks. The FX market sub-index was rather volatile, but not sufficiently so to affect the FSI trend.

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

Figure FSI1. **Financial Stress Index**

Source: NBU.

Figure FSI2. **Sub-index contributions to the FSI**



Source: NBU.

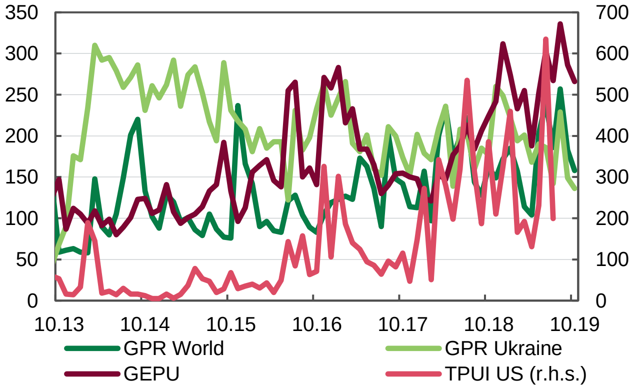
[1]The calculation method for Ukraine's Financial Stress Index is outlined in the December 2016 Financial Stability Report. The calculation method for the liquidity ratio was partially changed as of 1 April 2019, due to the revocation of the N4 ratio and the introduction of the LCR.

Part 1. External Conditions and Risks

1.1. External Developments

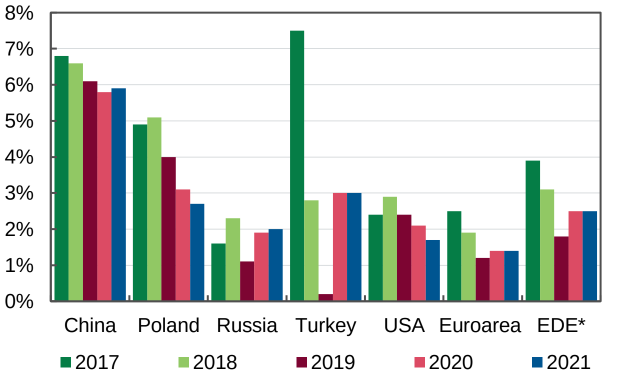
Geopolitical and geoeconomic risks remain high. Growth in the global economy and world trade has decelerated sharply. Meanwhile, the risks of a recession have abated, with expectations for 2020 being better than six months ago. Cuts in key policy rates by leading central banks are fueling interest in emerging markets. Most commodity prices have declined. Looking ahead, grain prices are expected to rebound, while ore prices are expected to fall. The threat of an escalation of the military conflict by Russia has decreased somewhat. The risk of a halt in gas transit through Ukraine remains high.

Figure 1.1.1. Geopolitical risk (GPR) index[2], global economic policy uncertainty (GEPU) index, and U.S. trade policy uncertainty index (TPUI)[3]



Source: Dario Caldara and Matteo Iacoviello; Davis, Steven J.

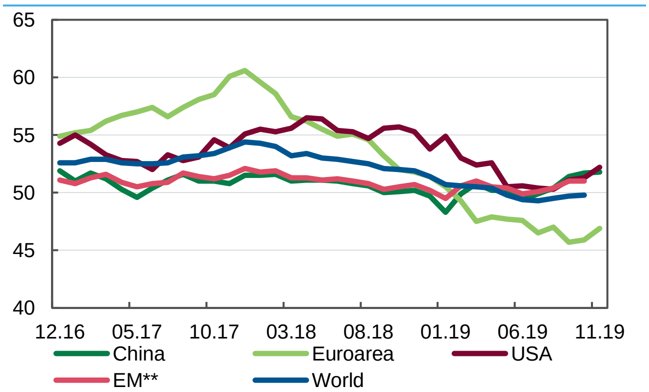
Figure 1.1.2. GDP of Ukraine's major trading partners



* Emerging and developing Europe comprises the nine Balkan countries, Poland, Belarus, Ukraine, Hungary, Moldova, Turkey, and Russia.

Source: the IMF, World Economic Outlook, October 2019.

Figure 1.1.3. Change in manufacturing PMI*



* Readings above 50 indicate an improvement, while anything below 50.0 suggests a declineValues; ** emerging markets.

Source: Markit, Refinitiv Datastream.

Global geopolitical and geoeconomic risks remain close to historic highs

The global economic policy uncertainty index is close to historic highs since its introduction in 1997. Political tensions in the United States have risen, which has wide international implications. U.S. presidential elections are seen as a 2020 uncertainty factor. Washington's trade standoff with China is escalating in waves. Protests in Hong Kong have caused a new escalation between the U.S. and China. Currently, the two parties agreed on mutual lifting of some tariffs, devaluations, on access to Chinese financial market; however, prospects for further deals is unclear. Brexit is unpredictable and threatens EU's financial sector and stability in Britain.

The direct risks of an escalation of the military conflict in Ukraine have abated somewhat

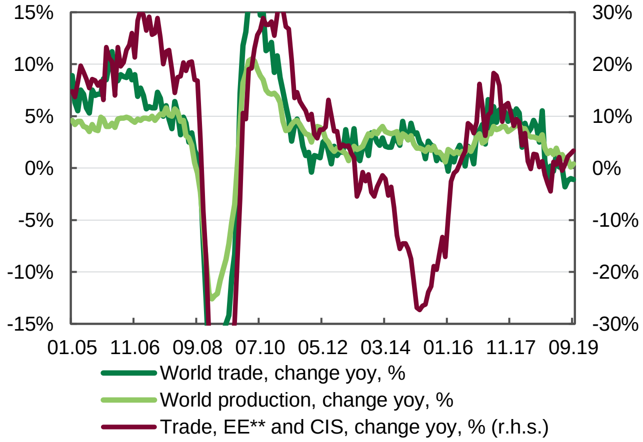
This is evidenced by the large-scale exchange of prisoners of war, the disengagement of troops, and the resumption of meetings of the so-called Normandy Four. A ruling by the International Court of Justice that it has jurisdiction in a case brought by Ukraine against Russia makes it possible to put judicial pressure on the aggressor. Nevertheless, the risk of an escalation remains, because of issue of Russian passports in NGCT areas, and new supplies of weapons and Russian troops to the occupied territories. The issue of regaining control over the border and reintegrating the Donbas remains unresolved. Holding elections in NGCT of Donetsk and Luhansk oblasts could be a challenge. Economic and political powers that call for a deal with Russia, even at the expense of Ukraine, have become more outspoken in Europe and the United States.

Economic growth decelerated in most countries, the pace of economic recovery will be uneven

In IMF estimates, global economic growth will slow to 3% in 2019, the lowest since the 2008-2009 crisis. Economic growth slowed in practically all of Ukraine's trading partners. Economic slowdown was more pronounced in emerging markets in particular in China, Turkey and Russia. Experts believe that the global economy is bottoming out, and that some economies will be back on track to grow in 2020. The IMF expects that economies of China and Poland will decelerate further. After the weakest growth seen since the crisis, economic recovery in the euro area will be sluggish (+1.2% in 2020 compared to +1.1% in 2019 according to the European Commission's estimates). Protectionist trends and

[2] https://www2.bc.edu/matteo-iacoviello/gpr.htm
[3] http://www.policyuncertainty.com/global_monthly.html

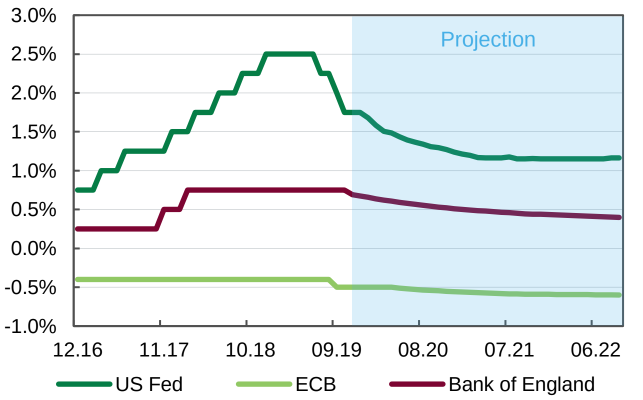
Figure 1.1.4. World trade and production*



* Volume of global trade; seasonally adjusted; production – production weighted, seasonally adjusted. ** Eastern Europe.

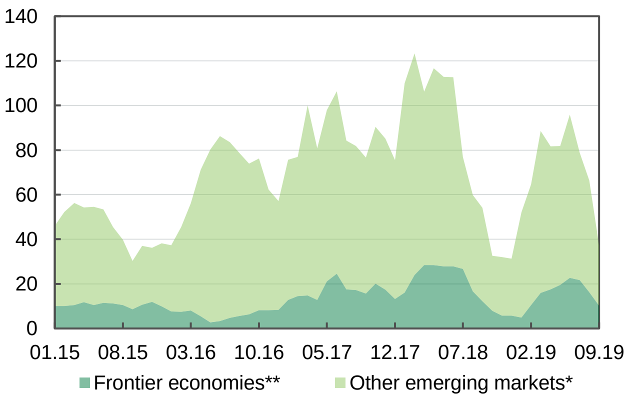
Source: Centraal Planbureau (CPB), the Netherlands.

Figure 1.1.5. Change and projections of key rates of the Federal Reserve Board (upper bound), Bank of England and ECB deposit rate



Source: the Federal Reserve Board, the ECB, Bloomberg.

Figure 1.1.6. Sovereign bond issuance, six-month rolling sum, USD billions



* Brazil, India, Mexico, Poland, Russia and Turkey.
** Separate group of economies that are to small / too risky to be considered fully fledged emerging markets, but also do not belong to less developed economies. In Europe, Ukraine, Romania, Baltic states and some Balkan countries are considered frontier economies.

Source: the IMF, Global Financial Stability Report, October 2019.

geopolitical risks are a threat to economic recovery. Expectations of economic recovery are linked to the easing in monetary policy seen in advanced economies and several emerging economies, while in China these expectations are also rely on fiscal stimulus. Leading production indicators in many of Ukraine's trading partners have started to recover according to the purchasing managers index (PMI).

Global trade growth slowed sharply, dragged down by geopolitical risks and weaker economic growth

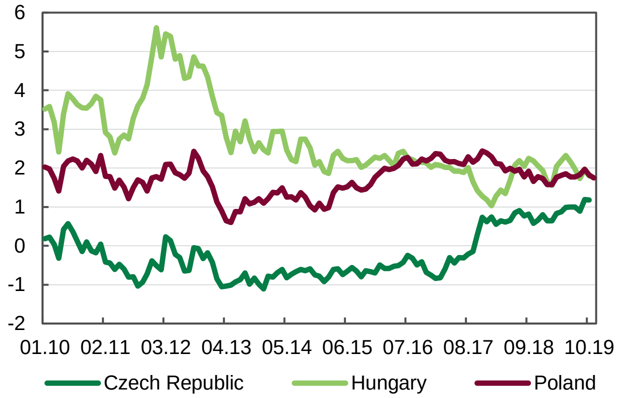
In October 2019, the World Trade Organization (WTO) revised its 2019 international trade growth forecast down to 1.2% versus the 2.6% growth it projected in April. Current indicators show that the volume of global trade has been decreasing since the summer of 2019. Although still expecting 2.7% trade growth in 2020, the WTO says that there are risks of a downward revision. The growth in global industrial output has also decelerated, among other things, on the back of a drop in the output of the automobile industry and worsening businesses' expectations. Meanwhile, trade and industrial output in Central and Eastern Europe are on the rise.

The risk of a halt in gas transit through Ukraine may materialize

Denmark granted its permission for the Nord Stream 2 gas pipeline, thus removing the last formal hurdle to the project. The Bundestag passed a bill exempting its section of the pipeline from the requirements of the third EU energy package, strengthening the position of Gazprom as a supplier and seller of gas in Germany. However, the pipeline is unlikely to be put into operation by the end of the year; therefore, Russia will eventually have to enter into a gas transit agreement. Trilateral talks (between the European Commission, Naftogaz and Gazprom) and bilateral talks (in particular high-level talks) about a new agreement on gas transit through Ukraine have not yielded desirable results. Russia demands that Ukraine releases Gazprom from its obligations to pay the damages awarded in the cases Ukraine has won against it. On the other hand, the U.S. Congress has approved a draft bill that imposes sanctions on the companies that were involved in the construction of Nord Stream-2 and TurkStream. A ruling by an EU court prohibiting Gazprom from monopolistic use of the OPAL pipeline and fines imposed by a Polish regulator on Gazprom and its EU partners will restrict Russia's efforts to dominate the EU gas market. Naftogaz is preparing a lawsuit against Gazprom demanding USD 11 billion in damages for a possible halt in gas transit through Ukraine. The court of Amsterdam is expected to make a final ruling on debt collection from Gazprom through the confiscation of its assets.

On 9 December, the Supreme court in London started hearing a case related to Ukraine's debt to Russia affected through purchases of Eurobonds worth USD 3 billion in 2013 (the so-called debt of Yanukovych). Russia demands USD 4.5 billion, including accrued interest. Ukraine believes that the debt was issued under duress and that court should not compel Ukraine to repay it.

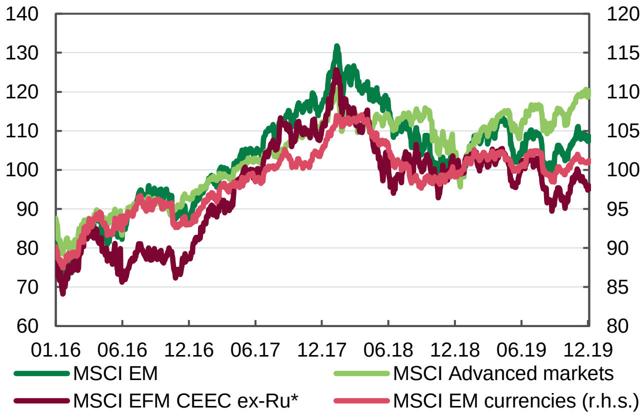
Figure 1.1.7. Spread between interest rates on 10-year sovereign bonds* of CEE states and Euro area, pp*



* CEE – states of Central and Eastern Europe outside of Euro area. Sovereign bonds at fixed rates.

Source: OECD.

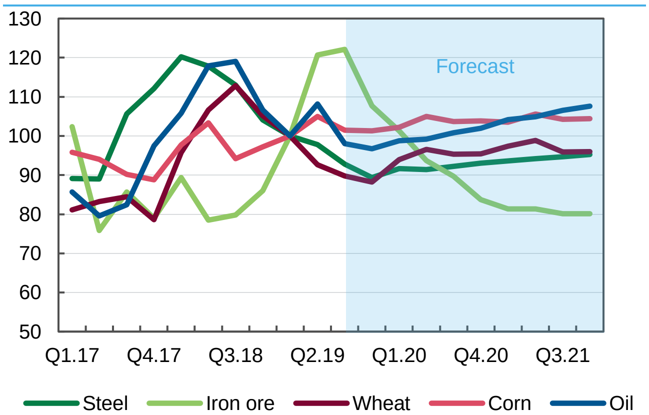
Figure 1.1.8. Stock indices of emerging markets (EM) and advanced markets, and EM currencies, 1 January 2019=100



* CEE – Central and Eastern Europe (excluding Russia).

Source: Refinitiv Datastream.

Figure 1.1.9. World commodity prices*, 2018=100



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

Source: the NBU, October 2019 Inflation Report.

Further monetary policy easing by the Fed and the ECB supported borrowings by emerging markets

The Fed cut the federal funds rate three times, by a total of 0.75 pp, in H2 2019. The ECB decreased its deposit facility rate by 10 pp, to -0.5%, and restarted net asset purchases. Experts and markets again expect a prolonged period of low rates of leading central banks. Up to 30% of the sovereign bonds issued by advanced economies bear negative interest rates. This could cause new financial shocks by encouraging investors to make overly risky investments, and leaving leading central banks stripped of powerful monetary instruments in their toolkits in the case of a potential new crisis. Many governments of emerging markets have seized the opportunity to borrow on the international markets at low interest rates. For its part, Ukraine has since the beginning of 2019 borrowed EUR 1 billion and about UAH 100 billion by placing domestic government bonds with nonresidents.

The value of the assets of emerging markets is recovering sluggishly

Capital inflows to these economies are expected to be smaller than in 2017-2018. Stock and currency indices in these economies underperformed compared to advanced economies on the back of global economic conditions and investors' search for safe assets. The value of assets started to grow since August, as the risk of a deepening of the trade conflict faded away. Worsening economic expectations in the euro area, especially in Germany, adversely affected the assets of Central and Eastern European countries.

Weak demand suppresses commodity prices

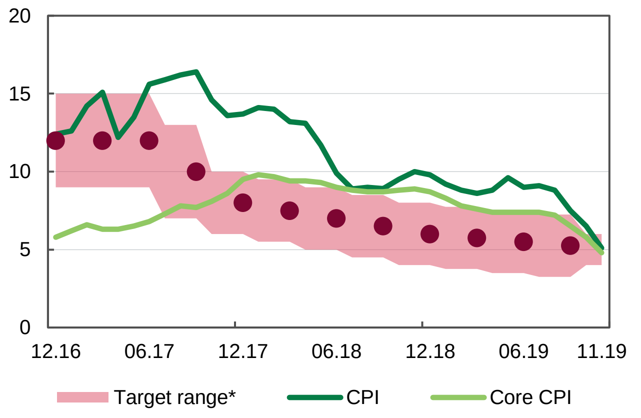
Commodity prices fell, dragged down by a slowdown in global trade and depressed demand. The global steel market (ferrous metals and products made of them made over 20% of Ukraine's exports in the first nine months of 2019) has been stagnating since the beginning of 2018, with prices sagging dramatically in 2019. Demand for steel in the EU is expected to drop by 1.2% in 2019 due to, among other things, a decline in the output of the car-making industry. According to Citigroup forecasts, steel prices will remain at their current levels in 2020, supported by demand from the construction sector, especially in China. Iron ore prices are falling dramatically from the five-year highs recorded in July on the back of rebounding Brazilian supply and an increasing supply from Australia. The oil market (oil and fuel account for over 20% of Ukrainian imports) was volatile in H2 2019, with Brent oil prices fluctuating in the range of USD 55-68.5 per barrel. This was due to both falling demand on the back of unfavorable macroeconomic conditions and production cuts by OPEC+ countries, and supply shocks (such as attacks on the oil refineries of Saudi Arabia). Looking ahead, oil price growth will be dampened by supply from OPEC nonmember countries (primarily the US) and slower demand growth. OPEC has revised downward its forecast for growth in global short-, medium-, and long-term oil consumption. Wheat prices declined as new harvest wheat came onto the market. However, a deterioration in 2019-2020 marketing year supply forecasts (for wheat, by Kazakhstan, Australia and Argentina; and for corn, by the US) will help push up prices for Ukraine's key grain exports (accounting for over 18% of our exports).

Part 2. Domestic Conditions and Risks

2.1. Macroeconomic and Fiscal Risks

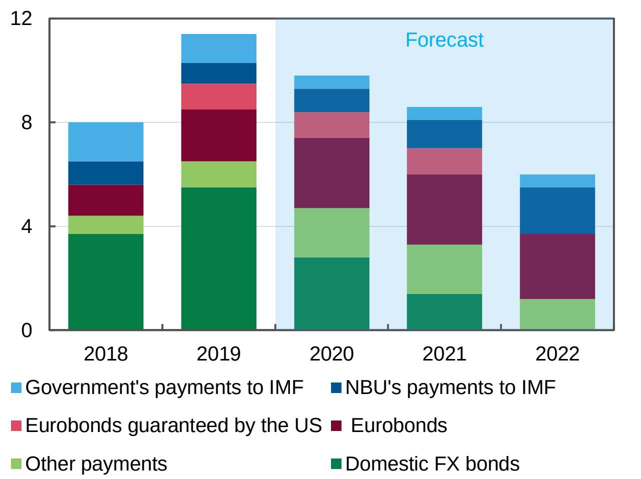
The macroeconomic environment is conducive to maintaining financial stability and strengthening the financial sector. Lowering inflation to the target and reducing its volatility will help restore long-term lending. The main macroeconomic risk for today is significant repayments on external public debt. To mitigate it, access to the international capital markets must be maintained. Therefore, implementing the new IMF program and meeting the terms of cooperation with other IFIs remain critical. Other risks include a reduction or complete halt of Russian gas transit through Ukraine from 2020 onward, a cooling of the global economy, and a delay in implementing structural reforms.

Figure 2.1.1. Consumer price indexes, % yoy



* Red dots – the inflation target.
Source: SSSU, NBU.

Figure 2.1.2. Foreign currency repayments on public and publicly guaranteed debt, USD billion*



* Including interest.
Source: NBU.

The economic environment supports financial stability

In October, the NBU raised its GDP growth forecast to 3.5%. The upward revision was caused by a faster-than-expected expansion of domestic demand, a bumper grain harvest, and a reduction in energy costs. The strengthening of the hryvnia did not affect the current account deficit, as FX inflows from abroad (from exports of goods and services, remittances) continue to grow, while the decline in global energy prices contributed to the slow growth in goods imports. Under the baseline forecast, economic growth will remain stable in the coming year, accelerating to 4% in 2021. The acceleration will be driven by continued increases in household incomes and productivity, a looser monetary policy, and high investment rates. No fundamental change in fiscal policy is expected. In 2020, the state budget deficit is planned at 2.1% of GDP (2.3% in 2019).

Lower inflation will increase the availability of credit

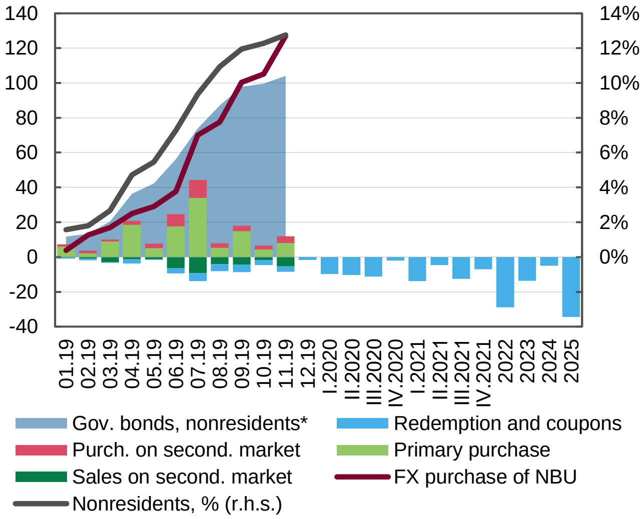
Consumer inflation slowed rapidly and reached the target range (5% ± 1 pp) in November 2019. The volatility of inflation declined as well. The consistent easing of the NBU's monetary policy will help reduce the cost of financial resources and restore long-term lending. For the latter to develop, it is important to keep inflation low and stable going forward. Cheaper business loans will allow companies to more actively raise funding to modernize production and increase output, which will translate into further GDP growth. The lower cost of borrowing for households will make mortgages attractive again, which will help boost housing construction. In the environment of low and stable inflation, the households will also be more willing to deposit money at banks and to extend their maturities. This is extremely important for the banking system, as the prevailing part of deposits is short-term.

The repayment and servicing of FX public debt is a key medium-term challenge

Ukraine continues to repay debts raised in times of crisis to have liquidity and replenish the NBU's reserves. The debt-to-GDP ratio is declining, but repayments of FX public debt remain concentrated. In 2020, they will decrease compared to the current year but will remain significant. In 2020–2022, the Government and the NBU will repay upwards of USD 24 billion in interest and principal on FX public debt. The bulk of this amount will have to be refinanced in the international markets.

Most credit rating agencies revised their ratings of Ukraine upwards after its economic performance improved. This has

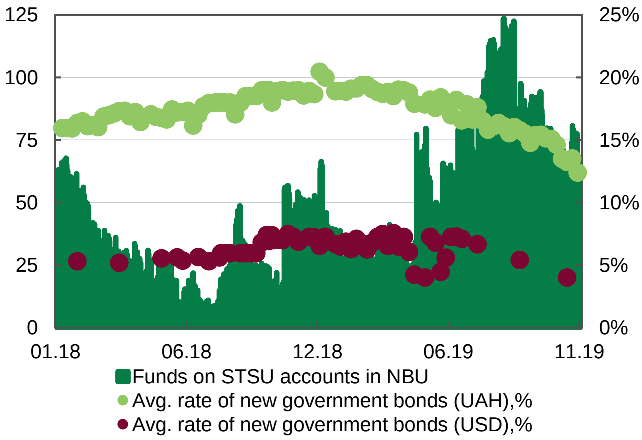
Figure 2.1.3. Nonresident participation in the market for domestic government debt, and the NBU's net FX purchases in 2019, UAH billion



As of 1 December 2019.

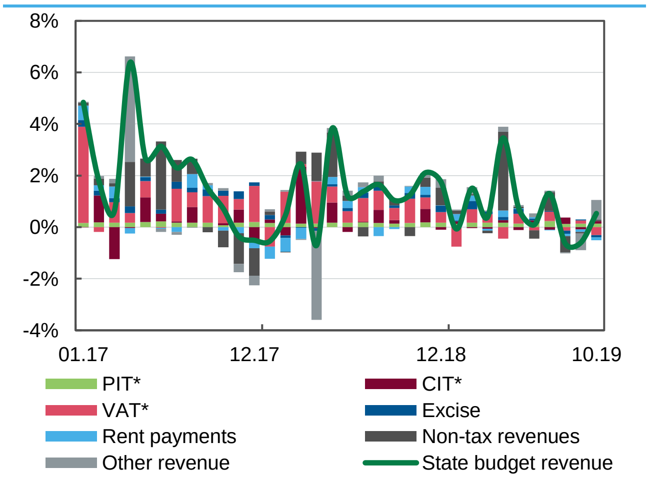
Source: NBU.

Figure 2.1.4. The hryvnia and FX balances in the STSU's accounts with the NBU, and average weighted rates on new domestic government debt



Source: NBU, Ministry of Finance.

Figure 2.1.5. Growth in state budget revenues: Trailing Twelve Months



* PIT – Personal Income Tax, CIT – Corporate Income Tax, VAT – Value Added Tax.

Source: STSU, NBU calculations.

increased the country's capacity to raise funds in the international market, but the cost of debt is still too high. In early December, the yield on dollar Eurobonds of Ukraine was in the range of 4%–7%, depending on maturity. This makes it vital for Ukraine to continue to cooperate with the IMF and other international financial institutions. The expected IMF's new Extended Fund Facility, which provides for the disbursement of USD 5.5 billion over the course of three years, will help lower the cost of sovereign and corporate borrowings. Furthermore, the IMF program is not as much about money as about providing an anchor for the implementation of important economic reforms that are sometimes socially unpopular. Therefore, international investors perceive cooperation with the IMF as a factor of confidence in the country and a confirmation that the reforms are going according to plan.

Nonresident demand for domestic government debt securities is a new fundamental factor in the market

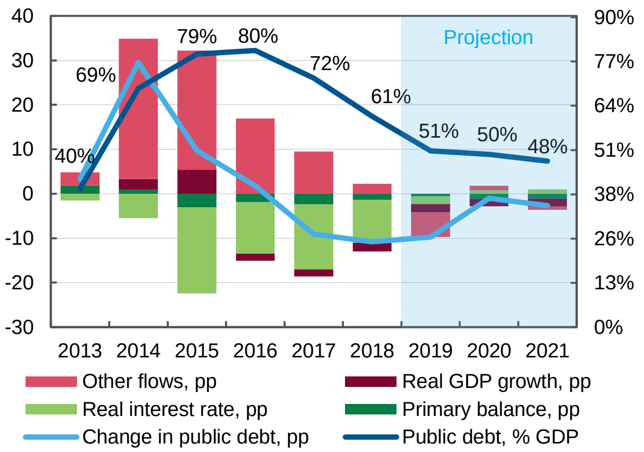
The significant growth in nonresident investments in domestic government debt securities has allowed Ukraine to finance current debt repayments and replace a portion of its FX debt with hryvnia debt. That and the hryvnia's strengthening in January–October 2019 brought the share of FX public and publicly guaranteed debt 6.1 pp down to 64.8%. Strong demand for domestic government debt in the past six months has made it possible to significantly reduce the cost of borrowings and extend their maturity. Over a half of the domestic government bonds purchased by nonresidents will mature in 2022–2025, and repayments that are due in the next two years are fairly evenly spread in time. The risk that comes with this source of financing is the high sensitivity of demand to conditions in the international financial market. If investor sentiment changes, fund inflows into Ukraine may cease. In order to reduce the potential negative impact, it is necessary to develop the domestic debt market, increase the maturity of debt, smooth repayments out, and continue cooperation with IFIs.

The liquidity buffer stabilizes the market

In H2 2019, a significant liquidity buffer built up (money in the single treasury account plus government's FX funds), enabling the Ministry of Finance to choose favorable terms and conditions for the placement of debt securities rather than go to the capital market whenever there was pressure to meet short-term financing needs. The formation of the significant financial resource was partly due to slow spending by local budgets. However, the main factor is the placement of domestic government bonds and Eurobonds in June–August 2019.

Liquidity buffers are actively used around the globe. Unless they are excessive or too expensive, they have a positive impact on the sustainability of public finances. Romania, for example, had an FX buffer in 2018 that equaled to 2.6% of GDP. For Denmark, the figure in national currency stands at 4% of GDP. For effective debt management in Ukraine, the liquidity buffer should be maintained at a certain optimal level.

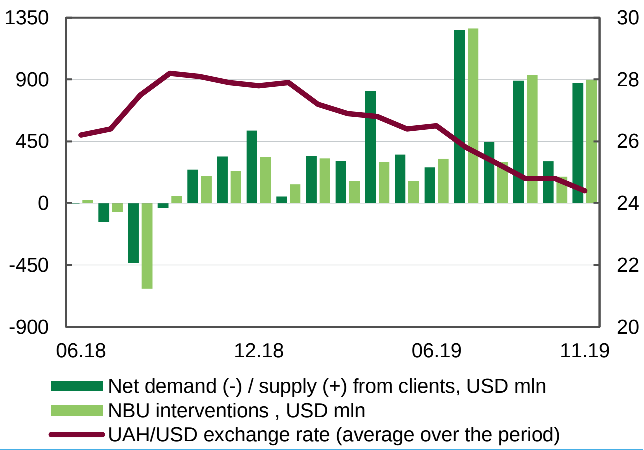
Figure 2.1.6. Ratio of public and publicly guaranteed debt to GDP, and factors driving its change*



* Other factors: the aggregate contribution of changes in the amount of guarantees, assets, and exchange rate fluctuations; positive values represent growth in the debt-to-GDP ratio, while negative values represent decreases.

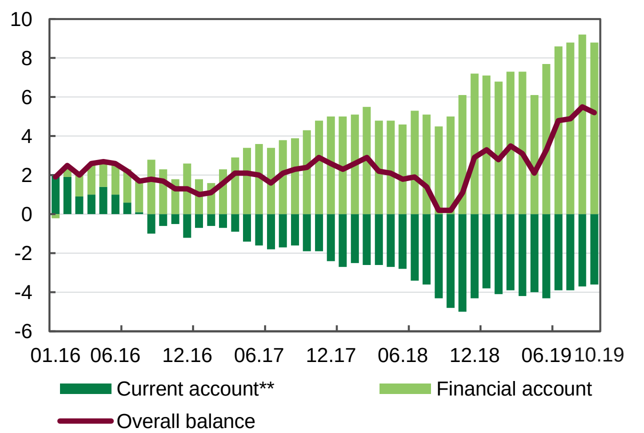
Source: NBU.

Figure 2.1.7. Net demand /supply of bank clients in the interbank FX market, and the change in NBU interventions, USD million



Source: NBU.

Figure 2.1.8. Balance of payments in 2016–2019, USD billion*



* Trailing Twelve Months.
** Current account and capital account.

Source: NBU.

Public debt is no longer high

If structural reforms progress as planned, the IMF tranches are disbursed as scheduled, and no significant macroeconomic shocks occur, public and publicly guaranteed debt will have dropped to 50% of GDP by the end of 2020 and to 48% by late 2021. The main factors will be GDP growth and control over the budget deficit through prudent fiscal policy.

Improving the debt structure will reduce both the debt burden and currency risks. The increase in the UAH debt share is envisaged by the Medium-Term Strategy for Public Debt Management for 2019–2022, as well as by the Memorandum of Cooperation between the Cabinet of Ministers and the NBU to achieve sustainable economic growth and price stability.

The strong hryvnia reflects the state of the balance of payments

The current account deficit has been within acceptable limits for a long time and is even declining relative to GDP. The hryvnia's strengthening has not led to a widening of the current account deficit in the first 10 months of 2019. The slight increase in the goods trade deficit, which was partially due to one-off factors[4], was offset by lower dividend payments, increased remittances, and higher exports of services.

During the first 11 months of 2019, the NBU's net FX purchases amounted to USD 5 billion – more than tripled over the last year's figure – and are the highest since 2007. Nonresident investments in domestic government debt increased over the same period by USD 3.7 billion.[5] Ukraine operates a floating exchange rate regime, and thus the NBU does not counter fundamental market trends. Its monetary interventions are only intended to smoothen out temporary imbalances, limiting the amplitude and pace of change in the exchange rate without altering its underlying trend. The stronger hryvnia reemphasizes the importance of hedging currency risks. To safeguard themselves against sharp fluctuations in the exchange rate, Ukrainian companies can be expected to make more active use of currency forwards and swaps, which were previously in low demand.

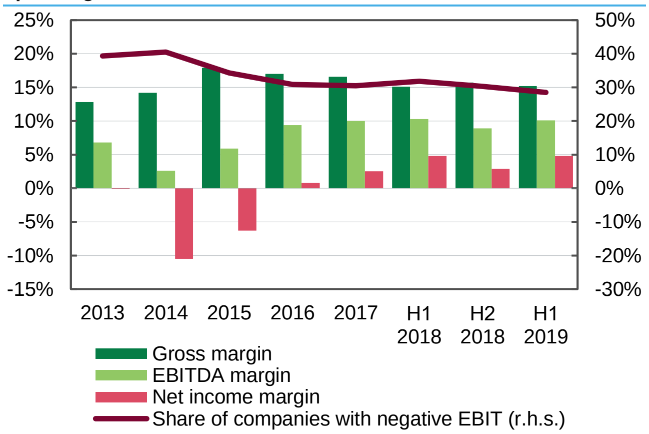
The main risks to the balance of payments are that Russia will stop the transit of natural gas through Ukraine and that the terms of trade may deteriorate. If liquidity in the global market narrows, it may adversely affect its performance and reverse FX market trends.

[4] For example, customs clearance in early 2019 of used cars imported to the country in previous periods.
[5] Net purchases based on the principal amount of debt.

2.2. Real Sector and Related Risks

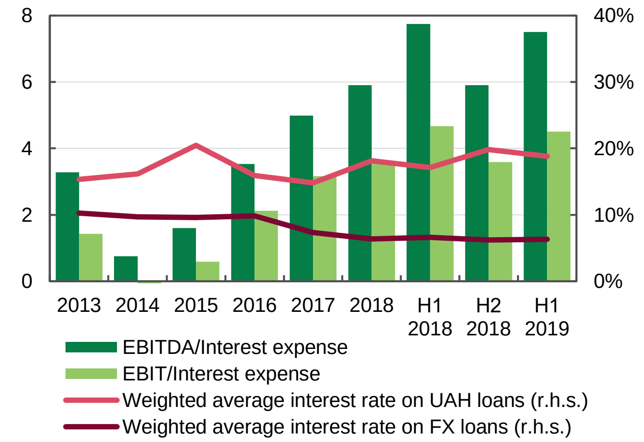
Real sector profitability has stabilized. The debt burden of enterprises in most industries has normalized and is now at an acceptable level. The main risks to real sector profitability are an increase in labor costs and unfavorable world commodity prices. Progress is being made, albeit slowly, in enhancing the protection of creditors' rights. Loan rates are expected to decline gradually as a result of the easing of monetary policy. The preconditions for the resumption of lending to the real sector have therefore been ensured.

Figure 2.2.1. Real sector profitability and share of companies with operating losses



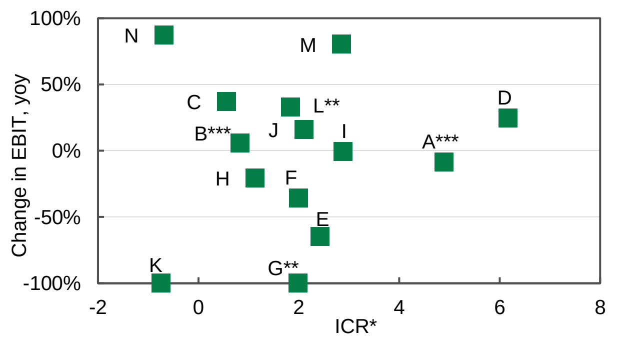
Source: SSSU, NBU estimates.

Figure 2.2.2. Interest coverage ratio (ICR) and EBITDA of non-financial companies, interest rates on new loans



Source: SSSU, NBU, NBU estimates.

Figure 2.2.3. Change in EBIT in the H1 2019 and ICR by sectors [7]



* 12 months to the end of June 2019.
** Data adjusted for outliers.
*** For industries A and B was used data for 2017 and 2018.
Source: SSSU, NBU estimates.

Real sector profitability has stabilized, and the leverage is acceptable

The growth in revenues[6] of real sector enterprises has slowed. Sales volumes of industrial companies grew by 5.4% yoy in H1. Higher household incomes favor sales in industries driven by the domestic demand. On the other hand, the global economic slowdown and a decline in commodity prices reduced profitability of exporting companies. Due to the combined effect of the two factors, total profit remains stable.

As of the end of H1 2019, the average gross-debt-to-EBITDA ratio was acceptable, and stood at 2x. However, leverage increased in machinery, metallurgy, transportation, and chemical industry. In light industry, construction, and real estate management sector, leverage fell somewhat. The distribution of debt load is uneven: around one quarter of large borrowers have an excessive leverage. Debt burden normalization is a precondition for the resumption of lending to the real sector.

The interest coverage ratio dropped slightly due to last year's increase in hryvnia loans rates and higher financial expenses. Overall, the interest coverage ratio remains high (4.5x in H1 2019). Companies in most industries have sufficient operating profits to service their debts (except for the chemical industry, real estate management, construction, and utilities).

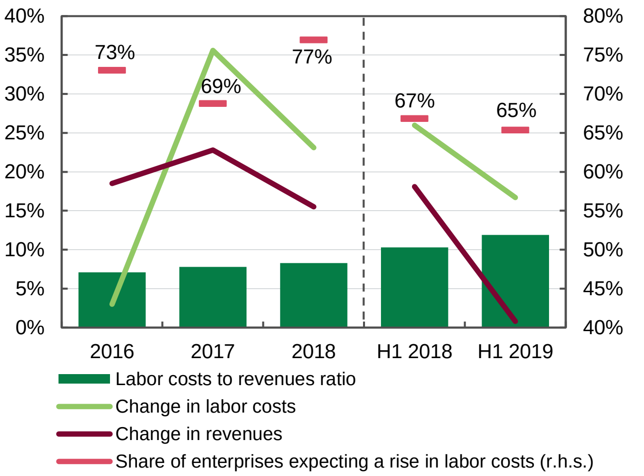
Higher labor costs and an unfavorable price environment pose the main risks

In the real sector, companies' labor costs have been growing considerably faster than revenues. This trend is continuing for the third consecutive year. The two major drivers of the labor costs growth remain a shortage of labor caused by labor migration, and qualification imbalances on the labor market (see Inflation Report, October 2019). Competing for personnel, employers are forced to raise wages. The average wage at industrial companies increased by 24.4% yoy in H1 2019. The most significant wage increases were seen in mining, coke production and metallurgy. Businesses expect wage growth to continue (see Business Outlook Survey, Q2 2019). The share of labor costs in the cost of goods sold reached pre-crisis levels.

The strengthening of the hryvnia in 2019 reduced exporters' hryvnia revenues, although it had a moderate effect on their

[6]The data exclude small businesses.
[7]Sectors: A – agriculture, B – vegetable oil and fat production, C – construction, D – mining, E – light industry, F – machine building, G – metallurgy, H – real estate, I – wholesale trade, J - retail trade, K - supply of electricity and other utilities, L - transportation, M - food industry, N - chemical industry.

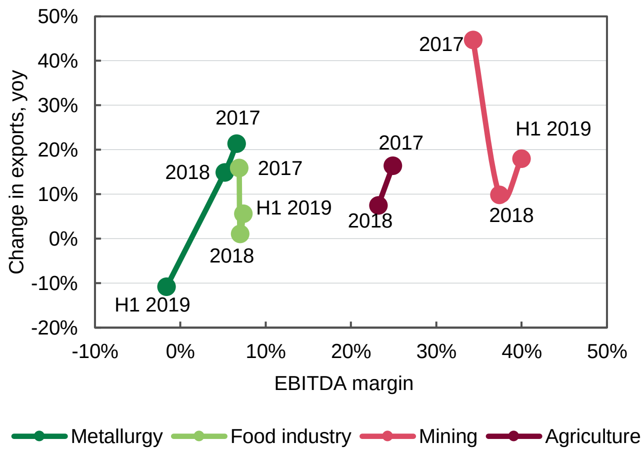
Figure 2.2.4. Growth rates in revenues, labor costs of non-financial companies* and enterprises' expectations



* Data for large and medium enterprises.

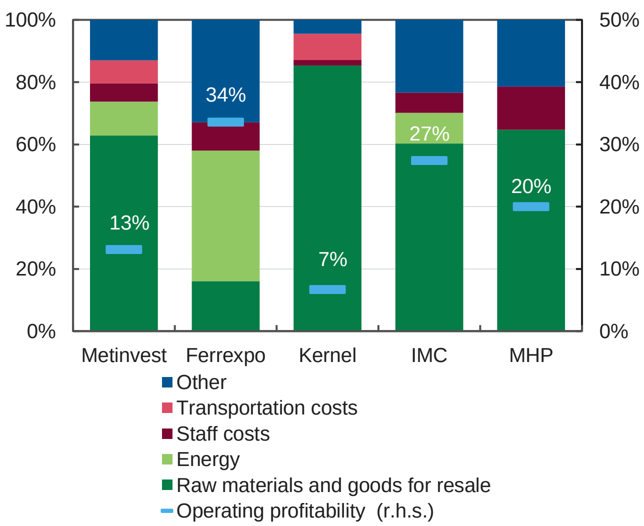
Source: SSSU, NBU, NBU estimates.

Figure 2.2.5. Change in exports in USD terms and EBITDA by sectors



Source: SSSU, NBU estimates.

Figure 2.2.6. Cost structure* of public exporting companies



* Data for 2018.

Source: companies` financial reports, NBU estimates.

profitability, as raw materials and imported goods, which also depend on the exchange rate, constitute the overwhelming share of the cost of goods sold. Margins narrowed in some export-oriented industries due to lower commodity prices. According to the NBU estimates, the external commodity price index for Ukrainian goods exports deteriorated in Q3 and over the forecast horizon (see Inflation Report, October 2019).

Operating profits decreased substantially in the metallurgy, mostly because of simultaneous drop in global prices for finished goods and a rise in production costs, spurred by hike in iron ore prices. Conversely, higher iron ore prices boosted profits in mining. Falling commodity prices also caused a decline in profits in some segments of the food-processing industry and agriculture, especially in production of sugar and eggs. Risks also persist in the production of fats and oils, due to low global prices and an increase in supply.

The preconditions for the resumption of lending to the real sector have been ensured

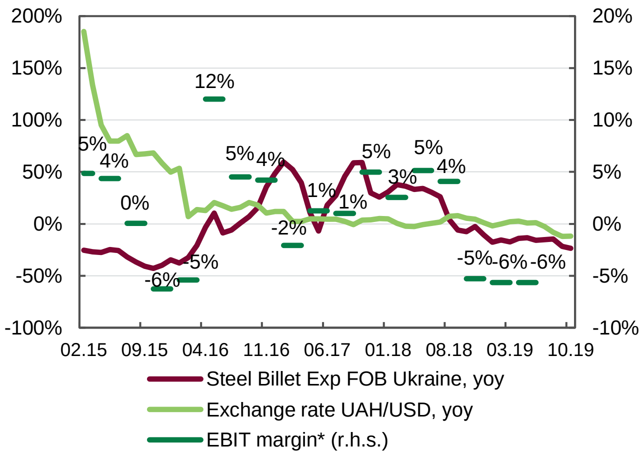
A growing number of factors indicate at a gradual increase in the demand for and supply of bank loans. The share of companies planning to borrow has been on the rise over the past 12 months. It was mainly driven by lower interest rates and positive business expectations after the elections. The banks are optimistic as well. More than 70% of financial institutions expect an increase in their corporate loan portfolio over the next 12 months (see Bank Lending Survey, Q4 2019).

Real sector companies, particularly state-owned monopolies, have been actively raising funding on foreign capital markets since the start of the year. Among other things, this was driven by a reduction in Ukraine's sovereign risks thanks to a stable macroeconomic environment. From the beginning of 2019, gross Eurobond placement amounted to USD 4.2 billion in gross terms. The segmentation of borrowing sources will continue. Large and best-quality companies will raise significant amounts of long-term funding on the foreign capital markets. Smaller companies will borrow from Ukrainian banks.

The potential for new loans growth is evident from the large share of companies without bank loans. These companies generate two thirds of real sector revenues. Therefore, the level of debt burden allows an increase in financial leverage. At the same time, the opaque ownership structure and reported poor financial performance of such borrowers is often an obstacle to lending.

Businesses report that high interest rates remain the main obstacle to taking out new loans. With the weakening of inflationary pressures, the NBU has started a cycle of monetary policy easing. The lower key policy rate translates into lower commercial interest rates on bank loans. Therefore, loans may become considerably cheaper in 2020 – provided that there are no external or internal shocks.

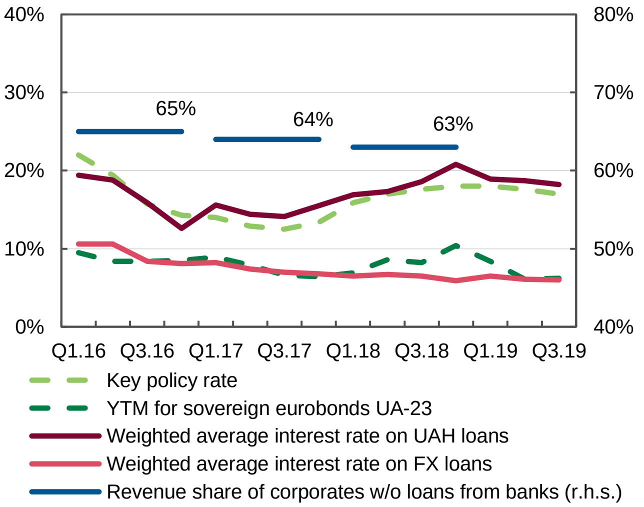
Figure 2.2.7. Dependence of metallurgical enterprises' EBIT margin on steel prices and exchange rate



* Data for the third quarter of 2019 are not available.

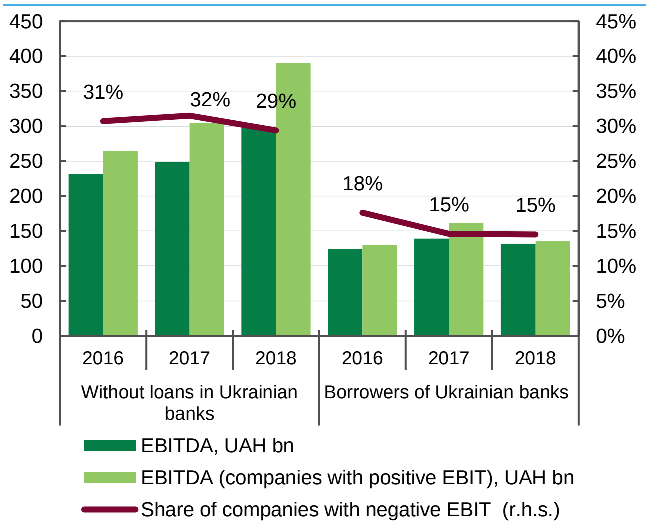
Source: NBU, SSSU, Thomson Reuters, NBU estimates.

Figure 2.2.8. Change in interest rates on new loans and share of revenue of corporates, which have not borrowed from Ukrainian banks, % per annum



Source: NBU, Bloomberg, SSSU, NBU estimates.

Figure 2.2.9. Comparison of non-financial companies EBITDA* and corporate borrowers



* Without state-owned enterprises.
** Without NPLs.

Source: SSSU, NBU estimates.

Amendments to legislation are also contributing to the recovery of lending. The Bankruptcy Code and the lending resumption law have enhanced the protection of creditors' rights. The validity term of the financial restructuring law was also extended.

Banks should take a conservative approach to assessing credit risks

Favorable macroeconomic conditions and high competition among financial institutions will boost the banks' risk appetite. That will push the banks to loosen their lending standards. In order to maintain their profitability, the banks will be willing to lend to borrowers that might have been identified as unacceptable previously. At the same time, taking into account lessons from the past, banks should maintain a conservative approach in their lending policies.

Guided by the Basel principles, the NBU requires banks to perform a full and reliable assessment of credit risks. The regulator expects banks to meet the minimum standards – namely:

- the banks' conclusions must be based on hard data, in particular on official financial statements. Companies that take out loans of more than UAH 200 million must have audited financial statements;
- borrowers must have a transparent ownership structure, and banks must be aware of business groups' perimeter;
- assessments must take into account forecast indicators and risks to the economic environment.

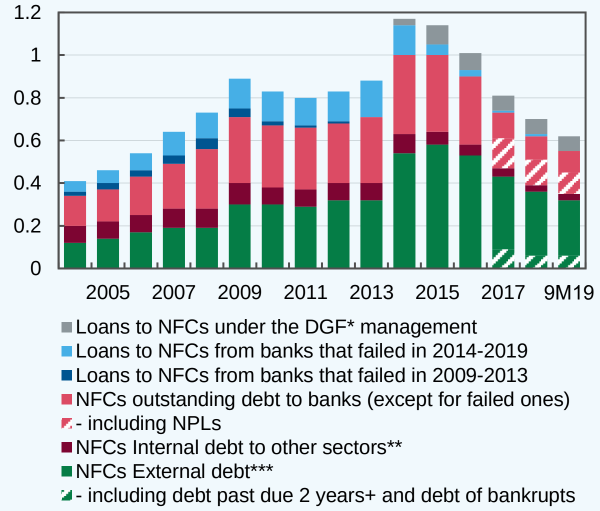
The NBU will continue to perform ongoing monitoring of portfolio quality in order to prevent a buildup of systemic risks and ensure financial stability. In addition, the NBU will also stress test the largest exposures of banks, control concentrations and related-party lending practices.

Box 1. Corporate Debt in Ukraine

The current indebtedness level of the Ukrainian real sector corresponds to both the state of the country's economic development and corresponding levels in neighboring countries. The growth in debt loads that exceeded this level in past years was due to a credit boom, which later led to a banking crisis.

Banks actively increased their corporate loan portfolios in 2005–2007. Businesses also used other financing sources, particularly external capital markets. The total outstanding debt of corporations rose from 41% of GDP in 2004 to 64% in 2007. The credit bubble grew: banks were less strict in risk assessment of borrowers and relied on collaterals, which were growing in value. With a fixed exchange rate, borrowers willingly took out foreign-currency loans: the level of dollarization increased to 45% in September 2008 from 40% in 2004, and the gross external debt owed by corporations (excluding trade credit) grew by 6 pp, to 19% of GDP.

Figure B.1.1. NFCs outstanding debt, % GDP



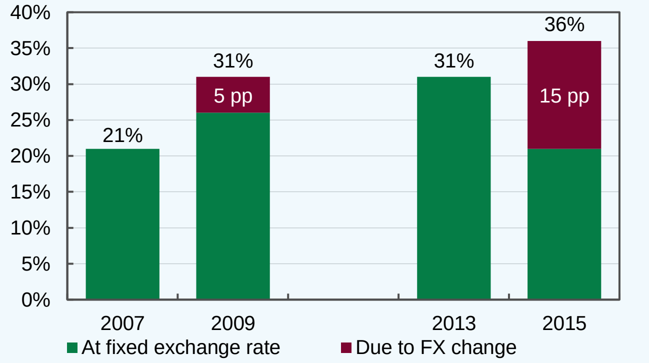
* Outstanding loans to NFCs at the time of bank transfer under the DGF management.
** To NBFIs, government and debt securities placed to households.
*** Eurobonds and loans to non-residents, incl. direct investment enterprises. No trade credits. The latest data for Q2 2019.

Source: NBU, SSSU, NCFS, STSU.

The crisis of 2008 was accompanied by a depreciation of the hryvnia and borrower defaults. It was clear that the real sector's leverage was too high. As of the end of 2009, the depreciation pushed up the ratio of loans to GDP in banks that are currently solvent by 5 pp, to 31% of GDP. Some banks went bankrupt in 2009–2013. At the same time, most of the problems of defaulted borrowers were frozen: banks just did not recognize the actual levels of nonperforming loans.

Banks faced the greatest difficulty in 2014–2016. New defaults were added to old toxic portfolios hidden in their balance sheets. Over 2014–2018, 72% of loans outstanding as of the end of 2013 were recognized as nonperforming. Banks that closed in recent years accounted for 35% of the loan portfolio as of the start of 2014.

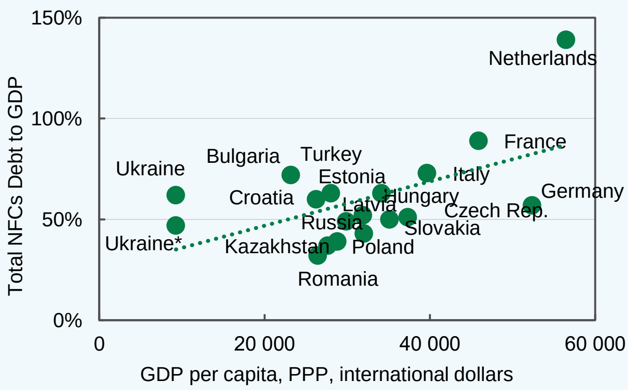
Figure B.1.2. Outstanding loans to NFCs from solvent banks at the end of November 2019, % GDP



Source: NBU, SSSU.

It took time for the corporate sector to deleverage. An important factor behind the debt reduction was a decrease in foreign-currency corporate loans at banks that lasted until the end of 2017. The external corporate debt also declined, to 32% of GDP as of the end of Q2 2019 (from 58% of GDP at the end of 2015). That said, one fifth of this debt was past due for more than two years.

Figure B.1.3. Nonfinancial corporate debt, loans and debt securities in 2018, % GDP



* Without non-performing bank loans and overdue external debt for over two years and debt of bankrupt enterprises.

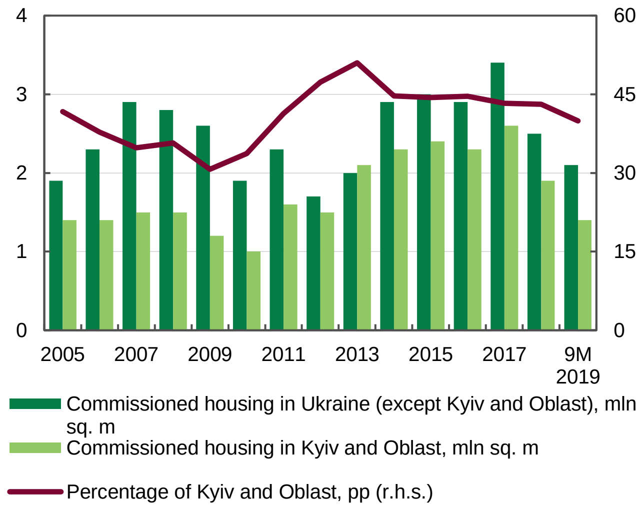
Source: ECB; data on Russia and Kazakhstan – the countries' central banks; data on Ukraine – the NBU estimates (including assets managed by the Deposit Guarantee Fund).

The total outstanding corporate debt as of the end of September 2019 was 62% of GDP, including loans managed by the Deposit Guarantee Fund, which corresponds to the pre-crisis level seen in 2007. When excluding external debt past due for more than two years and nonperforming bank loans, this figure drops to 47%. Such leverage level of the Ukrainian real sector is adequate to the country's state of economic development and comparable with the trend of CEE. The two crises divided the real sector into zombie companies with excessive debt loads and companies that withstood the crisis (see Box 1. Stars and Zombies: An Assessment of the Quality of Companies in the Real Sector in the December 2018 Financial Stability Report).

2.3. Real Estate Market and Related Risks

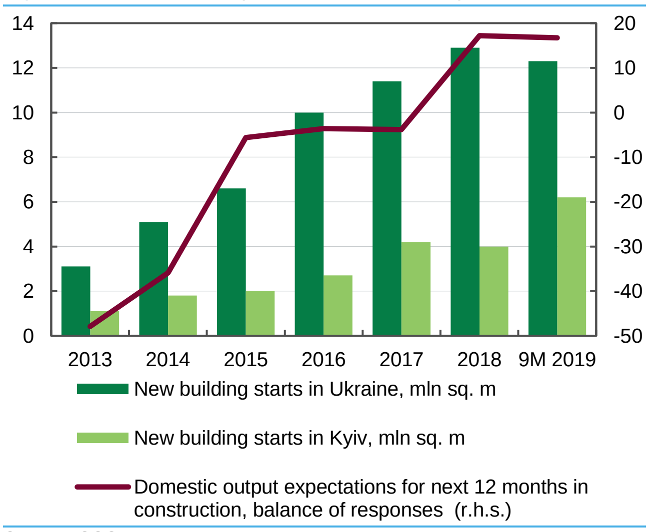
Housing prices remain relatively stable, with buoyant demand offset by large volumes of housing construction. A rise in household income is fueling demand, while strong competition is forcing developers to keep new housing prices in check in spite of rising costs. Mortgage lending is taking up, but from a very low level. Therefore, at present mortgages are not affecting the market in any material way. Apart from high loan rates, the real estate market is facing other significant problems, such as the insufficient legal protection of households investing in primary housing market.

Figure 2.3.1. **Supply of new residential housing**



Source: SSSU, Kyiv Main Statistics Office.

Figure 2.3.2. **New housing at the start of building**



Source: SSSU, NBU.

The construction of new housing is rebounding

The volume of residential housing commissioned in the first three quarters of 2019 rose by 36.6% compared to the same period last year. Meanwhile in Kyiv the growth was more rapid: 53.6% yoy.

Such trends will persist in the near future, since the construction area for which permits have been issued in Kyiv has doubled yoy, while in regions, in contrast, it fell 3.3% yoy. The legal environment for developers will change noticeably in 2020. In particular, stricter requirements will be introduced for high-rise buildings, which could raise construction costs. However, starting in 2021, the financial burden will decrease somewhat, as the 4% surcharge on infrastructure development payable by developers to local budgets will be cancelled.

Analysis of Kyiv's primary real estate market[8] shows that new housing supply is already practically in line with new construction requirements, and takes into account changes in demand patterns. Housing has become more affordable, with investors preferring higher-comfort buildings that have practical layouts and developed infrastructure, and are located in comprehensive development areas. This has affected supply patterns: in 2014, the share of new comfort-class housing was about 15%, while in 2018 it was 60%.

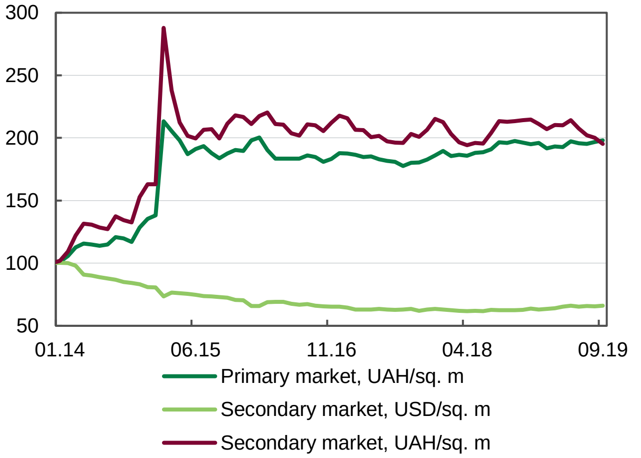
Housing is becoming more affordable and attractive

Demand for housing is high and sustained – the number of housing purchase and sale agreements increased by 4.9% yoy in Q1–Q3 2019. A large portion of flats offered for sale on the primary market are in buildings that are expected to be commissioned in at least two years. Although expected to rise in the long-run, demand fell somewhat in H2 2019 on the back of the stronger hryvnia. Housing buyers that have FX savings sometimes have been delaying housing purchases in the expectation that the U.S. dollar would strengthen.

Hryvnia real estate prices have been stable for a long time – over the last 12 months prices for new housing have increased by only 1% and have risen by only 7% since September 2016. However, real housing prices (adjusted for inflation) have dropped in recent years, signifying that new housing supply is rising faster than demand.

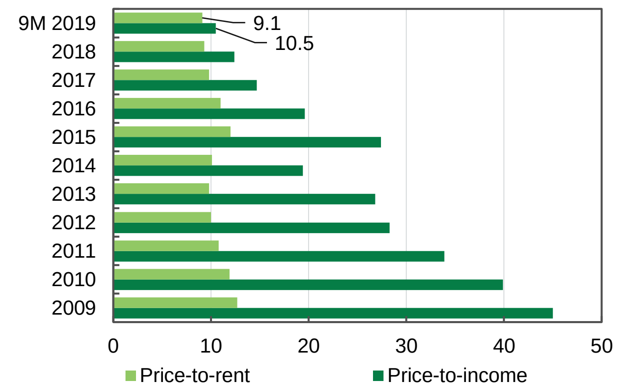
[8] In late 2019, the NBU analyzed housing supply by Ukraine's largest developers on Kyiv's primary real estate market (typical investment terms and conditions, installment plans, and mortgage lending). The analysis was based on typical 70 square meter flats with base prices from UAH 20,000 to UAH 30,000 per square meter.

Figure 2.3.3. Kyiv housing prices, December 2013 = 100



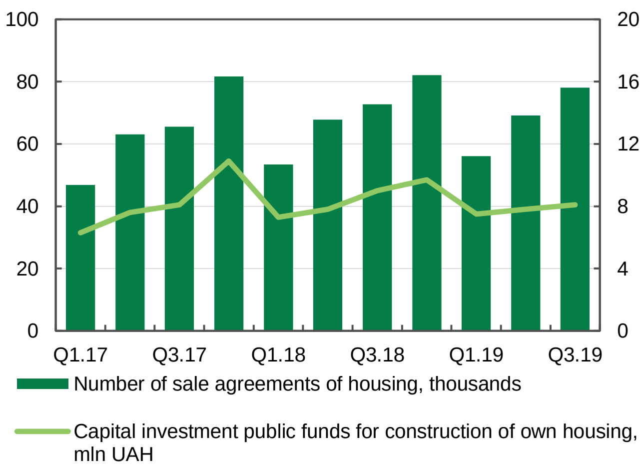
Source: real estate agencies, NBU estimates.

Figure 2.3.4. Kyiv's price-to-income and price-to-rent ratios in 2009 – 2019



Source: SSSU, NBU estimates.

Figure 2.3.5. Housing purchases and financing



Source: Ministry of Justice, SSSU.

Higher household incomes have pushed the price-to-income[9] and price-to-rent[10] ratios to 10-year record lows. Ukraine holds one of the lowest ranks among the European countries in terms of the price-to-rent ratio, which means there is a lot of room for further demand growth.

A sustained increase in construction costs and practically unchanged housing prices have negatively affected the profitability of developers. In particular, wages in construction rose by 18.3% yoy in September 2019, while the cost of construction work grew by 6.4% yoy. If this gap persists, developers might have to raise prices in order to continue to make profits.

Number of banks that are actively engaged in mortgage lending is limited

The analysis of developers' supply conducted by the NBU confirmed that choice on the mortgage lending market was limited: developers together suggested only seven banks to borrow from. None of the developers offered a choice of more than two banks. The longest lending term under partner programs is 20 years, while the maximum loan amount is UAH 2 million, with a down payment of 20%-60%. Interest rates range between 19%-20% per annum, but banks also offer lower rates for periods of up to five years. Although net hryvnia loans for real estate construction and renovation grew by 13.4% yoy in October 2019, the volume of these loans was insignificant.

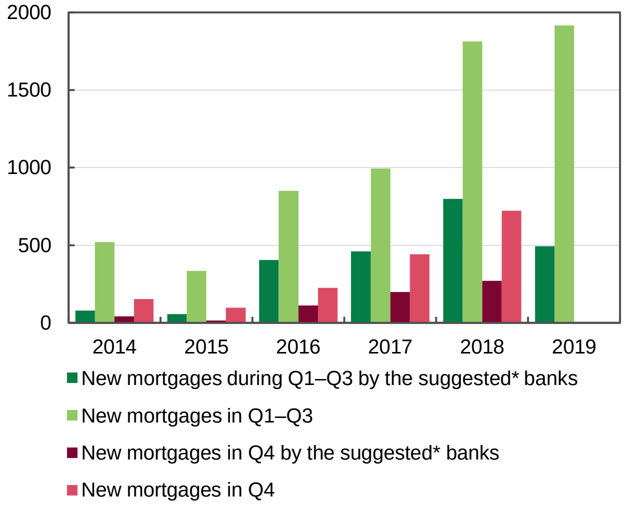
To sustain demand developers offer discounts or installment plans. The lowest prices are set when full payment is made – in such cases, developers offer a 5%-20% discount on the base price. Developers' installment plans are widespread – with 60% of those surveyed offering grace periods from three months to up to five years from the date a flat is commissioned to the date full payment is made. The most common down payment is 30%, although some developers are willing to decrease it. The problem with such financing is the indexation of the cost per square meter of housing, which makes the total investment amount impossible to determine. In other cases, the cost is pegged to the UAH/USD exchange rate, subjecting buyers to currency risk[11]. Sometimes, payment schedules do not state clearly that the outstanding amount may increase by up to 10% annually.

An opaque market is a barrier to mortgage lending

Usually the only effective source of financing agreements on the housing market is mortgage lending. In Ukraine, however, the volumes of mortgage lending are unnaturally low – the ratio of the hryvnia mortgage portfolio to GDP is below 1%, with less than 7% of agreements financed through mortgages according to market participants. The main barriers to mortgage lending growth include high loan rates, even despite the recent gradual easing in monetary policy. Meanwhile, legal risks restrain the banks' willingness to issue

[9]The price-to-income ratio is calculated using the following formula: square meter price multiplied by standardized flat area and divided by average annual wage.
[10]The price-to-rent ratio is calculated using the following formula: purchase price per square meter divided by rent price per square meter.
[11]An exchange rate coefficient is set on the basis of the ratio of the UAH/USD exchange rate on the payment date to the exchange rate that was in effect when the agreement was signed.

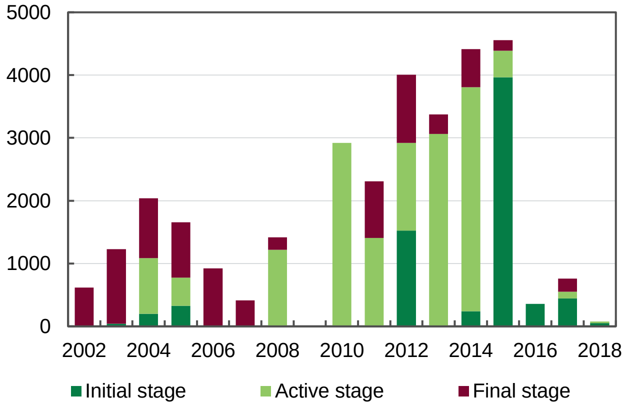
Figure 2.3.6. **New retail mortgage lending, UAH million**



* Data on the seven banks surveyed developers offered for mortgage lending.

Source: NBU.

Figure 2.3.7. **Number of flats in long-delayed construction projects broken down by the year when construction began and the stage at which construction was stopped**



Source: DC Evolution, NBU estimates.

mortgage loans. A moratorium on the foreclosure of collateral is expected to be lifted only in late 2020.

Several issues remain unresolved on the primary real estate market. These issues pose risks to investors and must be taken into account by banks when setting mortgage rates. These include:

- the low level of protection of investors' rights and non-transparent investment schemes. At present, no type of construction financing agreement guarantees that the construction of the building will be completed on time, and that the ultimate owner will ever get the facility they invested in.
- developers bear no financial liability for violating the terms and conditions of agreements. Although the obligations of the parties are formally stated in agreements, de facto they are not enforced.
- delays in commissioning residential buildings. Only 30% of surveyed developers said they were sure that they would commission housing as scheduled. Usually commissioning is delayed by three to six months, with one out of ten developers reporting delays of one and a half year. The main impediments here are paperwork issues.
- the non-transparency of the housing market: no information is available about the ultimate beneficiaries and financing schemes of developers. Since the construction of housing has social importance, transparency requirements and responsibility for violating the terms and conditions of agreements should be similar to those applied in the banking sector.

The insufficient transparency of developers, along with the dishonesty of a large number of market participants, have already resulted in the formation of a stock of long-delayed construction projects. According to DC Evolution data, in late August 2019, there were 66 housing complexes that were either considered long-delayed or left unfinished. The total number of flats in unfinished construction projects is 1.5 times that of the average annual number of new flats commissioned in Kyiv over the last five years.

This autumn, flats in the construction projects of Ukraine's largest developer were effectively added to this number. The halt in construction by the Ukrbud corporation endangered the development of 46 houses, while also violating the rights of 13,000 investors. The ruined reputation of Ukraine's largest developer could slash demand on the primary market and worsen the financial standings of all market participants.

A pick-up in mortgage lending could be one of the drivers of economic growth. However, if legal and infrastructure issues remain unresolved, a rise in mortgage lending could result in a price bubble that would pose a threat to financial stability. With a view to preventing that, the primary housing market needs to be properly regulated. Among other things, this requires strict compliance with state construction regulations, the introduction of effective master plans for urban development, ensuring market transparency and protecting the rights of investors.

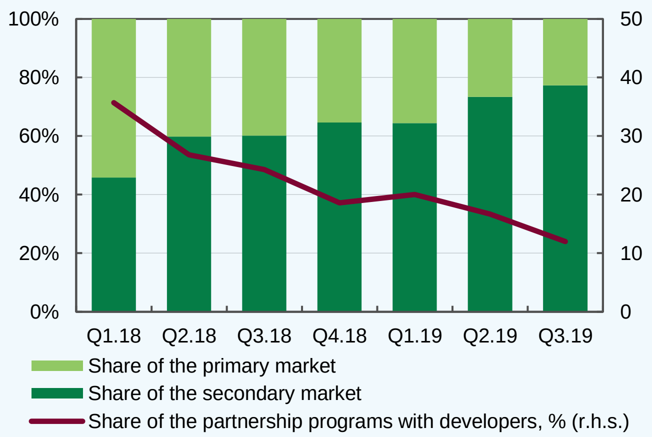
Box 2. Findings of Mortgage Lending Survey

The majority of banks still shun mortgage lending: one third of banks accounts for 92% of mortgage loans issued. Most of the newly issued loans are taken to buy real estate on the secondary market, while lending to purchase new residential property under partner programs is declining rapidly. Mortgage lending conditions are quite conservative. As the quality of new mortgage loans is gradually improving, banks are becoming more optimistic about the speed of mortgage lending resumption.

Recently, the NBU has held the third annual mortgage lending survey among banks. The sample comprised 24 banks actively engaged in mortgage lending.

The respondent banks issued loans at a steady pace: their mortgage portfolios grew by an average of UAH 620 million per quarter. Mortgages annually issued by the respondent banks accounted for 25% of outstanding mortgage debt of households. Over the first nine months of 2019, the respondents issued 6.9% less of new mortgages compared with the same period last year. Loans to buy residential property on the secondary market made up the larger share of new mortgage loans (71.7% over the first nine months of 2019). Therefore, there is a dramatic change in the structure: this level was as low as 28.5% three years ago. In parallel, the share of loans issued under developer partner programs was on a decline.

Figure B.2.1. Loan distribution by market segment*



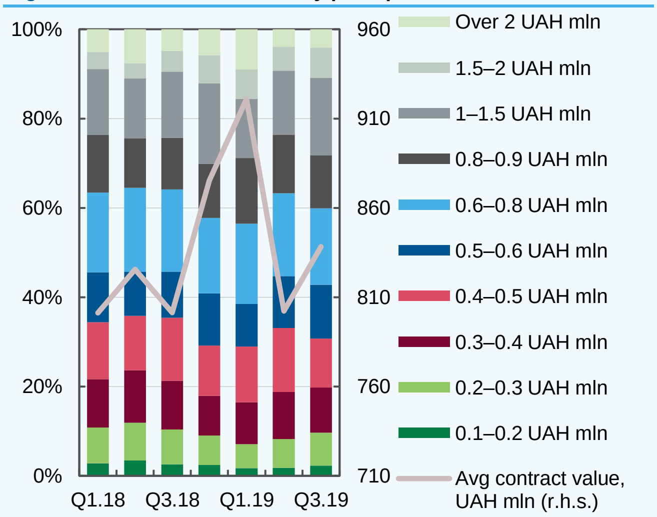
* Weighted by loan issue.
Source: banks' data.

Growth in the average loan is weak

The average loan grew by 5.5% yoy over the first nine months of 2019, meaning that it was almost stable in real terms. The majority of loans ranged UAH 0.6–1.5 million. Around 60% of new mortgages were issued for the period of 15–20 years. The average loan term at the origination has been declining lately: 13.1 years in the first nine months of 2019 compared with 14.5 years in 2018. In the meantime, almost no new loans were issued for a term of over 20 years.

The average age of borrowers remained practically unchanged, standing at 37 years. The percentage of young borrowers (under 30) in the total amount of newly issued loans was still low, at around 15%.

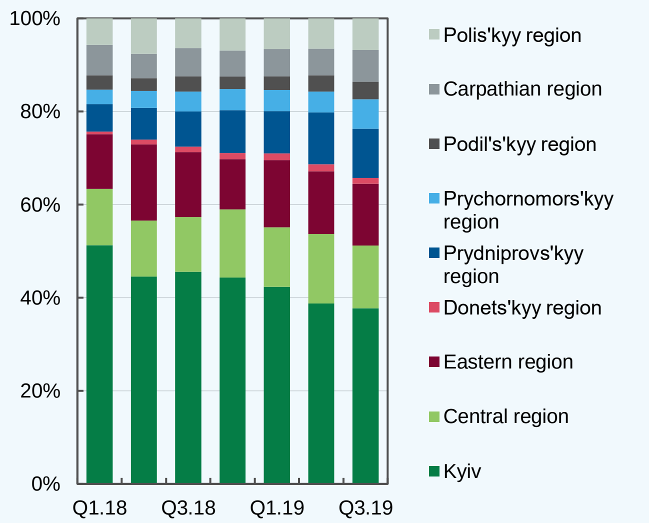
Figure B.2.2. Loan distribution by principal*



* Weighted by loan issue.
Source: banks' data.

Kyiv still leads the regional distribution, although losing ground little by little: its contribution to new mortgages declined to 37.7%. Market shares of western and southern regions are increasing gradually.

Figure B.2.3. Loan distribution by region



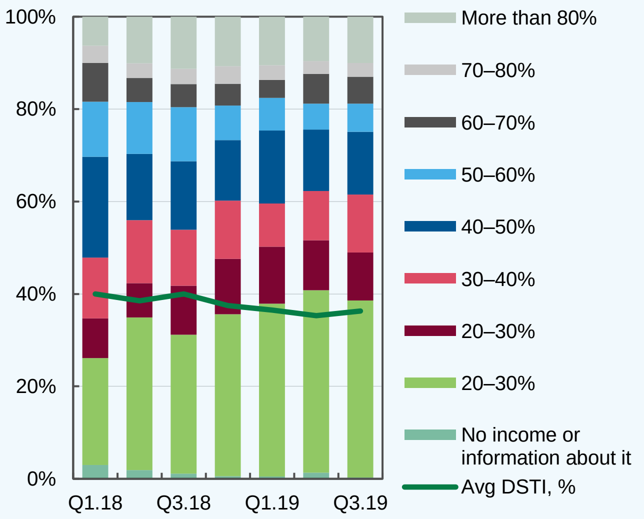
Source: banks' data.

As of the end of September 2019, the average monthly income of borrowers at the moment of loan origination increased by 9% yoy. That said, most often borrowers are households with a total official income of UAH 50,000–100,000. Some banks issue mortgages even to households that have less than UAH 10,000 of official monthly income. However, banks do not provide mortgages to persons who have no official income.

Mortgage lending conditions are conservative

Households' debt-service-to-income ratio (DSTI) for new mortgages decreased by 3.6 pp, to 36.3%. Around a half of mortgages were issued with DSTI of less than 30%. Overall, the share of loans with DSTI of over 40%, which put a heavy debt burden on the borrower, has decreased by 13.5 pp since 2018.

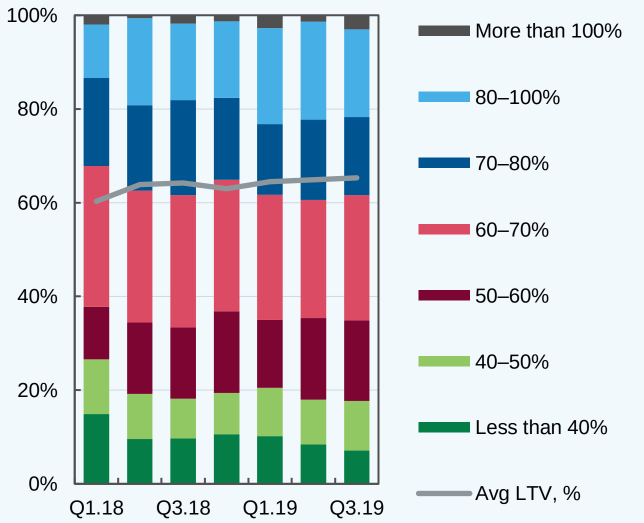
Figure B.2.4. Loan distribution by DSTI at the moment of mortgage loan issue*



* Weighted by loan issue.

Source: banks' data.

Figure B.2.5. Loan distribution by LTV*



* Weighted by loan issue.

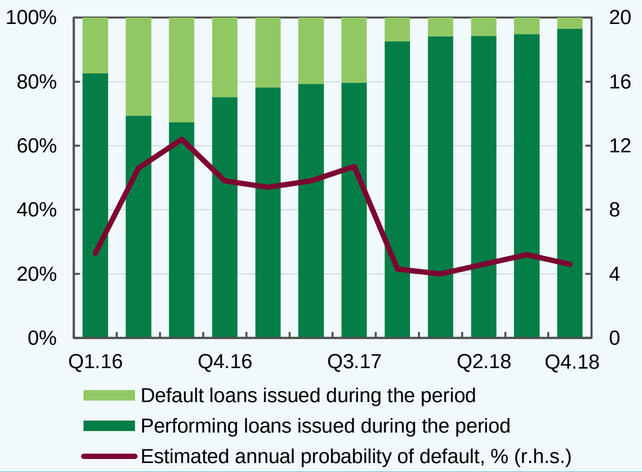
Source: banks' data.

In Q3 2019, the average loan-to-value (LTV) ratio for new loans was 65%. That corresponded to banks' assertion of a 30% minimum down payment. Over 21 months, the share of debt in financing purchases of residential property has risen by 5 pp. The percentage of new mortgages with LTV of over 80% also increased. Since the start of last year, the share of such loans has grown by 8.3 pp.

Quality of new mortgages is improving gradually

The improvement in quality is evidenced by a stable decline in the default ratio for mature loans (with maturity of more than one year) over the past three years. Only 5.6% of last year's loans defaulted. As a comparison, this ratio was around 10% as of early 2018.

Figure B.2.6. Loan defaults by quarter



Source: banks' data.

Banks are upbeat

The respondents expect a pickup in mortgage lending over the coming three years. If conditions are favorable, the banks plan to increase their mortgage lending by 15% yoy next year.

As of now, the banks see the moratorium on foreclosure as the main obstacle to mortgage lending resumption. Other important barriers are the insufficient protection of creditors' rights, lack of a proper legal framework, and nontransparency of the primary market. The respondents also mentioned stringent NBU requirements and unfair market competition.

Figure B.2.1. Ranking of the main obstacles to mortgage lending resumption*

Obstacle	Average rank
Moratorium on foreclosure under FX mortgages	5
Insufficient protection of creditors' rights	4
Lack of a proper legal framework and nontransparency of the primary housing market	4
High interest rates	3
Lack of hryvnia long-term funding sources	3
Lack of solvent borrowers with official proof of income	3

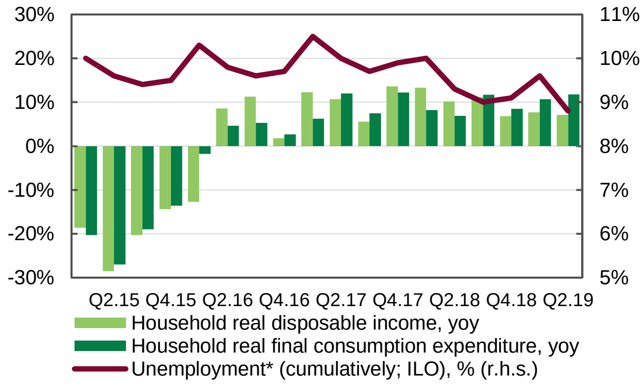
* The banks were offered a ranking scale of 1 to 7.

Source: banks' data.

2.4. Households and Related Risks

The growth of household income continued to significantly outpace that of GDP in 2019, although it is expected to come close to the pace of economic growth in the medium-term. The rapid growth of income led to excessive consumer optimism and a surge in retail lending. Although the average debt burden of households is low, many low-income households have high debt burdens, because they actively took out short-term consumer loans. The creditworthiness of medium- and high-income households is rising, reducing the risk of lending to such customers. Inflows of household deposits to the banks remain commensurate with the pace of nominal income growth. Propensity to save will gradually increase as the living standards of people improve.

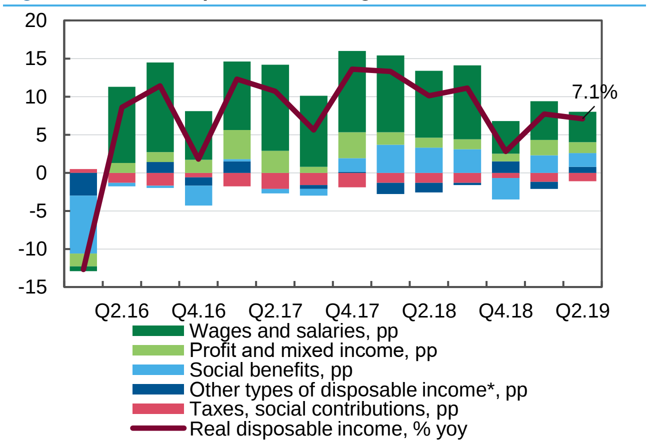
Figure 2.4.1. Change in real disposable income, consumer expenditures and the unemployment rate



* Percentage of the economically active working age population.

Source: SSSU, NBU estimates.

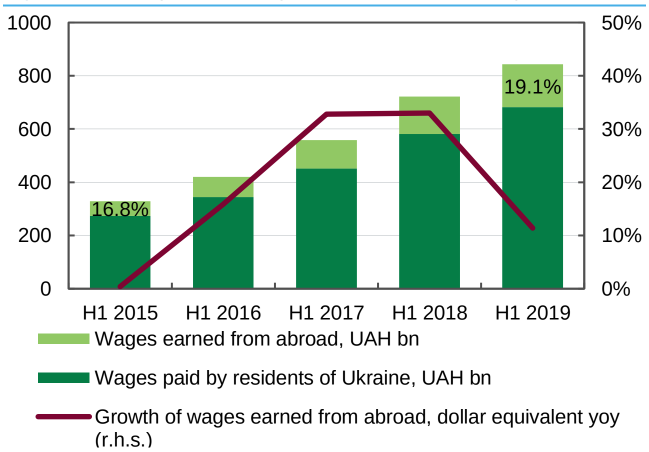
Figure 2.4.2. Real disposable income growth factors



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

Source: SSSU, NBU estimates.

Figure 2.4.3. Wages earned by Ukrainians domestically and abroad



Source: SSSU, NBU estimates.

Real income growth is normalizing

The growth in real household income slowed to 7.4% yoy in H1 2019, but was still twice as high as real GDP growth. The main reason for this was a 10% rise in real wages, which pushed up the share of wages in disposable income to 53.1% – the highest figure since 2010. Wage growth was propped up by lower unemployment and the robust demand for workforce in the real sector. Conversely, social payments made a less significant contribution to income growth, in particular due to the moderate annual indexation of pensions.

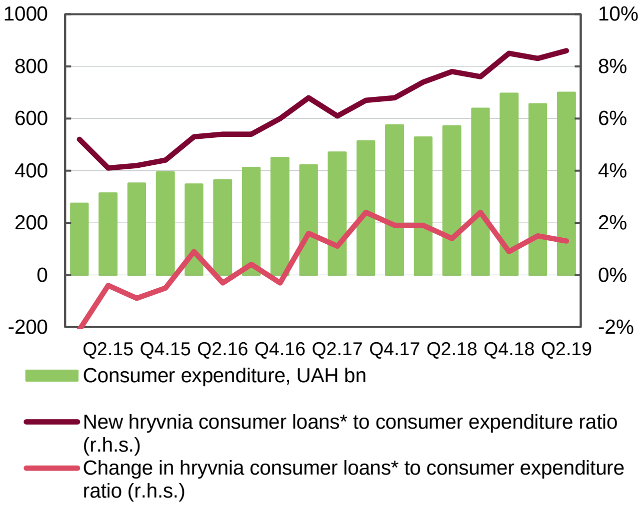
The gap between Ukrainian and European wages has narrowed on the back of high wage growth and the strengthening in the hryvnia seen in the current year. Over the last four years, the ratio between the average wage in Poland, which is the main destination for Ukrainian labor migrants, and the average wage in Ukraine has dropped from 4.5 to 2.7 times. That is why the intensity of labor migration from Ukraine declined sharply starting from mid-2018. As a result, the growth in wages received abroad decelerated. Looking ahead, growth in wages received in Ukraine will be the main source of household income. Real wages are expected to rise by 4%–6% in the medium term. Competition among employers for workers and wage growth that outpaces labor productivity growth are worsening companies' operating performance.

Currently, half of households do not spend more than 60% of their income on basic needs[12]. Over the last four years, the percentage of such households has risen fivefold, signifying the gradual revival of living standards and creditworthiness of households. The findings of GfK surveys also indicate the improvement in the creditworthiness: the percentage of people who described their income as low dropped again this year. This is also increasing the number of solvent borrowers for banks.

Households remain net creditors of the banking sector. Currently, the loan-to-deposit ratio hovers around 38%. Propensity to save remains low, despite the improvement in living standards over the last three years. Household deposits at banks are growing at a slower pace than nominal household income. Deposit growth is mainly generated by current accounts. According to GfK data, the percentage of households who have term deposits, or plan to make them, remains below 4%.

[12]Spending on basic needs means spending on food, clothes, footwear, and utilities.

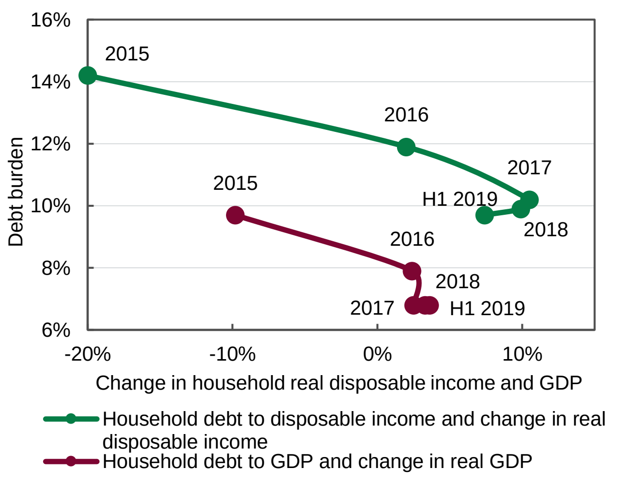
Figure 2.4.4. Impact of consumer lending on consumer expenditures



* Gross consumer loans issued by solvent banks and NBFI.

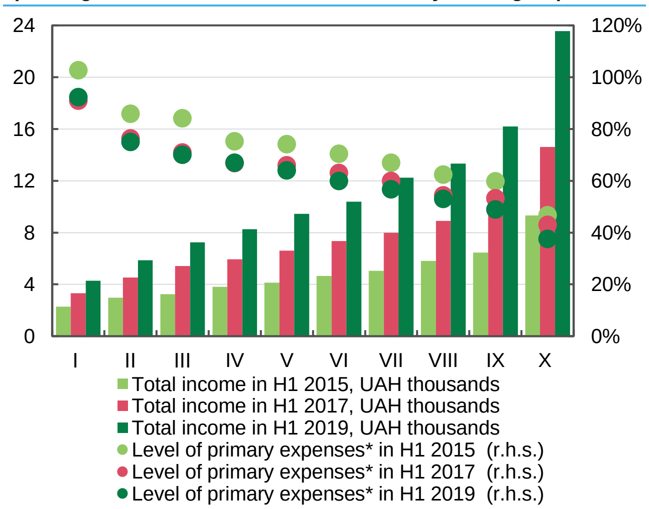
Source: SSSU, NBU estimates.

Figure 2.4.5. Household debt burden



Source: SSSU, NBU estimates.

Figure 2.4.6. Average monthly income and the percentage of spending of one household on basic needs by decile groups



* Percentage of spending of one household on basic needs.

Source: SSSU, NBU estimates.

Record-high consumer sentiment is fueling consumer lending

Three years of rapid income growth have improved expectations and spurred households' consumer behavior. Consumption is, and will remain in the near future, the main driver of GDP growth. Real consumer spending increased by 11.3% yoy in H1 2019. Strong consumer sentiment is fueling the demand for loans to finance current needs and buying durable goods. New hryvnia consumer loans issued by banks are rising at a rate of around 30%. This has pushed up the ratio of new bank consumer loans to consumer spending to 7%. For nonbank financial institutions (NBFI), this figure stands below 2%. The ratio of the growth in debts on consumer loans issued by banks and NBFI to consumer spending still remains low. Therefore, the role of consumer lending in maintaining consumer demand has significantly increased over the last three years.

The rapid income growth pushed the ratios of household loans to GDP or to household disposable income to below 10% at the end of H1 2019. In general, this shows that the debt burden of households is on average low, and that there is a lot of potential for reviving lending. The experience of other countries has demonstrated that mortgages hold the key to the revival of long-term lending. In Ukraine, however, the volume of mortgage lending remains non-material.

The banks are actively lending to low-income households

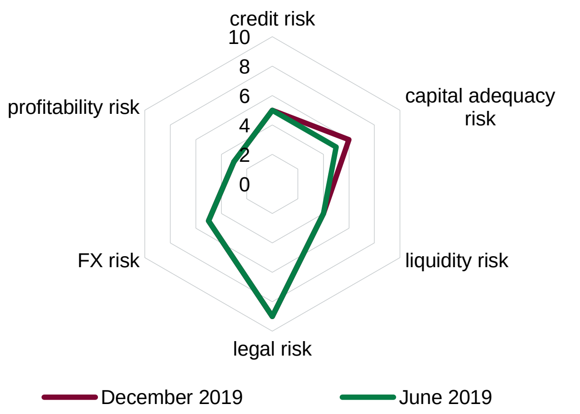
One out of five households spends over 80% of its income on food, clothes and utilities. According to data provided by banks, such households often borrow actively from banks and NBFIs.

In May, the NBU surveyed banks on specifics of their borrowers (see Box 3 "Results of a Survey of Consumer Lending by Banks: Borrowers with Low Income Are Mostly Indebted" published in the June 2019 Financial Stability Report). The survey revealed that low-income borrowers or borrowers that do not disclose their income posed the highest risk for the banks. Loans to such borrowers account for the bulk of the banks' consumer loan portfolios, while also accounting for the largest percentage of past due payments. Effective interest rates on such loans are extremely high. That is why low-income households spend a considerable portion of their income (over 20%) on servicing their consumer loans. All this requires the banks to assess the financial standings of borrowers more carefully, especially in the light of intensifying competition for customers, and an easing in lending standards.

Part 3. Banking Sector Conditions and Risks

3.1. Banking Sector Risk Map

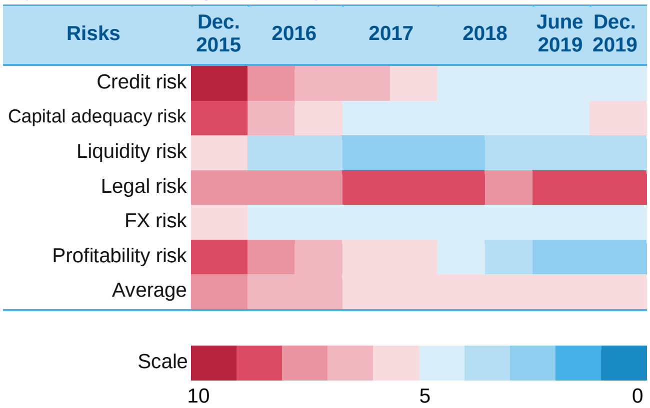
Figure 3.1.1. Banking Sector Risk Map*



* The NBU assesses risks on a scale from 0 to 10, where 0 is the lowest and 10 the highest level of risk. The assessment reflects the outlook for the next six months.

Source: NBU estimates

Figure 3.1.2. Heat map of banking sector risks



Source: NBU estimates

Description:

- Credit risk reflects expected changes in the share of non-performing loans in bank loan portfolios and the need for extra provisions for those loans.
- Capital adequacy risk measures the ability of banks to maintain an adequate level of capital.
- Liquidity risk is a measure of the ability of banks to meet their liabilities to depositors and creditors in full and on time.
- Legal risk is an estimate of the ability of banks to use legal instruments to effectively protect their rights.
- FX risk is the risk that foreign exchange market trends will impact the financial performance of banks.
- Profitability risk reflects the ability of banks to generate net profit.

Credit risk unchanged

The growth in corporations' profitability and household income is decelerating. Although most real sector companies have reduced their leverage, there remain a lot of financially weak borrowers that are restructuring their debts. The banks are easing their retail lending standards. The approaches some banks apply to assessing risks from unsecured consumer loans are sometimes not conservative enough.

Capital adequacy risk increased

The stress tests conducted in 2019 revealed that some banks had failed to increase their financial resilience since 2018. These banks hold sufficient capital under current conditions, but have no safety margins to rely on in a crisis. In particular, this is a problem for two state-owned banks. The introduction of stricter capital requirements and capital buffers is increasing the risks for these banks.

Liquidity risk unchanged

A structural liquidity surplus continues to persist on the financial market. The banking sector has a surfeit of liquidity, with most banks meeting the LCR requirement by a comfortable margin. Meanwhile, competition for liabilities – deposits from corporations and households – remains intense, preventing the cost of funding from decreasing more rapidly. The short maturity of liabilities remains a systemic risk for the sector.

No change to legal risk

The trends have been divergent: a number of laws needed by the financial sector have been adopted (these included the Split law and the law on the protection of consumer rights); and the effect of the financial restructuring law has been extended. The initial experience of implementing new legislation on creditor rights protection has also been positive. That said, court rulings on disputes between banks and borrowers are still mixed in nature. Legal risks arising from the appeal against the nationalization of PrivatBank remain high.

No change to foreign exchange risk

The share of FX in banks' assets and liabilities has risen over the last six months, and banks became more willing to issue FX loans to businesses. Open foreign currency positions of banks currently pose no significant risk to these institutions, while their external debt is not rising.

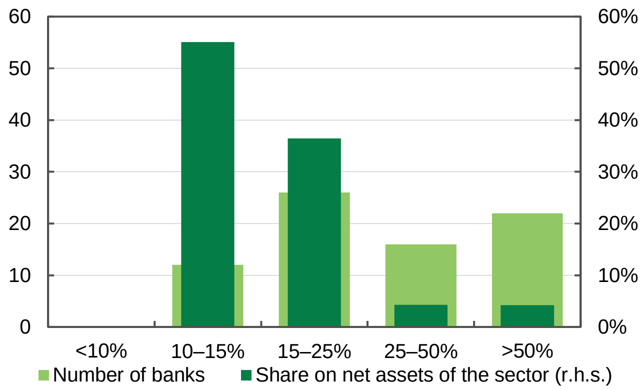
Profitability risk unchanged

Banks continue to operate in a benign environment, the return on equity is at a historic high, but may decline in future. The growth in fee and commission income is decelerating. The interest margin will decrease, due to the ongoing monetary policy easing cycle, and consequent interest rate decreases.

3.2. Capital risks and stress testing

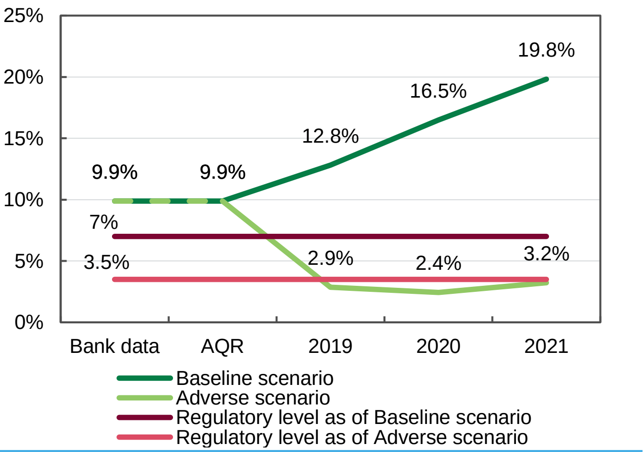
For the current macroeconomic environment, Ukrainian banks are sufficiently capitalized and profitable. The sector's resilience to systemic risks is also increasing. However, the banks should be aware of the weaknesses of their balance sheets and business models: in times of crisis, the negative impact of these weaknesses on financial sustainability is multiplied. Overstatement of future customer solvency, the short maturity of funding, significant FX holdings of banks, and insufficient operational efficiency would pose risks to capital in case of a crisis. To mitigate adverse effects if these risks were to materialize, financial institutions should maintain capital adequacy ratios at the levels defined upon the results of the resilience assessment. Meeting the required ratios and gradually introducing new capital requirements will enhance the banks' resilience to possible crises.

Figure 3.2.1. Breakdown of the banks' capital adequacy as of 1 October 2019



Source: NBU.

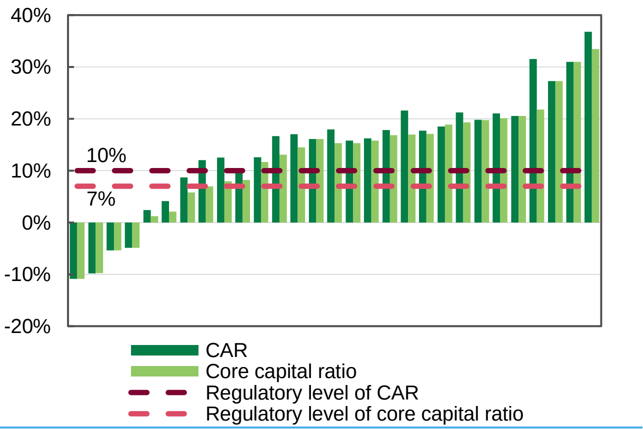
Figure 3.2.2. Weighted average estimates of the core capital adequacy ratio based on stress test results*



* Weighted by risk-weighted assets for each year.

Source: NBU.

Figure 3.2.3. Banks' capital adequacy ratios in the first year of the stress test baseline scenario (bank-by-bank breakdown)



Source: NBU.

The banking system is now sufficiently capitalized

The performance of financial institutions is improving: the credit portfolio is increasing, its quality is rising, and provisioning is at its lowest in more than a decade, making the banks highly profitable. The banks' capital adequacy is thus well above the minimum ratios. The average adequacy ratio of regulatory capital is now 19.4%, while that of core capital stands at 13.6%. Under current macroeconomic conditions, these ratios are at comfortable levels for most banks and for the regulator. By operating with capital in excess of the minimum ratios, the banks ensure they will meet stricter requirements in future without slowing down lending.

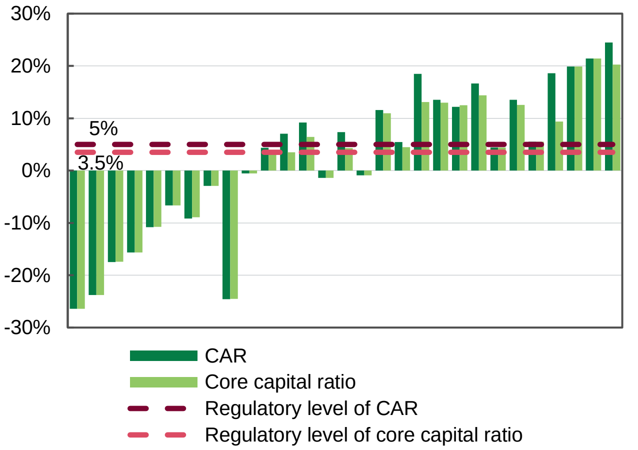
However, the currently high capital adequacy ratios fall short of giving a guarantee that the banks will have sufficient safety margins in all circumstances. In a crisis, a bank can burn through a large portion of its capital in a few months' time, creating threats to solvency. The NBU and regulators elsewhere in the world are thus interested not only in the current state of play, but also in ascertaining whether the banks are sufficiently resilient to potential crises. To that end, the NBU holds annual stress tests. The stress-test scenarios include the most relevant risks – ones that are sure to materialize under adverse circumstances. As it stands now, these risk factors are estimation of customer solvency, which are not conservative enough, the short maturity of funding, significant FX holdings on the banks' balance sheets, and insufficient operating effectiveness.

The overall results of the stress testing have generally confirmed the view that, under the baseline scenario, the banks are not facing difficulties. The banks' capital adequacy in the forecast period rises by almost 10 pp due to profits (under the static balance sheet assumption). But even under the baseline scenario, a need for additional capital arises at 11 financial institutions. These capital needs, estimated at UAH 35.3 billion in the hryvnia equivalent, will mostly come from state-owned banks.

Under current conditions, the main threat to the banks' capital is the depreciation of collaterals for NPLs

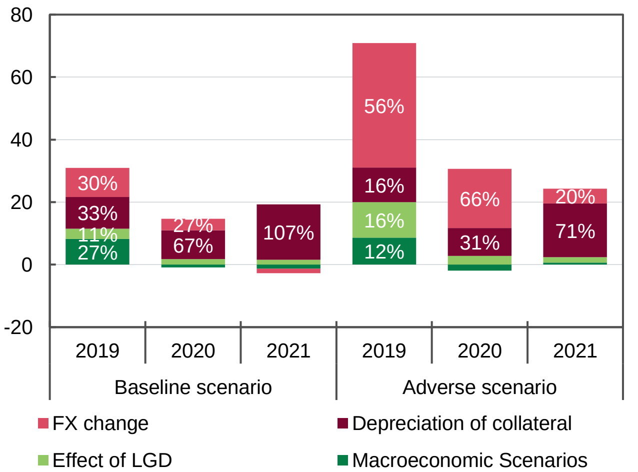
Significant capital needs arise as collaterals for NPLs depreciate. Overall, the NPL provisioning coverage ratios are high across the banking system, but state-owned, Russian, and several private banks still have some defaulted loans on their balance sheets that are partially covered with collateral. As a result, these loans are not fully provisioned. Collateral for these loans should have been recovered and sold, but

Figure 3.2.4. Capital adequacy ratio in the first year of the stress test adverse scenario (bank-by-bank breakdown)



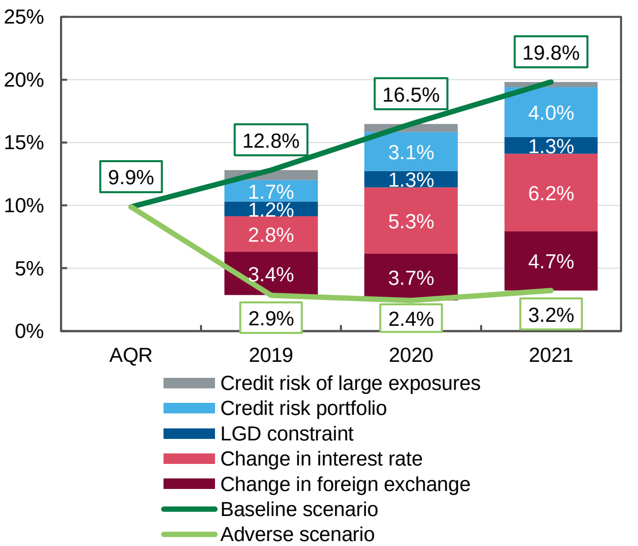
Source: NBU.

Figure 3.2.5. Changes in the credit risk of large debtors in a stress test



Source: NBU.

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



Source: NBU.

since it has not, the banks ought to recognize their losses and fully provision for these loans. The rules requiring the gradual depreciation of collateral for loans that have been classified as nonperforming for more than two years were introduced in 2018 and were first applied during this year's stress testing. The application of the rules has worsened the results of the banks' resilience assessment, but has yielded a clear understanding of how much additional capital the banks may require in future.

Credit risk can significantly increase in times of crisis

Under the adverse scenario, 18 banks require an overall capital increase of UAH 73.8 billion. The factors noted above jointly reduce the banking system's capital adequacy by 7.5 pp.

Credit risk pertaining to large corporate borrowers poses a material threat to the banks' capital. Part of this risk is materialized through the collateral depreciation effect mentioned above. In addition, modeling indicates that if macroeconomic conditions deteriorate, a portion of debtors do not have sufficient operating cash flows to service their debts. If credit risk materializes, the banks also incur losses arising from the significant FX component of their balance sheets. In particular, if the domestic currency depreciates, not only does the debt burden of borrowers increase, but the dollar value of collateral plummets as well. To ensure they are resistant to shocks, the banks should reduce the concentration of their corporate portfolio and lend to debtors with acceptable debt loads and transparent ownership structures.

This year's resilience assessment has focused on household loans due to their rapid growth in recent years. The quality of this portfolio is heavily dependent on macroeconomic conditions. In previous crises, the share of defaulted consumer loans reached 21%. These were the parameters used in the adverse stress test scenario. As a result, the resilience assessment of retail banks produced a worse outcome than last year.

Taking into account changes to the macroeconomic environment is critical to assessing segment-specific risks. To evaluate their provisions, the banks are required by NBU regulations and IFRS 9 to rely on both current and projected macroeconomic conditions. The banks should therefore refine their approaches to modeling expected losses and increase the models' sensitivity to macroeconomic factors. That will allow the banks to have timely forecasts of deteriorations in retail portfolio quality and maintain a sufficient stock of capital to cover unexpected losses.

The level of damage the banks incur from the deterioration of loan portfolio quality depends not only on the probability of default, but also on what is known as loss given default (LGD). Due to legal risks and fraud, the banks are often unable to collect the collateral to recover their losses. And in times of crisis, the liquidity of collateral declines, which affects the ability to sell foreclosed property. As for unsecured loans,

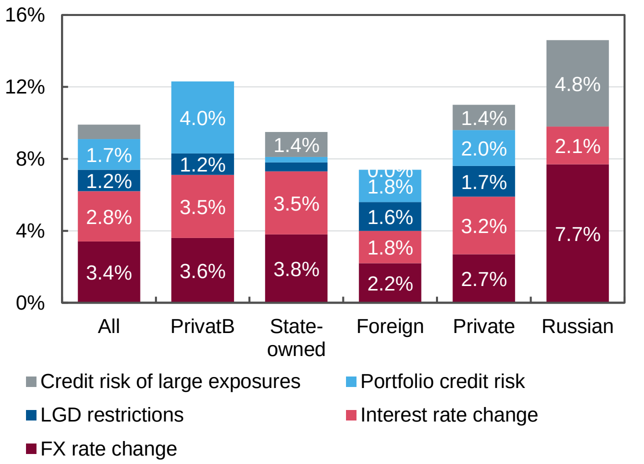
Table 3.2.1. Stress test scenario parameters, increase in %

Indicator	Baseline scenario			Adverse scenario		
	2019	2020	2021	2019	2020	2021
Real GDP	2.5	2.9	3.7	-4.1	-3.7	1.0
CPI	6.3	5.0	5.0	15.8	14.8	8.8
Exchange rate*	7.5	3.3	1.0	23.2	11.1	4.1

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

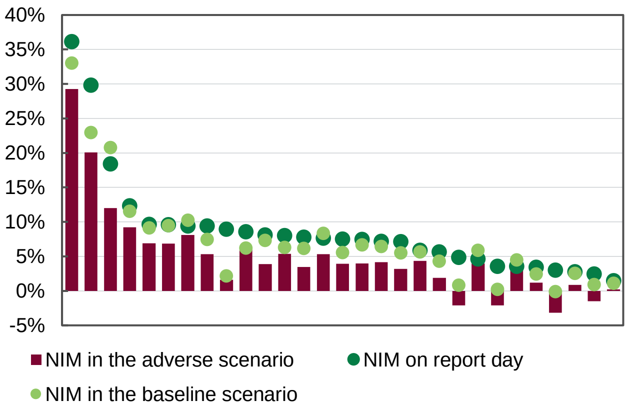
Source: Source: NBU, Focus Economics.

Figure 3.2.7. Factors responsible for a change in a bank's core capital under the adverse scenario compared to the baseline scenario



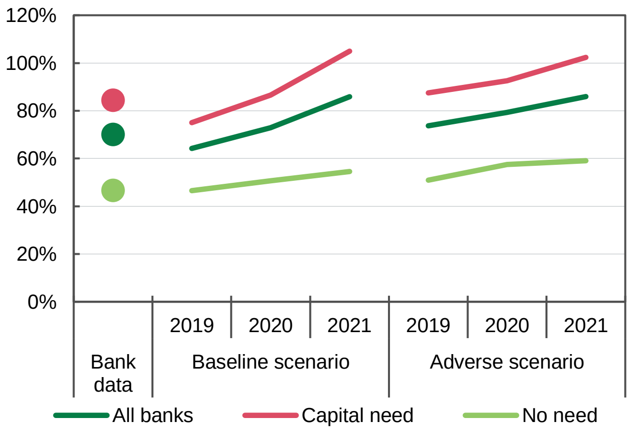
Source: NBU.

Figure 3.2.8. Changes in banks' CIR in stress testing



Source: NBU.

Figure 3.2.9. Changes in banks' CIR in stress testing



Source: banks, NBU estimates.

statistical data shows that the banks received debt repayments only during the first year after the borrower's default, and that they recover no more than a fifth of the debt. All these factors were reflected in the stress testing. In general, the LGD assumption worsened the banks' capital adequacy ratios by 1 pp in the adverse scenario compared to the base case. This effect was most pronounced for the banks with large portfolios of unprovisioned loans left over from earlier crises.

Interest risk, operational inefficiency, and dollarization threaten the capital of a number of banks

The large proportion of short-term funding implies that during crises, banks are forced to reprice most of their liabilities within months. This subjects them to interest rate risk, which pushes the capital adequacy ratio lower by 6 pp in the adverse scenario compared to the baseline scenario. Operating profit margins come to the fore when net interest income is reduced. The cost-to-income ratio (CIR) at banks that did not need any capital increases according to stress test results averages 47% and increases slightly over the stress test horizon. Meanwhile, for banks that did require capital, the CIR started from 84% and grew to over 100%. Poor operating performance poses a threat to capital adequacy even now that commercial interest rates and banks' interest margins have begun to decline.

The dollarization of the financial institutions' balance sheets still carries considerable risks. Currency risk undermines the solvency of debtors when adverse events materialize, and the banks suffer losses from the reevaluation of unprovisioned defaulted loans. In the adverse scenario, they account for more than half of the overall credit risk increase of corporate debtors. In general, due to the imbalances in the currency composition of the assets and liabilities of individual banks, the effect of a currency shock reaches 5 pp of the capital adequacy ratio compared to the baseline scenario.

To increase resilience, banks must gradually build up capital

The depreciation of collateral for NPLs currently poses a threat to capital, the stress testing revealed. However, these losses are predictable and should be covered by capital planning. Fundamental risks that appear in the adverse scenario could affect a number of banks. In order to prevent them, the financial institutions must maintain capital adequacy ratios at levels well above the NBU's minimum requirements. Using the stress testing results, these levels were determined for a number of banks. These banks must now form the necessary capital buffers. At the same time, operating performance is no less important. If a bank is unable to generate sufficient income to cover operating expenses and credit risk losses, it does not have long-term prospects for working in the market.

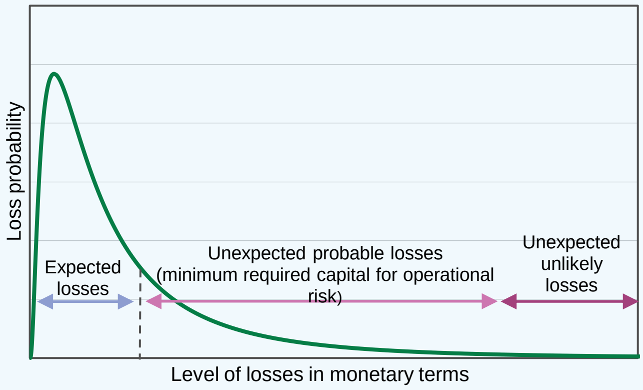
Box 3. NBU Implements Capital Requirements to Cover Operational Risk

Starting from 1 January 2022, the NBU will require banks to cover their operational risks with capital. The relevant resolution is going to be approved in the near future, providing banks with enough time to prepare. The capital required to cover unexpected losses from operational risk will be determined in accordance with Basel III, and will take into consideration the specifics of the Ukrainian banking system. Taking operational risk into account will raise banks' risk-weighted assets, thus reducing their capital adequacy ratios. However, given a long transition period and high current profitability, most banks will meet the new requirements without difficulty.

Operational risk (OR) is the risk of loss resulting from inadequate or failed internal processes, people, and systems or from external events. OR includes legal risk, but excludes reputational and strategic risk.

Banks are exposed to OR events every day. Losses caused by OR are an unavoidable part of their day-to-day activities. Banks can usually assess OR and include it in the prices of their products, thereby avoiding risks to their operation. Even so, unexpected events may occur, causing practically unlimited losses for banks. Financial institutions should have capital sufficient to cover these losses. The cyberattack in 2017 that carried the Petya virus is a vivid example of such an unexpected event. The attack hit banks that accounted for more than a third of the banking system's assets. As a result, some banks suspended their operations for several days. This suspension caused losses that are still difficult to estimate. (Read more in the box Cyber Risk as a Challenge for Financial Stability in the December 2017 Financial Stability Report).

Figure B.3.1. Probability distribution for OR losses at banks



Source: NBU.

Managing OR is an essential part of a bank's internal risk management system. The Basel Committee has clearly defined this since 1998. In order to protect financial institutions from the negative financial consequences of OR realization, in 2004, the Basel Committee (Basel II) set requirements for covering unexpected losses from OR with capital.

According to the rules, the first step is to calculate the potential unexpected losses from OR events. This is the figure to be covered with capital. The next step is to determine the risk-weighted assets equivalent by multiplying the determined capital needs by an inverse of the minimum capital ratio. OR-weighted assets are included in the denominator of the Capital Adequacy Ratio (CAR) together with assets weighted for credit and market risks.

$$\text{RWA(Operational risk)}=\frac{\text{Unexpected losses from OR}}{\text{Minimum CAR requirements}},$$

$$\text{CAR}=\frac{\text{Regulatory capital}}{\text{RWA(Credit risk)+RWA(Operational risk)+RWA(Market risk)}},$$

where RWA *are risk-weighted assets.*

In 2017, Basel III introduced a new OR calculation standard that superseded the three methods used globally. All banks must switch to the unified standardized approach by 2022. The proposed date for OR to be included into capital requirements in Ukraine coincides with the start of the implementation of the new standard.

The new standardized approach is universal and mostly uses open financial reporting data. According to the standard's developers, the estimated amount of unexpected losses closely correlates with actual losses from OR events. With some modifications, this standard will be applied to Ukrainian banks.

Under the standard approach, the losses from OR events depend on the scope of a bank's main operations. This can be measured using the profit and loss statement. Main operations at banks are comprised of three components: the interest and dividend component, the services component, and the financial component. The calculation uses the absolute values of these elements, therefore the capital requirements to cover operational risk applies to both profitable and loss-making financial institutions in terms of some of the components. Moreover, each component is calculated as an average over three years.

The sum of the three components is called a business indicator and reflects the approximate size of a bank's operations that carry OR. In order to assess losses from OR, the business indicator is multiplied by a marginal coefficient. As the business indicator increases, the marginal coefficient rises from 12% to 18%. This is how the core OR capital requirement is determined. Banks can adjust the determined amount of capital need using historical data of actual losses from OR events. In this case, an additional multiplier – the internal loss multiplier – is used. In order to make these adjustments, financial institutions must maintain a continuous high-quality database of at least the last five years.

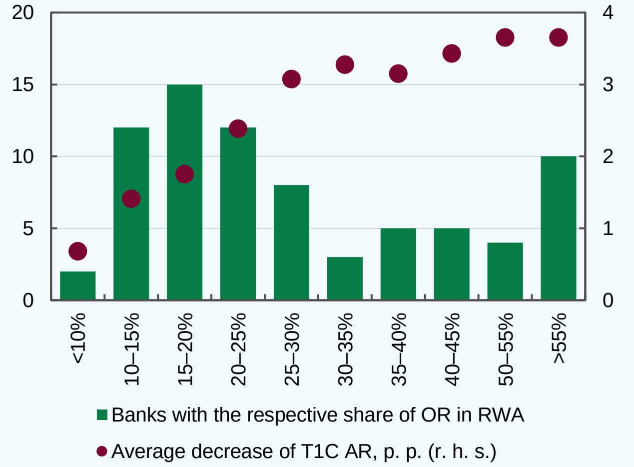
Unexpected losses from OR = BI × $\alpha \times \text{ILM}$,

where BI is the business indicator, α *is the marginal coefficient, and* ILM *is the internal loss multiplier.*

The NBU will implement the standardized approach, with some minor changes to account for the specifics of the Ukrainian banking system. That said, the NBU's approach will be somewhat more conservative than the original Basel methodology. In particular, the interest and dividend component will not be limited to 2.25% of interest earning assets envisaged by Basel. The average net interest margin of Ukrainian banks is much higher and changes quickly. Moreover, complete and reliable statistics of OR losses are not available, which complicates defining the respective threshold using local data. For the same reason, banks in Ukraine will not be divided into buckets with different marginal coefficients. The single ratio of 15% will apply to all banks. The internal loss multiplier will equal one for all banks.

Presently, financial institutions must fine-tune their risk management systems. In particular, they need to establish a high-quality database that ensures the information structure required by Resolution No. 64 and Basel. After that process is complete, the NBU will be able to revise the OR capital requirements and probably to propose a less conservative approach.

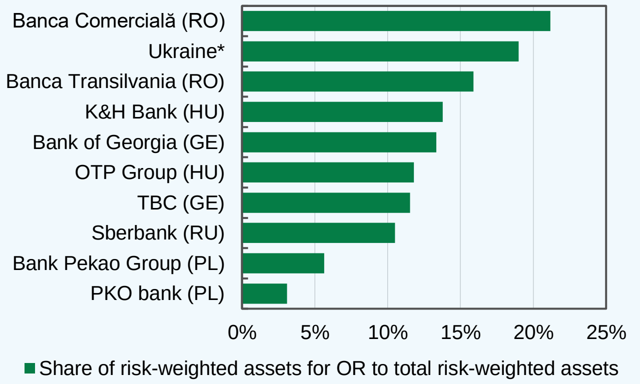
Figure B.3.2. Distribution of banks by the share of OR in their risk-weighted assets and the average change in Core capital adequacy ratio caused by the inclusion of OR, calculated as of 1 October 2019



Source: NBU estimates.

At early stages, due to the requirement of covering OR, some banks may have to increase their capital in order to meet the regulatory requirements. According to preliminary estimates, the sector's OR-weighted assets will account for 19% of total risk-weighted assets. This share is somewhat higher than in the neighboring countries due to the specifics of bank portfolios in Ukraine. The significant portion of OR in risk-weighted assets is due to banks' balance sheets containing a material share of government securities, which are assigned a zero credit risk. If the OR capital requirement is implemented right away, the average core capital adequacy ratio of the banking system would drop by approximately 4 pp. Most banks, however, would still comply with the minimum requirements, thanks to the high average ratios of capital adequacy.

Figure B.3.3. The average share of OR-weighted assets in total risk-weighted assets of banks in Ukraine compared with banks ratios in neighboring countries calculated as of 31 December 2018



* The median for the banking system as of 1 October 2019.

Source: financial statements from banks' official websites, NBU estimates.

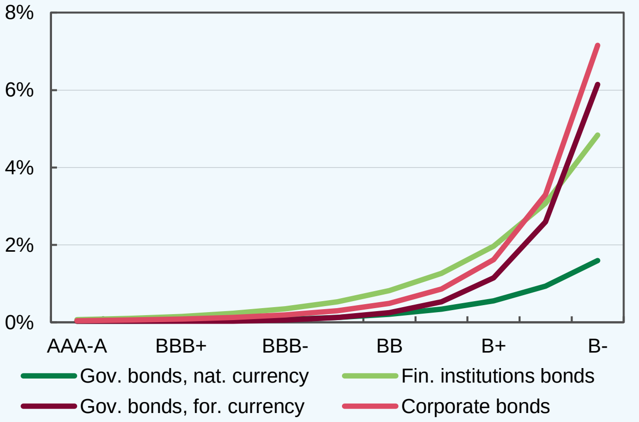
Moreover, banks will have a long transition period in order to implement the OR capital requirement. The new requirements will take effect starting in 2022, as the relevant resolution will be approved in the near future. Financial institutions will have enough time to accumulate the required amount of capital using their current profits. The OR capital requirement will make individual banks and the entire system more resilient to unexpected crises.

Box 4. Banks must hold capital against FX domestic government bills and bonds

The recently-lifted restrictions on the movement of capital in Ukraine did not let banks invest in foreign securities. Such investment opportunities opened up after the currency liberalization, prompting the NBU to formulate rules for assessing the credit risk of these investments. The probabilities of default on securities will be determined using international ratings. Ratings will also inform securities' risk weights that are used to calculate capital requirements for a bank. This general approach will also apply to Ukrainian government bills and bonds denominated in foreign currency (FX domestic government bonds), which, in contrast to the hryvnia-denominated ones, are not risk-free.

The currency liberalization enabled banks to invest in foreign-issued securities – both sovereign and private. This gives a number of advantages, as it extends the banks' options for investing their temporarily free liquidity. At the same time, the financial institutions must properly assess the credit risks pertaining to these investments. The NBU has set rules for the assessment of prudential provisioning for securities. The probability of default (PD) will be determined according to the ratings assigned by international rating agencies. PD benchmarks are based on the default statistics of the issuers rated by Moody's, S&P, and Fitch. The statistics cover a period of 15 years.

Figure B.4.1. Estimated PD curves of rated issuers of securities

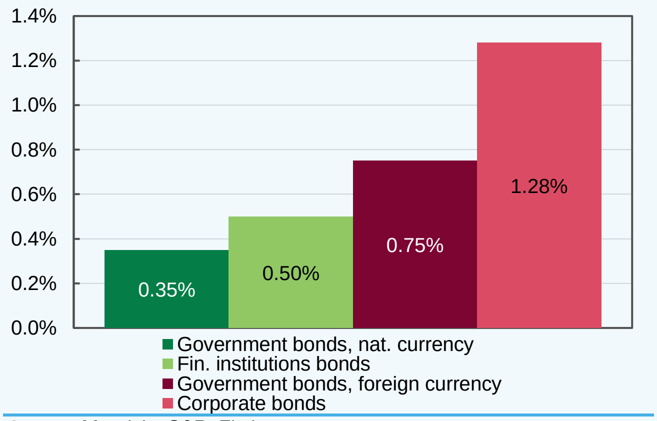


Source: NBU.

The credit risk of Ukrainian government bonds denominated in foreign currency (FX domestic government bills and bonds) will also be estimated on the basis of the country's sovereign ratings. Up until now, all securities issued by the Ukrainian government, regardless of currency, have been considered risk-free for the purpose of calculating the capital needs of banks. From now onward, only hryvnia-denominated bonds will remain risk-free. Basel recommendations envisage that regulators can identify debt securities of the national government as risk-free, which, among other things, is intended to make their monetary policy more effective.

According to international and Ukrainian practice, government securities denominated in foreign currency are not risk-free. In times of crisis, depreciation leads to a sharp increase in the public debt burden, which in turn increases the government's credit risk. In addition, during crises, governments cannot always refinance these borrowings. This is confirmed by the data on defaults observed over the past 15 years: defaults on FX sovereign liabilities occurred twice as often as those on national currency liabilities.

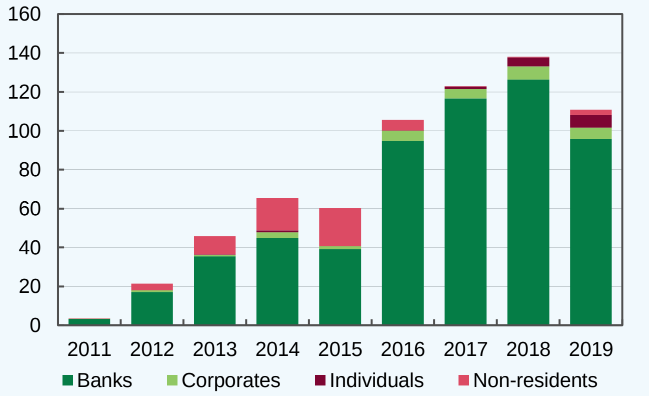
Figure B.4.2. Average defaults by issuers with international ratings in 2002–2017



Source: Moody's, S&P, Fitch.

Banks will be required to make prudential provisions against FX domestic government debt and other securities, and to hold capital for unexpected losses. These requirements will be phased in over the course of 2020. The transition period will allow banks to incorporate the new rules into their investment plans.

Figure B.4.3. Breakdown of holders of FX domestic treasury bills and bonds, UAH billion*



* FX rate as of the end of the period. 2019 – as of 25 November.

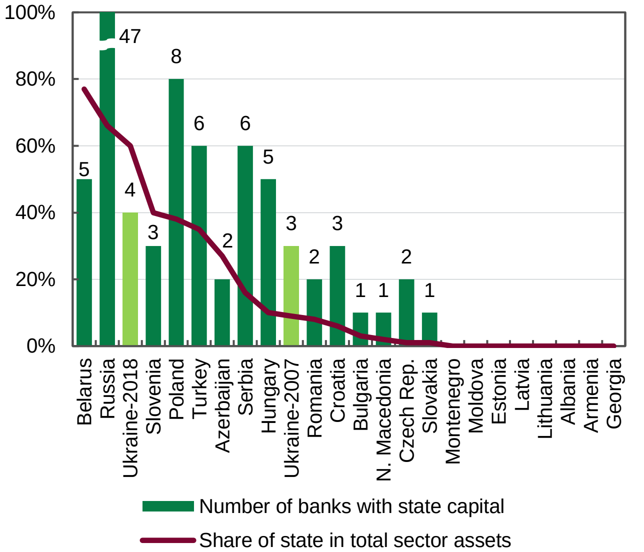
Source: NBU.

The new approach may somewhat reduce the interest of Ukrainian banks in FX domestic government bills and bonds. However, this is consistent with the government's announced plans to phase out domestic FX borrowing. These intentions are envisaged in the government debt management strategy until 2022 and in the Memorandum of Cooperation between the Ministry of Finance and the NBU. In the medium term, this will help dedollarize the balance sheets of Ukrainian banks.

3.3. Risks Caused by a High Share of State Capital in the Banking Sector

In Europe, state-owned banks rarely play a key role in the financial sector. However, they are systemically important in Ukraine. A significant share of state capital in the Ukrainian banking sector is a result of past crises. Today, state-owned banks, primarily Oschadbank and Ukreximbank, face a number of fundamental problems, including the unsatisfactory asset quality, small interest margins, and low operational efficiency. This makes them unable to generate capital. As these banks are big players on the market, systemic risks arise for the entire sector. State-owned banks should aim at maximizing the value for their owner and potential investors. The newly appointed independent supervisory boards are expected to transform appropriately the banks' strategies. Over the coming years, the share of state capital in financial institutions should decrease markedly.

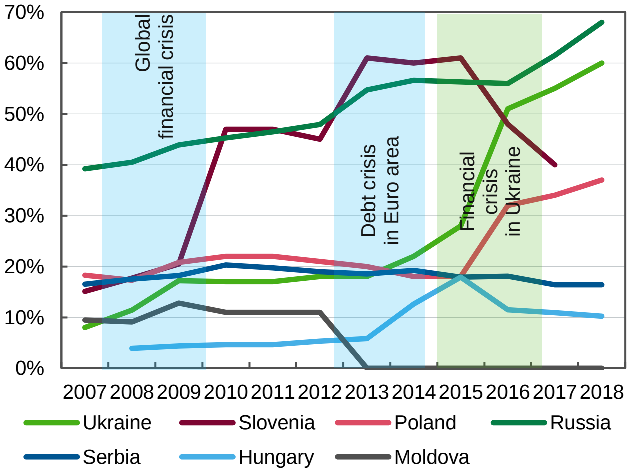
Figure 3.3.1. Market share and number of banks with state capital in banking sectors of CEE countries



Note: data for 2017; data on Russia cover banks with share of state capital over 15%; data on Ukraine do not include the Settlement Center.

Source: NBU, EBF, Raiffeisen Bank International, financial statements of state-owned banks.

Figure 3.3.2. State-owned banks' share in total assets of the banking sector*



* According to definitions and data of national central banks.

Source: Raiffeisen Bank International.

The majority of European governments minimize the share of state capital in the banking sector

State-owned banks are often vulnerable to political influence and less effective compared to private banks. That is the case for banking systems of Central and Eastern Europe (CEE) according to a recent study by the IMF[13]. For this reason, many European countries either did not set up state-owned banks or privatized them, like in Georgia, Moldova, Lithuania, and Albania.

There are also arguments in favor of a partial presence of the state in the banking sector. For example, lending of state-owned banks is often less pro-cyclical. In some countries, state-owned banks are niche banks that support exporters, small enterprises, and development projects and offer mortgage loans, as in the Czech Republic, Slovakia, Romania, and Bulgaria. However, this does not give state-owned banks a major role in the system, neither in terms of their number nor the amount of their assets. In countries with a material share of state capital in the banking system, these banks are operationally efficient, profitable, and independent.

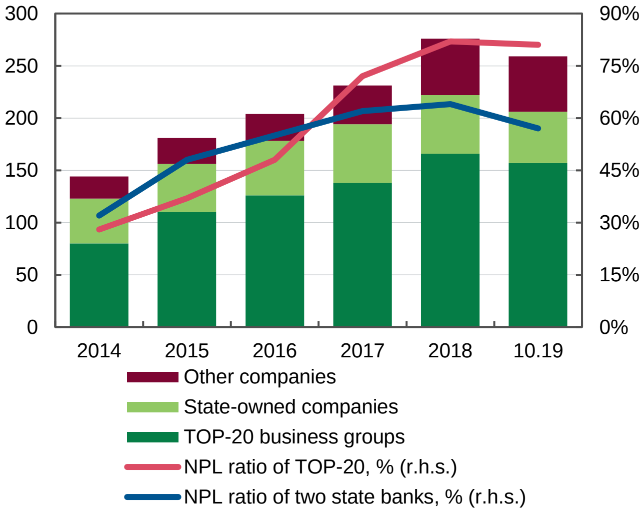
The share of state capital often grows due to crises, when governments have to bail out troubled banks

The most vivid examples in CEE are Slovenia and Latvia; in Europe as a whole, these are Belgium, the Netherlands, and the UK. Governments of these countries had to bail out systemically important banks in order to maintain stability of the financial system. Eventually, the governments sold their share in those banks. Poland and Hungary are a special case, where the market share of state-owned banks increased due to political reasons.

In Ukraine, the share of state capital in the banking sector grew during periods of crisis. Until 2008, state-owned banks accounted for around 10% of the sector's assets. This figure doubled after the crisis (which was comparable with the levels seen in Poland and Serbia at the time) and then soared to 50% starting in 2015. That was driven by the nationalization of PrivatBank and switching of many customers to the state-owned banks, which were considered a safe haven during crisis times.

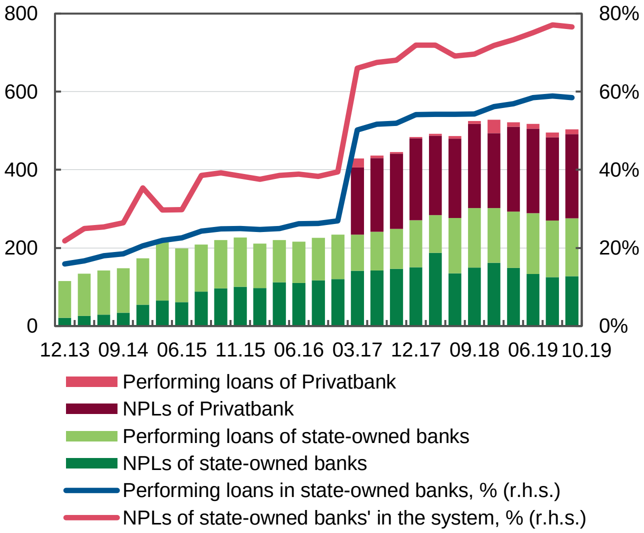
[13] Reassessing the Role of State-Owned Enterprises in Central, Eastern, and Southeastern Europe, IMF, European Department, June 2019 https://www.imf.org/~/media/Files/Publications/DP/2019/English/RRSOECESEEEA.ashx.

Figure 3.3.3. Corporate loan portfolio structure at Oschadbank and Ukreximbank, UAH billion



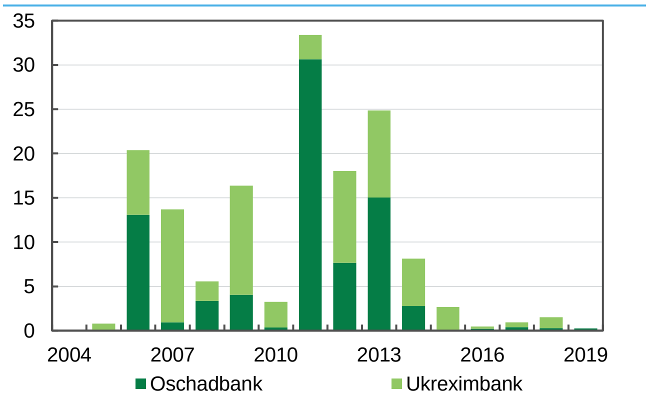
Source: NBU.

Figure 3.3.4. Corporate portfolios of state-owned banks, UAH billion



Source: NBU, SSSU, NBU estimates.

Figure 3.3.5. Non-performing loans by year of origination



Source: NBU.

Low asset quality is the main problem of Ukrainian state-owned banks

Loans to state-owned enterprises make 20% of corporate portfolios of Oschadbank and Ukreximbank, Ukraine's two oldest state-owned banks, and loans to top-20 notorious private business groups make 60% of those portfolios. There is a reason for such a structure of loan portfolios: in the past, credit decisions at these banks were often influenced by politicians and poorly economically grounded.

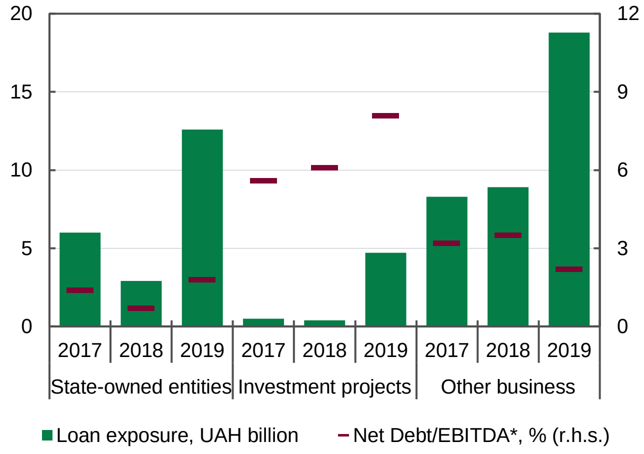
Large exposure to state monopolies, although undesirable, did not have a major negative impact on the quality of loan portfolios. However, loans to business groups were issued in the interests of their owners, not in the interests of the banks. The NPL ratio for corporate portfolios of state-owned banks is currently 56.8% (13.4% at banks other than Russian banks). Almost all NPLs originated before 2015. Neglecting the basic risk management standards led to large losses on such loans during the crisis of 2014–2016 (for more details, see the box Loan Concentration Risks Require Stricter Controls, p.23, in the June 2017 Financial Stability Report).

In 2016, the NPL volume at state-owned banks rose sharply because of PrivatBank. Loans to shell companies of PrivatBank's ex-owners were recognized as NPLs after the nationalization. Almost all of these loans have been 100% provisioned, and the capital needs have been covered by the state. Overall, the government's cost of the banks support and PrivatBank nationalization in 2014–2017 exceeded UAH 200 billion, or 8.7% of GDP of respective years (not accounting for coupons paid). As domestic government bonds were used to increase the banks' capital, they still make a large share of their assets.

For the fourth year after the crisis, state-owned banks have not managed to significantly reduce the NPL ratios. Influential borrowers resist any attempts to recover the debts. Sometimes it is unwillingness to repay and not financial difficulties that stands behind poor debt servicing. On the other hand, the management of state-owned banks has a limited toolkit for NPL resolution, so a number of important decisions was postponed until the formation of supervisory boards. Banks are incurring new losses due to slow NPL resolution: they have to increase their prudential provisions as collaterals gradually depreciate.

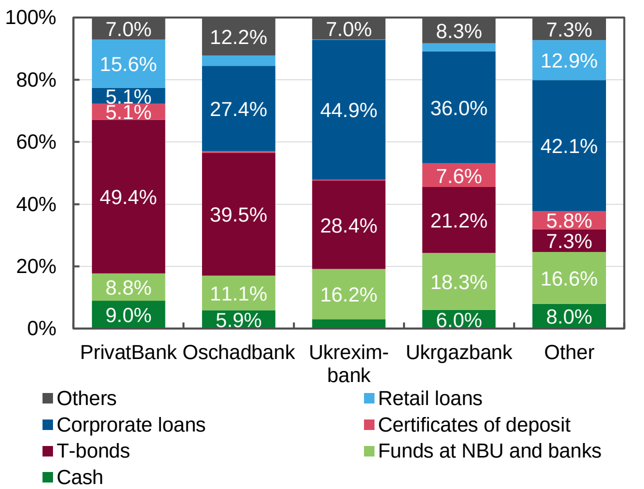
The new loans issued by state-owned banks are predominantly of acceptable quality. However, the banks' credit policies should be more prudent. State-owned banks maintain high concentration on some sectors and groups. There is a growing share of investment projects that carry higher risks than existing businesses. The banks remain active in lending to state monopolies. Once supervisory boards are in place, the financial institutions must develop a lending strategy and follow it.

Figure 3.3.6. New corporate loans from Oschadbank and Ukreximbank



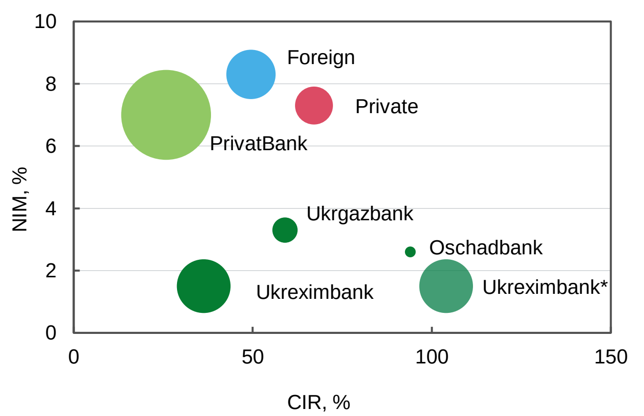
* Calculated based on annual financial statements for 2018.
Source: NBU.

Figure 3.3.7. Net assets composition of banks



Source: NBU.

Figure 3.3.8. Banks' key financial performance indicators



* CIR does not include income from FX revaluation.
The size of a circle corresponds to the level of ROE.
All group indicators are weighted by the amount of assets.
Source: NBU.

The asset structure of state-owned banks is very different from that of private banks

Apart from corporate loans, securities account for a material share of assets at state-owned banks, a result of previous recapitalizations with domestic government bonds. Earnings from securities total to 30% of interest income earned by Ukreximbank, 36% by PrivatBank and Ukrgasbank, and 47% by Oschadbank. Retail loans make up a significant share of the portfolio only in PrivatBank. Another peculiarity of state-owned banks is their important external financial relations and the core role on the Ukrainian interbank market. In addition, PrivatBank is the absolute leader in terms of the amount of card payments, accounting for 60% of these transactions.

State-owned banks should be more flexible in their pricing

The net interest margin of Oschadbank and Ukreximbank is low, less than 3%, although it is around 7% at private banks. This is a product of double problem. On the one hand, a large share of state-owned banks' portfolios does not generate any market interest income. On the other, the cost of their liabilities has been remaining high for a long time, despite the cuts in the NBU's key policy rate. Foreign-currency funding is also expensive. The banks have been maintaining their rates above the market level, although their options of using FX funding is limited apart of investment in government securities.

State-owned banks are market makers in the segment of retail and corporate deposits. They determine the cost of resources for the system. Private banks have to proceed from rates offered by state-owned banks in their own pricing. Moreover, state-owned banks have a significant competitive advantage: they enjoy either an explicit or an implicit deposit guarantee, as the government always supported these banks in crisis periods. As a result, state-owned banks are perceived as more reliable, implying that their rates should be lower. However, it is not always the case.

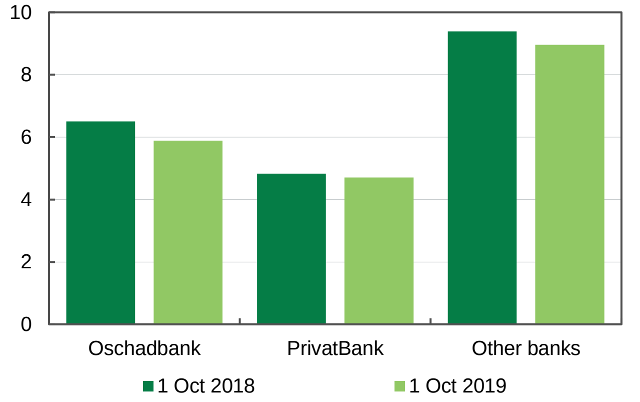
Thus, another issue to be solved is the blanket guarantee provided for retail deposits at Oschadbank. The guarantee is free-of-charge for the bank, whereas other banks pay regular contributions to the Deposit Guarantee Fund (DGF) to ensure a guarantee of UAH 200,000 for their customers. Oschadbank should participate in the deposit guarantee system on standard terms. In particular, that is a precondition for attracting new investors in the future. A draft law on including Oschadbank to the deposit guarantee system on standard terms has already been submitted to the parliament[14].

Improving operational efficiency is a priority

While interest income is small, administrative and other operating costs remain excessively high, especially expenses to maintain the branch network. Oschadbank has an extensive network, but fees and commissions it receives are

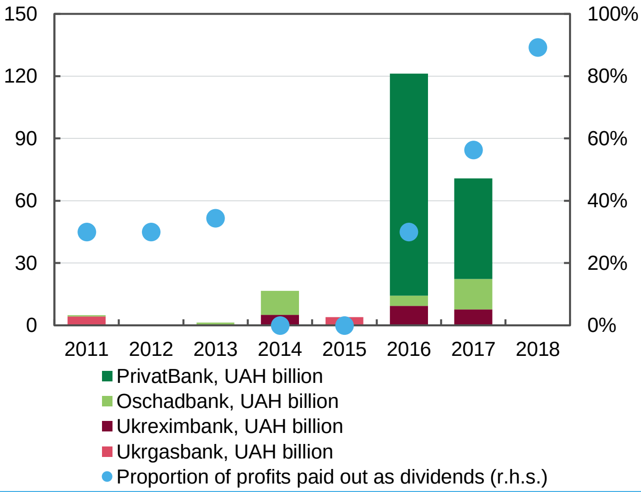
[14] Draft Law of Ukraine No.2571 *On Amendments to Certain Legislative Acts of Ukraine on Certain Issues of Banking System Operation* dated 11 December 2019.

Figure 3.3.9. The number of bank branches per 100,000 inhabitants



Source: NBU.

Figure 3.3.10. Cost of recapitalization of state-owned banks and the proportion of their profits distributed as dividends



Source: NBU.

not enough to cover the costs. Moreover, the bank is slow in increasing its retail loan portfolio, despite its accessibility for customers thanks to the wide branch network. As a result, Oschadbank's cost-to-income ratio (CIR) is 94%. At Ukreximbank, it exceeded 100% a year ago; in 2019, the CIR remained the same, excluding the effect of revaluation of FX items on the banks' balance sheets.

Oschadbank and Ukreximbank generate low profits due to insufficient operational efficiency and a concentration on low-quality assets, which makes them extremely vulnerable to macroeconomic shocks. These banks are not able to generate an adequate return on capital. Their small profits are distributed to the budget through dividend payment. According to stress tests, under the adverse macroeconomic scenario, additional capital needs of state-owned banks might reach tens of billions of hryvnias. That poses a systemic risk for the sector.

Banks must revise their business models

Supervisory boards must ensure a transformation according to strategic goals set by the government in order to address the above problems. That is why establishing independent supervisory boards at state-owned banks was a long-awaited step. Over the coming years, the share of state capital in the banks should decrease markedly. A number of prompt and important changes is required to make it happen:

- The banks' operations must be aimed at a single key goal – to maximize the banks' value for the state as their owner. Increasing profitability and return on capital must be the main focus, instead of maintaining or raising the market share.
- The banks must quickly resolve NPLs on their balances sheets, most of which are duly provisioned.
- The banks must define their lending priorities, which would allow them to increase their interest margins.
- The banks must improve their credit analysis and expertise and implement proper risk management systems.
- The banks must optimize their operating expenses and revise their budgets considering returns from implemented and planned investment projects.

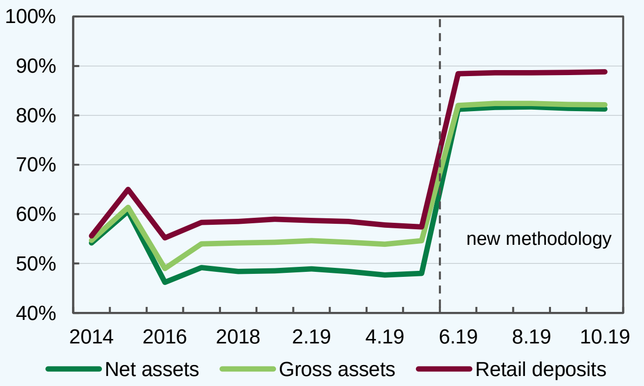
Box 5. Revised approach to identifying systemically important banks (SIBs) in Ukraine

SIBs have large concentrations of assets, they are interconnected with other market participants, and have an impact on the stability of the entire financial system. That is why regulators pay special attention to such institutions. Stricter prudential requirements apply to such institutions because their improper operation could pose risks to financial stability. In 2019, the NBU revised approaches to identification of systemically important banks. In June, the central bank identified 14 SIBs in line with its revised methodology; from 2021 onwards, these banks will be required to hold extra capital buffers.

A systemically important bank is a bank the bankruptcy or improper operation of which could trigger systemic risks domestically or even globally. The latest global financial crisis has forced regulators to subject these institutions to more careful scrutiny. The destructive consequences of this crisis resulted from the accumulation of risks in large financial institutions, and the failures of some of these institutions. In order to prevent the crisis from deepening, governments and central banks had to support the liquidity and capital of these financial institutions, which caused losses to their states. Therefore, after 2009, IFIs and national regulators introduced stricter requirements for the regulation of, and supervision over, systemically important financial institutions, including banks. They are now subject to the requirement to hold a systemic importance (capital) buffer, the obligation to draw up recovery and resolution plans, and the application of stricter liquidity regulations.

In Ukraine, the practice of identifying SIBs was launched in 2014. Since that time, SIBs have been identified annually, with their identification criteria based on three groups of indicators: the size of their assets, their line of business, and the extent of their financial interconnections. At first, eight banks were classified as systemically important, however, after the 2016 crisis the number of SIBs was reduced to three. Historically, SIBs concentrated 49–65% of assets and retail deposits in the banking system. The development of the banking system, increasingly complicated interconnections between market participants, and the need to ensure the system's resilience necessitated a revision of the approaches.

Figure B.5.1. Share of SIBs in Ukraine's banking system

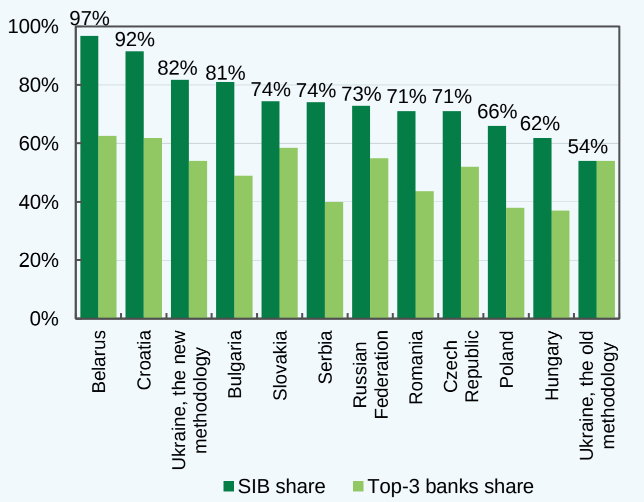


Source: NBU data.

In June 2019, the NBU approved a revised methodology for identifying SIBs, which was based on international experience, in particular EBA guidelines. The methodology envisages identifying systemically important banks in two stages. At the first stage, banks are assigned scores based on the above three groups of indicators. However, the number of indicators in each group has increased significantly. In particular, more indicators of a bank's interconnections with other financial institutions have been added. The share of a bank in the system, as determined through each indicator, is multiplied by a respective ratio. The shares are then added up. A bank is regarded as systemically important when its total weighted share or the total weighted share of the group to which it belongs is at least 275 bps. At the second stage, banks that hold 1% or more of guaranteed household deposits are added to the above list of banks. An important innovation and a specific feature of the Ukrainian methodology is the fact that systemic importance is established for bank groups on a consolidated basis. This means that all banks that belong to one group are given the status of SIBs.

Based on the new methodology, 14 SIBs were identified: 9 at the first stage and 5 at the second stage. The revised methodology noticeably increased the share of SIBs in total sector assets, bringing it close to the figures seen in other European emerging markets. It is worth noting that the status of a SIB does not mean that the state is obligated or will be willing to bail that bank out at any cost. After all, this could give rise to misaligned incentives and moral hazard, which would result in the banks' taking undue risks. With a view to preventing this, the NBU will apply stricter prudential requirements to SIBs thus enhancing their resilience. In particular, SIBs face stricter portfolio diversification requirements and have to draw up recovery and resolution plans. In addition, SIBs must at all times hold a systemic importance buffer. This buffer ranges 1%–2%, depending on a bank's systemic importance indicator; it will be activated from the beginning of 2021. These measures are expected to enhance the resilience to crises of both individual banks and the banking system as a whole.

Figure B.5.2. The share of SIBs in the total assets of the banking systems of European emerging markets in 2018

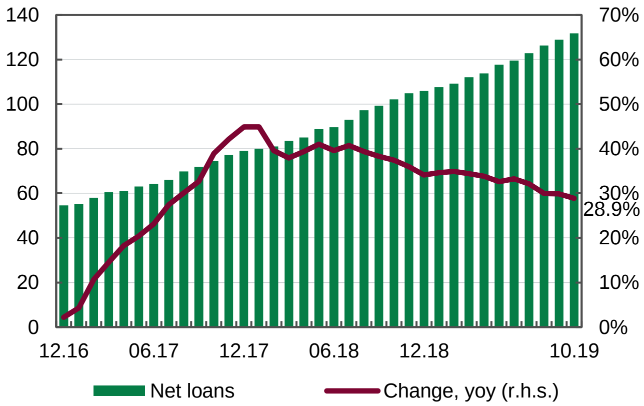


Source: Raiffeisen Bank, NBU estimates.

3.4. Consumer lending risk

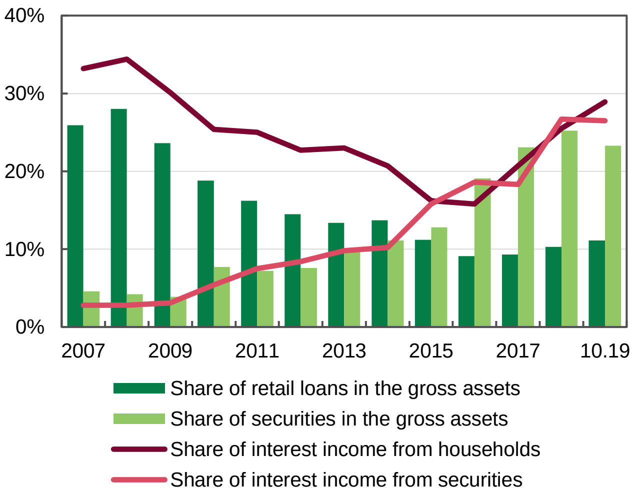
Consumer lending continues to grow at an extraordinary pace of about 30%. The high profitability of this segment attracts banks. Growing household incomes and upbeat consumer confidence fuel demand for these loans. The ratio between new consumer loans and household spending is 9% and counting. The banks tend to underestimate the risks that come with these loans. The NBU therefore plans to raise the risk weights for these assets, thus requiring that the banks finance unsecured consumer loans more out of capital and less with deposits. These changes are intended to prevent the buildup of systemic risks in the banking sector and the economy and to promote financial stability.

Figure 3.4.1. Net hryvnia retail loans*



* In banks solvent as of 1 November 2019.
Source: NBU.

Figure 3.4.2. Contribution of consumer loans into banks' interest income compared to securities



Source: NBU.

Retail lending continues to surge, though less rapidly

New loan disbursements remain consistently high in monetary terms, but portfolio growth has declined to 29% against a high comparison base. The retail portfolio has already taken up 11% of bank assets. The banks now rely on retail lending for 29% of their interest income. The unheard-of profitability of this segment prompts the banks to make massive investments in its development. A dozen banks have reported annual increases in the net retail loan portfolio of more than 30%. Some of them more than doubled their portfolios over the year.

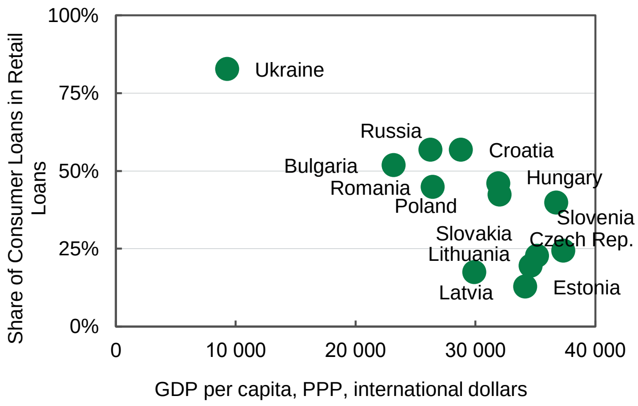
The continued rapid growth in incomes and the decline in retail lending standards are driving the segment's growth. Lending is playing an increasingly important role in supporting private consumption. Currently, the ratio of new loans to total household spending is 8.6%, double the level of 2015. The findings of the latest lending survey show that household demand for loans is not waning. Accordingly, the financial institutions expect that the rapid growth in this segment will continue – in spite of loan portfolio quality, which the banks say has recently begun to deteriorate.

Since November 2018, borrowers have defaulted on about 5% of the portfolio of the banks that are most active in the segment. Several banks have reported significantly higher default rates. Nevertheless, the banks are still not conservative enough in their assessments of credit risk. Their projections of losses from a potential deterioration in the loan portfolio are overly optimistic. A survey of the financial institutions suggests that a large fraction of borrowers spend approximately 20% of their income on servicing their bank debt (for more, see Box 3. Results of a Survey of Consumer Lending by Banks: Borrowers with Low Income Are Mostly Indebted, Financial Stability Report for June 2019, p. 29). The majority of these borrowers is made up of low-income households. This debt burden poses risks to their solvency, especially considering that incomes are set to grow at a lower pace.

Loan penetration is below its equilibrium level but is approaching it fast

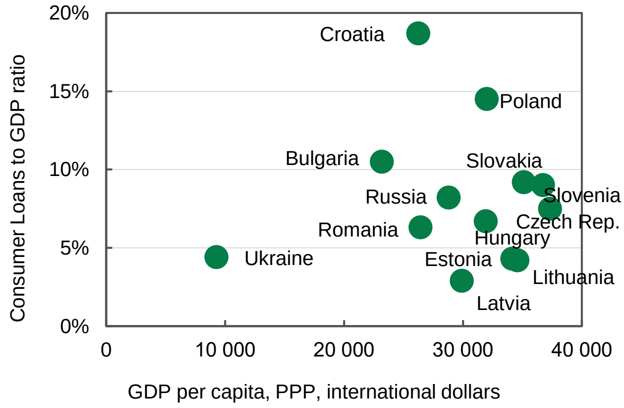
The rapid growth in unsecured consumer lending is typical of emerging markets. As the economy advances, the share of unsecured consumer lending shrinks, giving way to mortgage lending. As a rule, household loan portfolios in advanced economies have only small fractions of unsecured loans. The share of these loans is marginal relative to GDP and household incomes: in the EU member states, unsecured

Figure 3.4.3. Ratio of per capita GDP to consumer loans in the retail portfolio



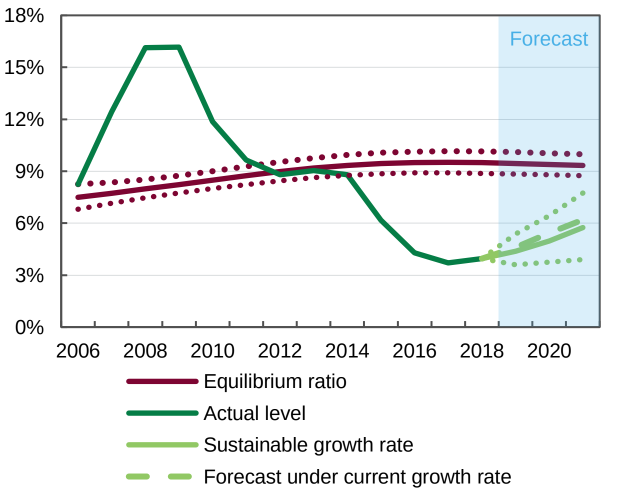
Source: IMF, ECB, central banks' websites, NBU.

Figure 3.4.4. Ratio of per capita GDP and consumer loans to GDP



Source: IMF, ECB, central banks' websites, NBU.

Figure 3.4.5. Equilibrium ratio and sustainable growth rate of consumer loans-to-GDP



Source: NBU.

consumer loans rarely exceed 10% of GDP. An NBU study of the equilibrium level of consumer loan penetration in Ukraine has confirmed that it is close to 9% of GDP.

The estimation of the equilibrium ratio of consumer loans to GDP in Ukraine was performed in two stages. Stage one involved the estimation of a long-term relationship between loan penetration and macroeconomic indicators for a group of countries for the period between 1995 and 2017. The group included both developed countries and emerging markets. Inflation, interest rates, and the contribution of private consumption to GDP were the explanatory variables. At stage two, the estimates obtained in stage one were used to calculate the equilibrium level of lending in Ukraine. Consumer lending remains below its equilibrium ratio, the study showed. At the same time, actual figures are rapidly approaching the equilibrium ratio and may eventually exceed it.

Consumer lending risk rises

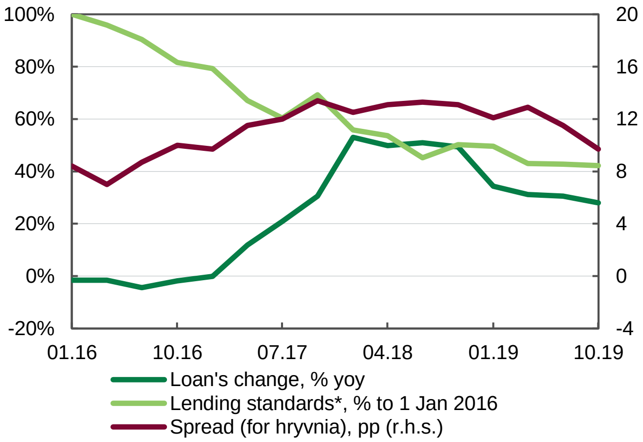
Upbeat consumer sentiment and credit availability are fueling the purchases of durable goods, the bulk of which are imported. As a result, lending may put pressure on the current account balance, as it did in 2007–2008 and 2012–2013.

At the same time, the segment's high profitability, along with market competition, will continue to prompt the banks to lower their lending standards. The financial institutions optimistically estimate the expected level of defaults at 2%–3%, sometimes failing to take into account that the quality of unsecured loans is heavily dependent on the macroeconomic environment and might quickly deteriorate.

As the banks are not conservative enough in estimating their expected losses, they need to hold more capital to cover the unexpected ones. Raising credit risk weights is a way to achieve that. The current risk weights of 100% and the minimum capital adequacy ratios of 10% mean that for every UAH 10 of loans, the banks should hold UAH 1 of capital. Raising the risk weights to 150%, for example, will increase the need for capital by half, to UAH 1.5. In other words, increasing the risk weights of certain types of loans means that the banks will have to finance more of these loans with capital and less with deposits.

Indicative risk weights for consumer loans were estimated using unexpected credit risk losses. Unexpected losses were estimated with the confidence level of 99.9%, implying that the chance of higher losses was only 0.1%. Two approaches were used to estimate unexpected losses. The first, recommended by the Basel Committee, implies estimating the probability of default (PD) in times of stress through its correlation with the macroeconomic environment factor (the factor method). The factor is assigned a value that corresponds to the desired confidence level, at 99.9%. The second approach relies on the same confidence interval but uses the historical volatility of the credit losses indicators (the historical method). The risk weights are calculated so that

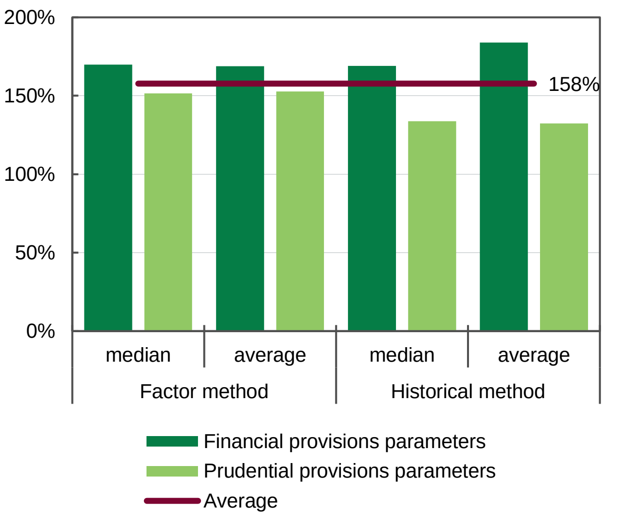
Figure 3.4.6. Lending standards and consumer lending growth



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

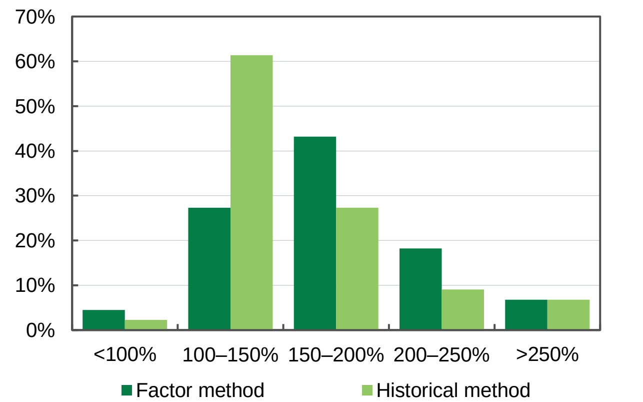
Source: NBU.

Figure 3.4.7. Average estimates of risk weights for unsecured consumer loans based on bank data



Source: banks, NBU estimates.

Figure 3.4.8. Distribution of ratings of risk weights for consumer loans based on bank data



Source: banks, NBU estimates.

capital will cover unexpected losses when minimum capital ratios are met.

The estimates relied on data from the banks that were the most active retail lenders. Specifically, expected loss parameters under IFRS 9 (financial provisions) and Regulation No. 351 (prudential provisions) were used. The results differ from bank to bank but show that the risk weights for the majority of the banks can substantially exceed 100%. The factor method yields heterogeneous estimates because of the stronger dependence of the results on expected loss parameters, which vary across the banks. By contrast, the historical method uses only the average historical volatility of indicators across the system.

To prevent the buildup of systemic risks, the NBU will increase the risk weights for consumer loans

The changes will apply to unsecured consumer loans and will come into effect at the beginning of 2021. The NBU will announce the risk weights for these loans early next year. These changes are intended to curb the excessive growth of the segment in the future and to prevent the buildup of systemic risks. The NBU expects the proposed changes will yield the following results:

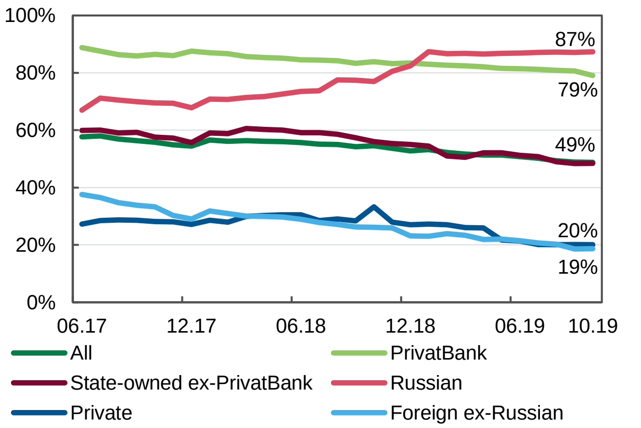
- The segment will remain attractive for the banks; however, they will hold more capital to cover unexpected losses from the deteriorating quality of unsecured consumer loans.
- The banks will take a more prudent approach to allocating capital between lines of business, depending on their risks and profitability.
- Capital-constrained banks will make more prudent credit decisions and assess the creditworthiness of borrowers more thoroughly, which will restrain the further easing of loan approval requirements in the segment.
- The impact on the cost of loans will be moderate or almost imperceptible. Loans will become cheaper due to an overall decline in interest rates and stronger competition between the banks in the segment.

Increasing the risk weights for consumer loans may dampen the banks' competitive edge over the nonbank institutions that do not currently face similar restrictions. However, this measure will promote a more prudent credit policy in the banking sector and reduce macro-level risks.

3.5. Loan Portfolio Quality

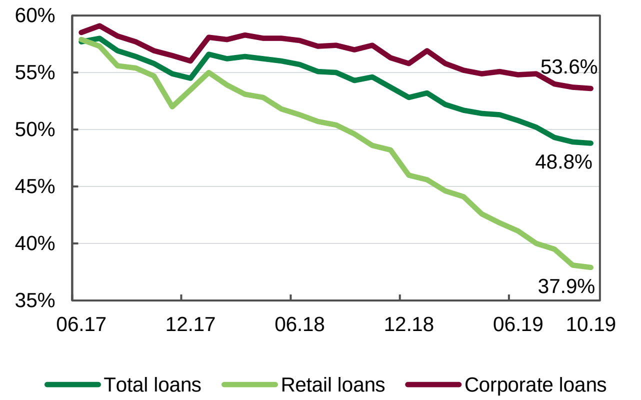
The nonperforming loans (NPLs) ratio is declining further across the sector. The factors behind the decrease in NPLs remain unchanged: a drop in low-quality foreign currency loans due to the strengthening of the hryvnia, new loans that diluted the consumer loan portfolio, and financial restructuring of corporate loans. NPLs on banks' balance sheets do not carry any major risks, as provisioning coverage ratio have reached 93.8%. NPL statistics properly captures the actual portfolio quality. However, banks consider a portion of loans as impaired according to the IFRS 9, but do not classify them as defaulted under the prudential requirements. The NBU plans to make the definition of NPLs even more conservative to comprise both impaired and defaulted loans. That can push up the estimated NPL ratio in the banking sector by around 3 pp.

Figure 3.5.1. NPL ratios by groups of banks



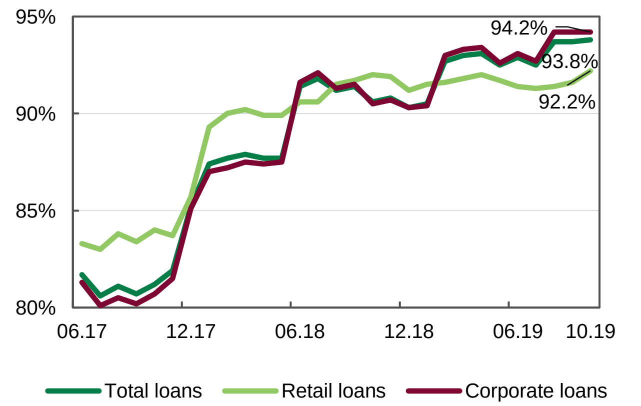
Source: NBU.

Figure 3.5.2. NPL ratios by types of borrowers



Source: NBU.

Figure 3.5.3. Provisioning coverage ratio



Source: NBU.

The NPL ratio is declining

It has decreased by 5.8 pp over one year. This change was driven by: (1) the strengthening of the hryvnia entailing a proportionate decline in foreign-currency NPLs; (2) rapid growth of consumer lending, which diluted the NPL portfolio; (3) financial restructuring of corporate loans, primarily at state-owned banks.

The NPL ratio is decreasing in the retail segment, mainly due to a rapid growth in new lending and resolving old foreign-currency loans (read more in Box 6. Ways to Reduce the NPL Portfolio). Progress has been made in the corporate segment this year: the amount of NPLs is decreasing in both relative and absolute terms. Loan portfolio quality is improving across all bank groups, except banks with Russian capital.

Banks' key objective is to clean up their balance sheets of NPLs

Despite a notable progress, Ukraine has one of the highest NPL ratios in the world. That does not pose any major risks to the sector, as almost all NPLs are duly provisioned. The provision coverage ratio (according to IFRS 9) reached 93.8%, and the coverage with prudential provisions (under Resolution No. 351) exceeded 96%. The NBU expects the prudential provisioning to grow further, as, over time, banks will stop taking into account collaterals under old NPLs when calculating prudential provisions.

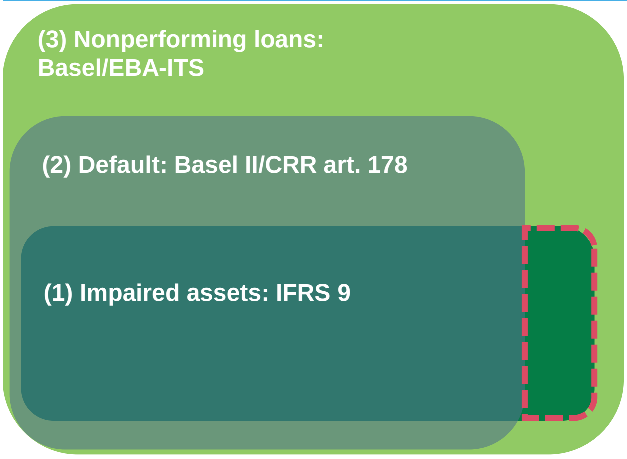
Financial institutions must get rid of NPLs. Thus, in June 2019, the NBU approved the *Regulation on the Management of Nonperforming Exposures at Ukrainian Banks*. The regulation requires banks to develop and approve problem assets management strategies aimed at reducing NPLs on their balance sheets by April 2020. Success will be mainly determined by cleaning up balance sheets of state-owned banks, as they currently account for 73% of NPLs. PrivatBank alone has 43% of such loans – almost all of them are loans to businesses of the bank's ex-owners.

NPL statistics capture the actual state of the sector

NPL statistics are one of the key indicators for the banking sector. For the NBU, it is important that these statistics are of high quality and fully reflect the actual quality of banks' balance sheets. Therefore, in 2017, the NBU changed the definition of a nonperforming loan. From that time, nonperforming or defaulted loans have the following attributes:

- a loan is past due for more than 90 calendar days, or

Figure 3.5.4. Interrelation between different categories of problem assets

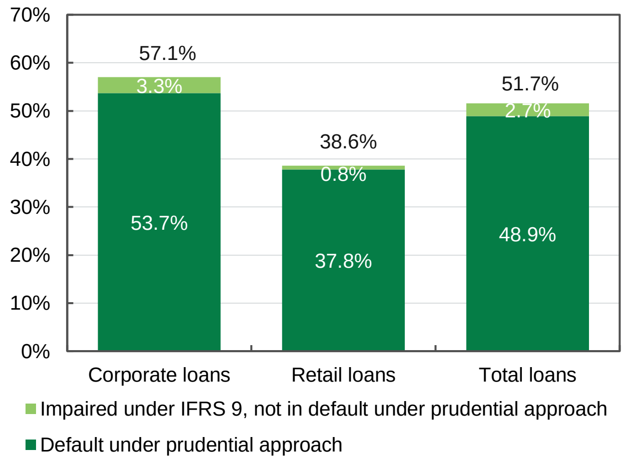


Source: NBU.

ITS (Implementing Technical Standards) is a document by the European Banking Authority (**EBA**), which sets the technical standard for reporting according to the **CRR**.

CRR (Capital Requirement Regulation) is a EU regulation on capital requirements that establishes prudential requirements for credit institutions and investment firms.

Figure 3.5.5. NPL ratios based on bank survey



Source: NBU; findings of the survey held among banks.

- the debtor is unable to meet their obligations without recovering the collateral.

The NBU and banks hold regular asset quality reviews to make sure that this definition remains effective and banks apply it in the most conservative way.

The global practice offers two approaches to loan quality classification:

- The accounting approach: if a bank expects debt servicing to be poor due to a number of reasons, such a loan is classified as impaired (or Stage 3 according to IFRS 9). This approach is not completely unified, mostly contains soft triggers, and largely relies on expert judgements.
- The prudential approach: loans of the lowest category are recognized as defaulted. Apart from past dues, tight default triggers are often set, such as the violation of key financial indicators.

Many jurisdictions have a broader category that includes both impaired and defaulted loans according to the above approaches. This category can also comprise some other loans that formally do not have the two attributes mentioned above, but in fact are unlikely to be repaid. Figure 3.5.4 visualizes how these three approaches overlap. The red segment represents loans that are impaired according to the IFRS, but are not recognized as defaulted. In order to assess the materiality of this segment for Ukraine, in October, the NBU surveyed around 60 banks that accounted for 95% of the sector's loan portfolio.

The survey showed that the current prudential requirements have a good coverage of problem assets. However, there are loans recognized as impaired according to IFRS 9, but not recognized as defaulted under the prudential requirements. These loans make up 2.7% of the total loan portfolio. These are mostly corporate loans, accounting for 3.3% of the corporate portfolio. Most often, these are restructured loans that have been excluded from the defaulted category according to the prudential requirements, but remain impaired according to the IFRS.

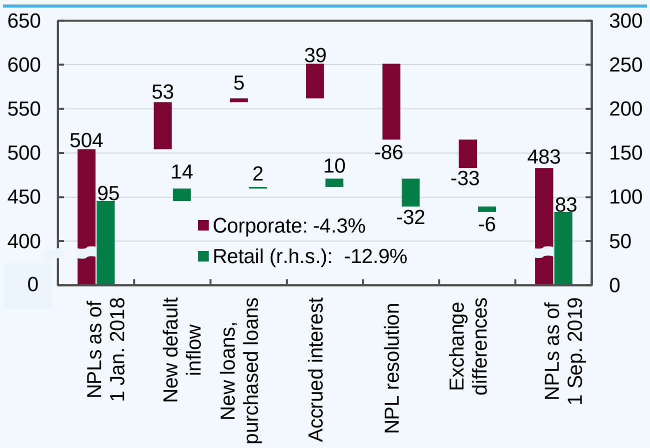
Overall, the NBU has confirmed that the NPL statistics in Ukraine are reliable and properly reflect the actual state of the sector. However, under a broader NPL definition that includes both defaulted and impaired loans, the current NPL ratio would equal 51.7% instead of 48.9% reported in the official statistics. To eliminate this discrepancy, the NBU plans to make the definition of NPLs even more conservative by including both categories.

Box 6. Ways to Reduce the NPL Portfolio

The resilience of the banking sector has increased greatly over the past five years. At the same time, the nonperforming loans (NPL) ratio remains high. Banks should clean up their balance sheets of such loans. The pace of NPL reduction is currently slow. Therefore, in July 2019, the NBU approved the *Regulation on the Management of Nonperforming Exposures at Ukrainian Banks.* Banks must implement the new requirements until autumn 2020. The NBU expects banks to be more active in cleaning their balance sheets: NPLs must be restructured, sold, or written off.

The NBU surveyed banks on main methods of NPL resolution they had been using from early 2018 to August 2019[15]. During this time, the total amount of NPLs decreased by 5.6 pp. Retail NPLs declined by UAH 12.3 billion, to UAH 83 billion, and corporate NPLs dropped by UAH 21.6 billion, to UAH 483 billion. Over the said period, the emergence of new NPLs offset NPL resolution. However, the progress of debt resolution accelerated in 2019, while the growth in new defaults slowed.

Figure B.6.1. Change in NPLs from the start of 2018 to August 2019, UAH billion



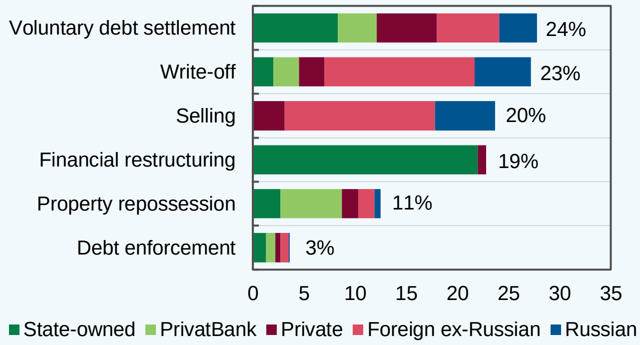
Source: based on banks survey, NBU.

A larger decrease was seen in FX retail NPLs, which was mainly driven by three factors: write-offs against provisions (more than 50% of the impact), voluntary debt settlement, and selling loans on the secondary market.

In the corporate segment, NPLs were mainly resolved through voluntary debt settlement and financial restructuring at state-owned banks (excluding PrivatBank), which account for 30% of the banking sector's NPLs. PrivatBank holds 43% of total NPLs, but almost all of its corporate NPLs are loans to companies of the bank's ex-owners.

Write-offs against provisions were largely used by private and foreign banks, whereas state-owned banks practically did not apply this tool. Loans to the largest Ukrainian business groups make the lion's share of NPLs at state-owned banks. The banks keep them on their balance sheets even if these loans are 100% provisioned. The amounts of debt written off against provisions are marginal at state-owned banks.

Figure B.6.2. Resolution of NPLs by types of measures taken from the start of 2018 to August 2019, UAH billion



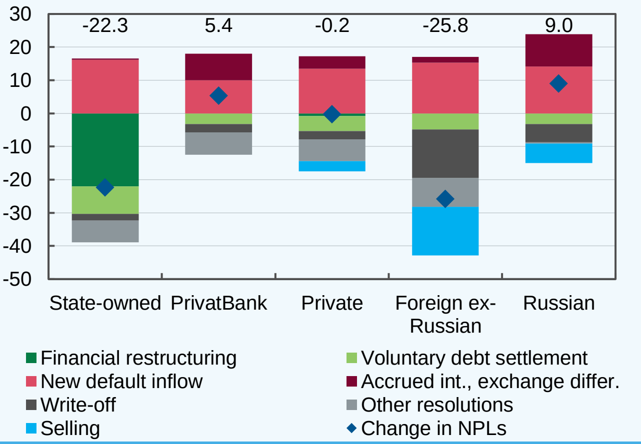
The share of each NPL resolution measure is shown as a percentage on the chart.

Source: based on banks survey, NBU.

Private and foreign banks also regularly sell their NPLs. State-owned banks do not use this method, mainly due to their reluctance to take legal risks that may arise because of selling loans at a discount.

Debt enforcement is not widely used in Ukraine, as it entails large expenses and long litigations: only UAH 3.6 billion was collected through enforcement procedures.

Figure B.6.3. Change in NPLs by bank groups from the start of 2018 to August 2019, UAH billion



Source: based on banks survey, NBU.

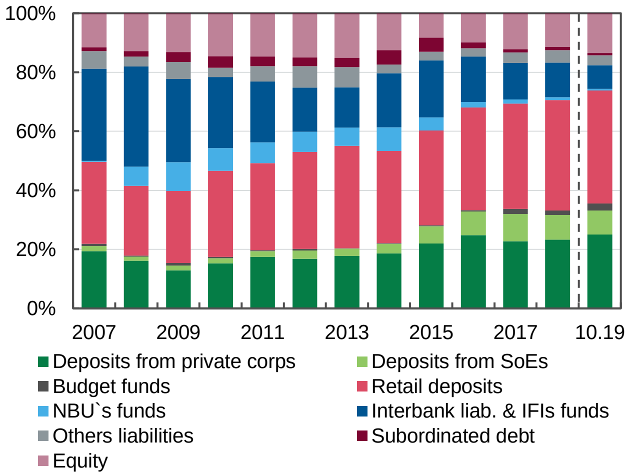
Banks are required to develop a three-year strategy for managing problem assets by 31 March 2020. The strategy must set realistic targets for reducing the share and the amount of banks' NPLs and recovered property on their balance sheets.

[15] According to the survey, around 60 banks operating in Ukraine accounted for 99% of NPLs in the banking system (data as of 1 January 2018, taking into account adjustments to financial statements according to IFRS 9).

3.6. Funding and Liquidity Risk

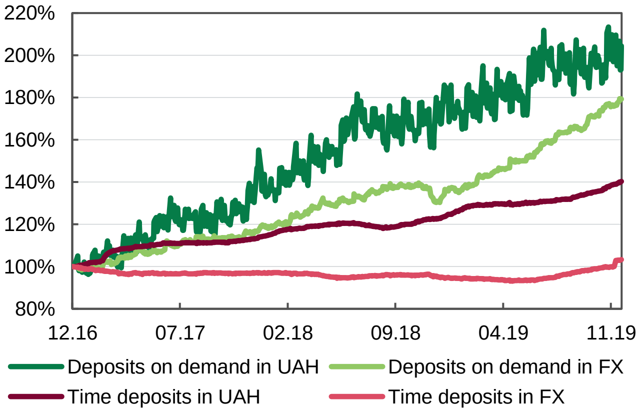
The share of deposits continues to grow in the structure of funding, reaching another record high. At the same time, the term structure of funding has deteriorated over the year as households' current accounts are growing faster than term deposits. However, the available high-quality liquid assets are sufficient to cushion potential shocks. Most banks meet the liquidity coverage ratio (LCR) requirement by a comfortable margin. To support the dedollarization, the NBU hiked the reserve requirements for foreign-currency deposits, while canceling the requirements for hryvnia deposits.

Figure 3.6.1. Composition of bank liabilities



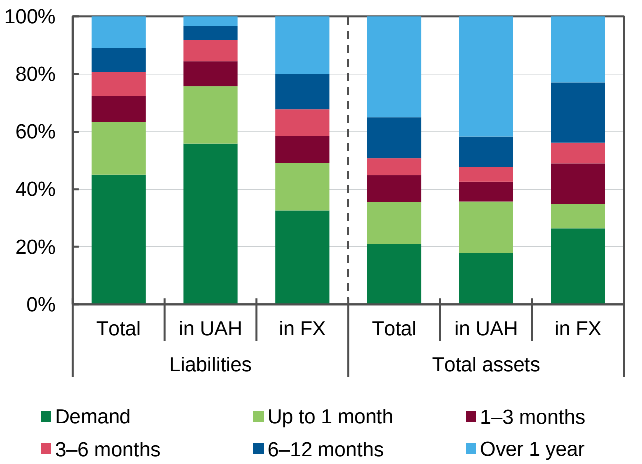
Source: NBU.

Figure 3.6.2. Retail deposits including certificates of deposit, 30.12.16 = 100%



Source: NBU.

Figure 3.6.3. Breakdown of total bank assets and liabilities by residual maturity, as of 1 November 2019



Source: NBU.

Foreign-currency funding comes from domestic sources

The share of funds due to households, businesses, and the budget rose by 5.2 pp over the year to reach 85.3% of banks' liabilities as of the end of October. On the other hand, the proportion of foreign-currency funding raised from nonresidents decreased by 3.7 pp, to 10.4%. Banks' external debt is not significant, amounting to USD 5 billion, of which 70% are funds borrowed by state-owned banks from international financial institutions or through Eurobond placements. The domestic market is the primary source of foreign-currency funding: banks attract 3.5 times more FX funds domestically than from abroad. In 2020, state-owned banks must redeem USD 720 billion of Eurobonds, which will probably lead to another decrease in the sector's external debt.

The term structure of deposits has worsened

Retail demand deposits grew faster than term deposits. Amid the overall decline in interest rates, banks do not offer premiums on longer deposits, hence giving customers no incentive to deposit their money for longer terms. Thus, the share of liabilities with a residual maturity of up to one month increased by 3.6 pp, to 66%. Predominantly short maturity of liabilities is a systemic risk to liquidity (read more in chapter 3.5 Funding and Liquidity Risk of the June 2019 FSR, p. 33).

HQLA are two times the required level

Banks had enough high-quality liquid assets (HQLA) to withstand potential liquidity shocks. The LCR was raised from 90% to 100% starting on 1 December. As of 10 December, only two small banks did not comply with the LCR requirement in foreign currency. All banks met the all-currency LCR. The level of HQLA at banks that accounted for 82% of the sector's assets exceeded the requirement more than twofold.

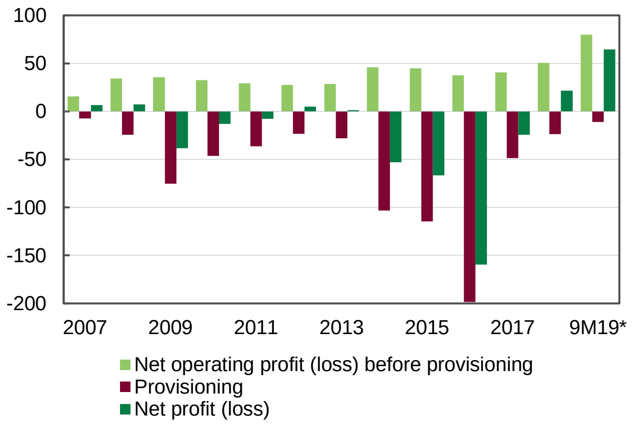
New reserve requirements aim to reduce dollarization

Foreign-currency retail deposits had been almost flat for three years, but started to grow rapidly in 2019, with their growth rates reaching 9.5% yoy at the end of October. That put a halt on dedollarization of banks' balance sheets, which was in progress for several past years. Earlier, the NBU identified the high dollarization of the financial sector as one of systemic risks. Therefore, the regulator has recently decided to change the algorithm of reserve requirements for banks. Starting on 10 March 2020, the required reserves for FX deposits will rise to 10% and no reserves will be required for hryvnia deposits. Previously, reserve requirements differed by the term of deposits: 6.5% for demand deposits and 3.0% for term deposits. In the medium run, the new requirements will make hryvnia liabilities more attractive for banks, prompting a gradual dedollarization of deposits.

3.7. Profitability Risks

The banking sector made a record profit not seen in over a decade, due to strong operational efficiency and low provisioning. The strong operational profitability was mainly driven by a high net interest margin and fee and commission income. The banks should use the period of high profitability to address their capitalization issues, invest in new technologies, and modernize their risk management. A sizeable increase in administrative expenses, such as wage costs, is a challenge.

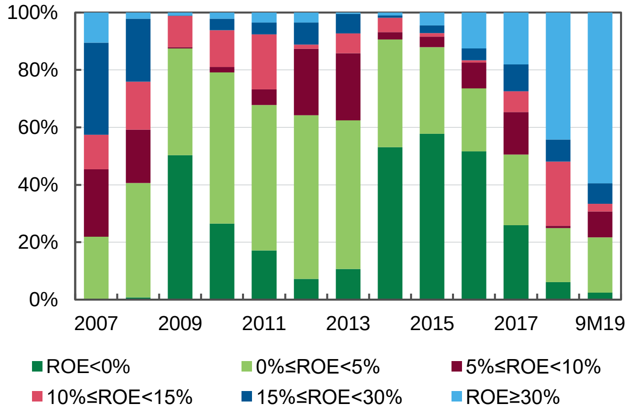
Figure 3.7.1. Profit or loss of the banking sector, UAH billion



* Annualized.

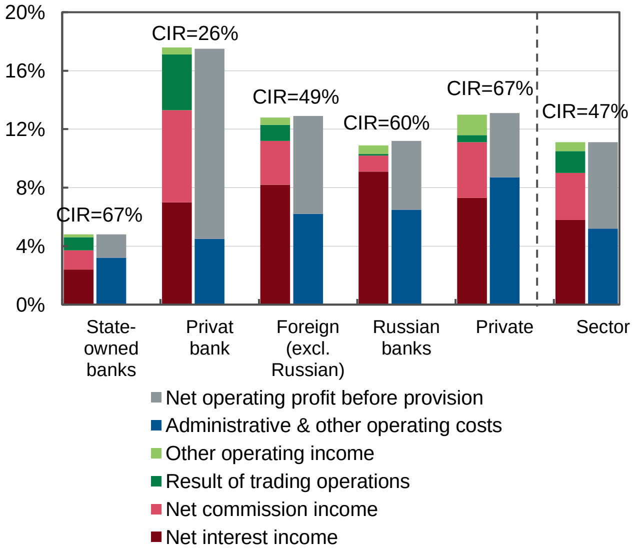
Source: NBU.

Figure 3.7.2. Breakdown of banking sector assets by ROE of banks



Source: NBU.

Figure 3.7.3. Ratio of the net operating profit in the first nine months of 2019* to assets by bank groups



* Annualized data.

Source: NBU.

The sector's profits are high, while profitability risk is moderate

In the first nine months of 2019, the banking sector's net profits increased by 4.4 times yoy, to UAH 48.4 billion. Out of 76 operating banks, 66 banks have been profitable from the start of the year. Ukrsotsbank, which merged with Alfa-Bank in November, generated 85% of the losses. Other loss-making banks accounted for only 1.6% of the sector's net assets, and did not pose any systemic risk. Over the past two years, the banks that are currently solvent (apart from PrivatBank) have recovered over a third of the losses they incurred in 2014-2016 through significant provisioning.

The profits mainly resulted from high operational efficiency and record-low provisioning. 15 banks, which together accounted for 60% of the sector's net assets, had a return on equity (ROE) of over 30%. These were mainly foreign-owned banks and two state-owned banks.

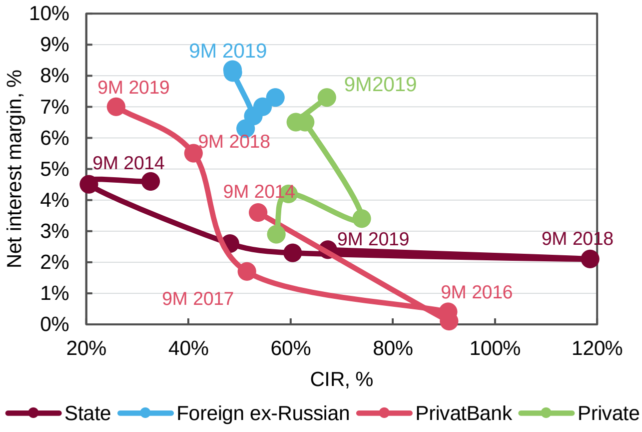
Provisioning decreased by about 60% compared to the first nine months of 2018. Even with the release of a significant amount of provisions made by one bank, through selling a portion of its loan portfolio, current provisioning is at the lowest level since 2007. With macroeconomic conditions remaining in general conducive to maintaining the high quality of the loan portfolio, the NBU does not expect any significant increase in the value of credit risk next year. Therefore, this cost component will not affect the profitability of the banks in any material way.

The operational efficiency of the sector has risen noticeably

The cost-to-income ratio (CIR) was 47.4% compared to 58.0% in the first nine months of 2018. In terms of groups, only foreign banks have reported high and stable operational efficiency in recent years. Compared to last year, an improvement in operational efficiency was reported by all groups of banks apart from private Ukrainian banks. These banks saw their operating expenses rise twice as quickly as the sector overall.

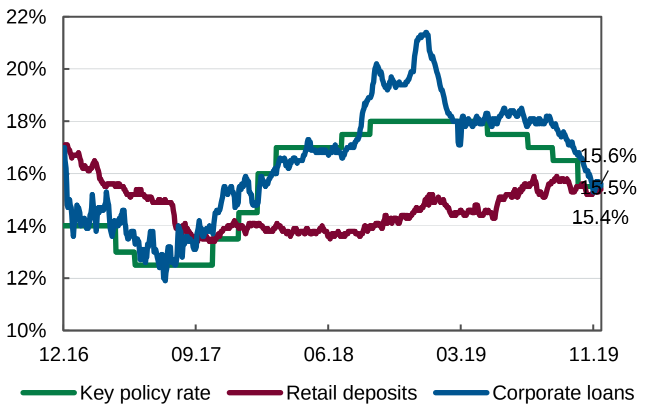
PrivatBank has witnessed the largest profitability growth over the last two years due to two factors: refocusing on highly-profitable consumer lending, and an increase in fee and commission income from the retail segment. An additional profitability driver was a drop in costs of deposits, which came to a halt in May, due to the risk of unfavorable rulings on the legality of the bank's nationalization. The operational efficiency of Oschadbank and Urkeksimbank was low because of the high cost of funding and the low performance of their loan portfolios. Unless they decrease deposit rates and form high-quality loan portfolios, the profitability of these

Figure 3.7.4. Cost-to-income ratio (CIR) and net interest margin by bank groups



Source: NBU.

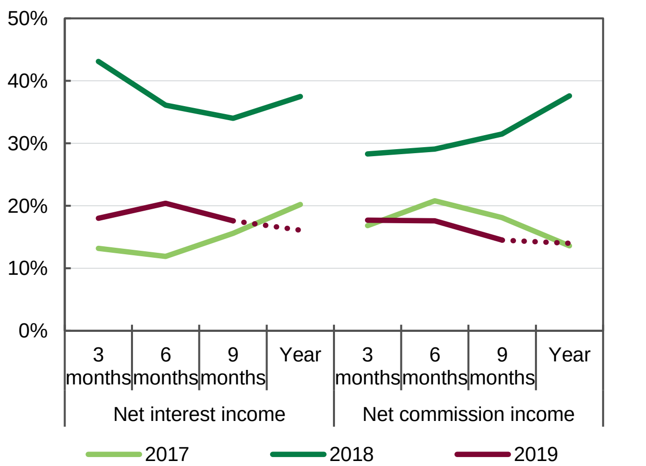
Figure 3.7.5. NBU key policy rate and interest rates on new hryvnia deposits and loans*, % per annum



* Daily rates, 5-day moving average.

Source: NBU.

Figure 3.7.6. Change in net interest and net fee and commission incomes, yoy



Source: NBU.

banks will remain low (see chapter 3.3. Risks Caused by a High Share of State Capital in the Banking Sector).

Net interest income will decrease over time

The sector's net interest margin, at 5.8%, is currently at a record-high not seen since 2009, primarily due to a large spread between interest rates on retail loans, which remained in high demand, and deposits. Meanwhile, the growth in net interest income (17.6% yoy over the first nine months) slumped compared to last year, and will continue to decelerate. The main reason for this is that loan rates are dropping faster than deposit rates. The banks are responding to the cuts in the NBU key policy rate by reducing corporate loan rates, and this trend will continue. Interest rates on retail hryvnia deposits have been dropping at a significantly slower pace.

Lower inflation will drive the rates of commercial banks down. Strong competition for solvent customers, both in the corporate and retail segments, will also help reduce these rates. For a while, the banks will be able to maintain the interest rate spread and margin at a reasonably high level by building up their portfolios of retail loans. Since rates on such loans are not very sensitive to changes in the NBU key policy rate, they are unlikely to move in line with other loan and deposit rates.

Net fee and commission income covers over 70% of administrative expenses

The growth in net fee and commission income (14.5% yoy) plunged compared to the same period last year (+31.5%). The growth in all fee and commission income components slowed, including income from fees and commissions the banks charge for payments and FX transactions, and for granting loans. About 80% of the sector's net fee and commission income was generated by only ten banks, with PrivatBank accounting for half of this income.

In the first nine months of 2019, net fee and commission income covered 71.6% of the sector's administrative expenses, or 52% excluding PrivatBank. That said, net fee and commission income is rising at a slower pace than the main components of administrative expenses: labor costs increased by 17.5% yoy, while operating expenses on fixed assets, which account for over a fourth of administrative expenses, grew by 25.4% yoy. These expenses rose despite a decrease in the number of branches by 6.3% and staff cuts by 0.5%. A rise in expenses on technological solutions and staff costs naturally reflects competition. Now, when profits are high, there is a window of opportunity for making such expenses.

3.8. Changes in the Regulatory Environment

In H2 2019, the parliament of Ukraine approved priority laws for the financial sector. The most important of these laws is the law on consolidating regulation of the financial services market, which reduces the number of financial market regulators from three to two. The law on protecting consumer rights in financial services is also very important. Its implementation will raise consumer confidence in financial institutions. The implementation of the Basel requirements for bank capital and liquidity and the Roadmap for Cancelling FX Restrictions is underway.

New Architecture for Nonbank Financial Sector Regulation

In September 2019, a law was adopted that provided for what has been termed "the split" – dissolving the National Commission for State Regulation of Financial Services Markets and splitting its regulatory functions between the NBU and the National Securities and Stock Market Commission (NSSMC). There will now be only two financial market regulators instead of three, both being vested with additional powers. In particular, the NBU will be responsible for regulating insurance, leasing, and financial companies, credit unions, pawnshops, and credit bureaus, while the NSSMC will be charged with regulating private pension funds and construction financing funds.

The split law will allow the introduction of risk-based supervision and regulation of the nonbank financial sector, prevent regulatory arbitrage, and provide the level playing field. The nonbank financial institutions (NBFI) will meet the requirements for ownership structure transparency, capital requirements, and anti-money-laundering requirements. The new regulatory model for NBFIs focuses on strengthening corporate governance standards and the protection of consumer rights.

The NBU and the NSSMC will assume the functions of regulating the financial services markets over the course of a transition period that will last until 1 July 2020.

New Mechanisms to Protect Rights and Interests of Financial Services Consumers

A law that gives the NBU a mandate to protect rights of financial services consumers took effect in October 2019. Before that, there was a loophole in the legislation: no regulator was responsible for protecting consumer rights in the financial services market. Until 2011, the State Service of Ukraine for Food Safety and Consumer Protection had been performing that function. Now the NBU has the powers to prevent wrongdoing on the financial services markets and take measures against offenders. The law also requires both banks and NBFIs to follow the same rules for disclosing information on the effective prices of financial services.

To implement the law, the NBU approved this December new requirements for banks to disclose information about their services. In three months, banks' websites are to provide exhaustive information about their services in a single unified format. Later, their websites will be required to offer calculators for the cost of and earnings from bank services. Similar requirements will apply to banks' advertisements.

As of today, the NBU has developed and provided banks with recommendations on dealing with consumer complaints. In 2020, the banks will be provided with recommendations on handling customers' personal data and requirements for disclosure on microloans, including in advertisements.

Improved Approaches to Nonperforming Exposures (NPE) Resolution

In July 2019, the NBU approved a regulation on NPE resolution at Ukrainian banks. Banks are required to develop and implement special NPE resolution procedures. The resolution option will depend on the borrower's potential solvency and readiness to cooperate with the bank. Financial institutions must also introduce early warning systems and processes of handling the foreclosed collateral. Banks with NPE ratio over 5% are obliged to create a permanent workout unit. Developing a systemic approach to managing problem assets will further contribute to reducing the NPE ratio.

Moreover, the financial restructuring law was extended for three years in September 2019. The law stipulates that restructuring must be voluntary and take into account the interests of all creditors, as well as the borrower's interests. In particular, it envisages the possibility of joint restructuring procedures for several related debtors that have different creditors.

Improved National Financial Monitoring Legislation

In December 2019, the parliament of Ukraine adopted a law requiring financial institutions to apply a risk-based approach when assessing customers, thus shifting to case-by-case reporting of suspicious transactions by their customers. The law raised the threshold amount to UAH 400,000 and reduced the number of attributes, which, if present, required financial institutions to report on financial transactions involving cash and money transferred abroad. It also obliged payment systems to accompany money transfers with information about the payer and the recipient of a transfer, and to take preventive anti-money laundering measures.

Continued Currency Liberalization

As part of the currency liberalization and further investment climate improvement, the NBU canceled the limits on repatriating foreign investors' dividends and proceeds from selling securities and equities. This loosening of requirements will provide nonresidents with more flexibility in how they manage their own funds, both in foreign currencies and in the hryvnia.

The process of currency liberalization will continue, and gradually all currency restrictions will be lifted in line with improvements in the macroeconomic environment and the adoption of the anti-BEPS law.

Changed Approaches to Measuring Credit Risk on Securities

In compliance with European law, the NBU has implemented a single approach to measuring credit risk on securities. According to this approach, the prudential provisions and credit risk weights for calculating capital will be determined on the basis of the international ratings of securities. That rule will also apply to Ukrainian government bonds denominated in foreign currencies. In line with Basel standards, Ukrainian government bonds denominated in the hryvnia will further be considered risk-free.

Lighter Schedule for Increasing the Minimum Capital Requirement

The NBU shifted to 1 January 2021 the deadline for banks to comply with UAH 300 million requirement for their share and regulatory capital, and initiated legal amendments to set the minimum required amount of share capital for banks at UAH 200 million. The current legislation requires banks to gradually increase their share capital to at least UAH 500 million by 11 July 2024.

Streamlined Bank Lending to Small Businesses

In December 2019, the NBU amended Resolution No. 351 facilitating bank lending to sole proprietors. Banks will be able to use a portfolio approach to assessing sole proprietors. This rule will apply to all loans of up to UAH 5 million. Timely debt repayment will be the key factor in borrower risk assessment. Thus, a loan to a borrower will be considered of a high quality as long as the borrower stays current on repayments. Banks will determine the minimum credit risk for such loans. The facilitated approach to credit risk assessment for sole proprietors will also simplify formal credit administration procedures. In general, this will provide banks with more opportunities to lend to SMEs and facilitate access to credit for entrepreneurs.

Simplified Procedure for Nonbank Institutions to Obtain Money Transfer Licenses

In November 2019, the NBU implemented a new licensing procedure for nonbank institutions for money transfers in the hryvnia without opening an account. In particular, the NBU cancelled the requirement for nonbank institutions to obtain the central bank’s validation of their internal rules for money transfers, and improved the requirements for business plans submitted by them in order to receive a license to make money transfers in the hryvnia without opening accounts. The simplified procedure enhances financial institutions’ access to the market.

Amended Required Reserves Requirement for Banks

In December 2019, the NBU introduced a new approach to required reserves. A zero rate will apply to hryvnia deposits, while 10% requirement will apply to FX deposits. This should promote bank lending and de-dollarization of the economy. New requirements will be effective from March 2020.

Recommendations

Financial stability requires smooth cooperation between all financial market participants – the NBU, banks, nonbank financial institutions, and market regulators – as well as the active support of state authorities. The NBU makes recommendations to public authorities and banks, and communicates its near-term goals and plans.

Recommendations to State Authorities

Approving laws for effective regulation of the financial sector
The 'split' law has been approved, and a number of new versions of sectoral laws should be passed next: laws on financial services, insurance, payment systems, financial leasing, and credit unions. Banking legislation also needs further improvements.

The most important draft laws submitted to the parliament:

bill on certain issues of the banking system's operation, which is to regulate the resolution of insolvent banks (No. 2571). The bill intends to improve banking regulation and supervision and defines the specifics of court proceedings on bank resolution. In particular, it stipulates that a court ruling to cancel the bank resolution does not restitute the previous bank's status; it does not suspend the liquidation procedure. Owners can only claim compensation if they can prove that they have incurred damages. The bill contains provisions to include Oschadbank in the overall deposit guarantee system starting on 1 July 2020

bill on the capital market (No. 2284). The bill stipulates improvements to the capital market infrastructure and introduces new fund management instruments for businesses. In particular, it covers the conclusion and execution of derivative contracts and making deals on derivatives, the functioning of formal commodity markets and building their infrastructure, and protection of bondholders' rights.

Ensuring the full implementation of the new cooperation program with the IMF
In December 2019, Ukraine reached a staff level agreement with the IMF on the new three-year Extended Fund Facility (EFF) program amounting to around USD 5.5 billion. The program will be launched after Ukraine takes all prior actions. After that, the parties should make every effort for Ukraine to meet all of its obligations.

Faster implementation of the strategy to reform state-owned banks
In 2018, the Financial Stability Council and the government of Ukraine endorsed the updated guidelines for the strategic reform of state-owned banks. However, the progress of its implementation was slow. Independent supervisory boards have finally been established at all state-owned banks. Banks must develop their strategies taking account of the strategic framework and revise their business models, while the supervisory boards are to control their implementation.

Less foreign-currency borrowing on the domestic market
The medium-term strategy for managing public debt, approved in June 2019, aimed to reduce the share of FX public debt and shift towards hryvnia borrowing. This goal is also set in the *Memorandum of Cooperation between the Cabinet of Ministers of Ukraine and the NBU to Achieve Sustainable Economic Growth and Price Stability*. The Ministry of Finance is expected to rely less on FX debt raised on the domestic market and eventually stop issuing FX-denominated domestic government bonds.

Enhancing transparency of the primary real estate market and reinforcing protection of investors' rights
The primary real estate market of Ukraine is extremely opaque and offers no effective mechanisms to protect investors' rights. The construction timelines are broken consistently, no information is available about the actual developer owners, and schemes to finance construction are complicated and obscure. That restrains and will continue to restrain the resumption of mortgage lending. Taking into account its social importance, requirements for transparency of the real estate market and the responsibility for failing to meet the contractual conditions should be similar to those in the banking sector. Drastic changes to the regulation

of the sector are needed at the legislative level in order to reinforce protection of investors' rights and prevent fraud among developers.

Recommendations to Banks

The main recommendations to banks made in previous issues of the Financial Stability Report remain relevant:

- to resolve more actively nonperforming loans (NPLs)
- to take a more conservative approach when assessing credit risk from consumer loans
- to decrease the dollarization of their balance sheets
- to raise and maintain more sustainable long-term resources
- to implement capitalization/restructuring programs based on stress tests results
- to maintain the lending standards and control the level of concentration on corporate borrowers.

Finalizing the risk management system

This year, banks implemented the regulation on organizing the risk management system consistently complying with the set timeline. Banks are to finalize implementation of these requirements in February 2020. At the final fourth stage, banks must develop and approve risk appetite statements and other internal risk management documents. Banks are required to inform the NBU about completion of this stage. The NBU will assess the effectiveness, comprehensiveness, and adequacy of risk management systems established by banks.

Implementing the nonperforming asset management system

Over three quarters of next year, banks are to comply with the schedule for implementing the *Regulation on Management of Nonperforming Exposures (NPE)*. By the end of February, banks must establish a standalone NPE workout unit and a board committee on NPE management (for banks with high NPL ratios). They must develop and approve the NPE management strategy and the action plan by the end of March. The strategy must set the targets for reduction in NPE ratios and amounts. The action plan is to specify financial, organizational, and technological actions that the bank plans to take in order to implement the strategy.

Ensuring a balanced dividend policy

Capital requirements are going to increase in 2020: the capital conservation buffer of 0.625% will become mandatory for all banks, and the list of risks to be covered with capital will be extended. Therefore, banks should have a balanced dividend policy that would allow them to comply with the increased capital requirements on time.

Developing recovery plans and submitting them to the NBU

In July 2019, the NBU required banks to develop recovery plans and update them on an annual basis. Recovery plans will help banks to stabilize their operations faster in case of a crisis. Developing recovery plans is mandatory for systemically important banks and recommended for other banks. Banks must submit their plans to the NBU by 1 October 2020 and update them annually. The NBU will assess the completeness, quality, and feasibility of the plans. The assessment results will be taken into account in course of banking supervision.

The NBU's Plans and Goals

The NBU, together with other financial sector regulators, is finalizing the Strategy for Ukrainian Financial System Development until 2025 and plans to present it to the wider public in January 2020. The strategy identifies five strategic areas (financial stability, macroeconomic development, financial inclusion, financial markets development, and innovative development) and introduces a mechanism for the authorities and professional market participants to coordinate their efforts in order to achieve the ultimate goals of financial sector development.

Implementing a new regulation framework for the nonbank financial sector

Pursuant to the 'split' law, the NBU will develop a concept for regulating nonbank financial services markets and a law on financial services markets. Until 1 July 2020, the NBU will be concentrating on updating regulations related to the register of financial institutions and sectoral laws. Wide public discussions will precede the implementation of the new regulations for nonbank financial institutions.

Finalizing requirements for the introduction of a new capital structure

Next year, the NBU will finalize and publish a new regulation on capital structure in line with the CRR and CRD IV, which are based on Basel III recommendations. However, the full implementation of the regulation requires amendments to the Law of Ukraine *On Banks and Banking*.

Introducing the new liquidity requirement NSFR

By the end of 2019, the NBU will approve the calculation methodology for the net stable funding ratio (NSFR), a new long-term liquidity ratio. The regulator plans to implement the ratio in 2020 taking into account the quantitative impact study. The initial value of the NSFR and the transitory period will be determined based on test calculations.

Setting capital requirements to cover the operational risk

By the end of 2019, the NBU will approve the *Regulation on Calculating the Minimum Operational Risk Value at Banks*. The calculation of operational risk will begin in test mode in 2020; in 2022, banks will be required to adjust their capital adequacy ratio for operational risk. Overall, banks will have enough time to accumulate the required amount of capital and meet the regulatory requirements (read more in Box 3. NBU Implements Capital Requirements to Cover Operational Risk).

Adopting a new model of payment market regulation

In July 2019, the NBU published the *Concept for Reforming the Payment Services Laws in Ukraine*. In 2020, the regulator plans to implement the EU Payment Service Directive 2 and replace the current law on payment systems and money transfers with a new payment services law that will bring major changes to the regulation of payment service providers. The new model envisages the cancellation of the requirement to create a payment system or become a member of an existing one in order to provide payment services. The implementation of the new payment services law will be discussed with financial institutions, experts, and other stakeholders.

Abbreviations and terms

AML	Anti-money laundering
BEPS	Base erosion and profit shifting
CAR	Capital adequacy ratio
CEE	Central and Eastern Europe
CIR	Cost-to-income ratio
CPI	Consumer price index
CRD IV	Capital requirements directive
CRR	Capital Requirements Regulation
DGF	Deposit guarantee fund
DSTI	Debt service to income ratio
EBA	European Banking Authority
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECB	European Central Bank
EFF	Extended Financing Facility
EL	Expected losses
EM	Emerging markets
EU	European Union
Fed	US Federal Reserve System
FX	Foreign currency/exchange
GDP	Gross Domestic Product
HQLA	High-quality liquid assets
IFI	International Financial Institutions
IFRS	International Financial Reporting Standards
ILO	International Labor Organization
IMF	International Monetary Fund
LCR	Liquidity coverage ratio
LGD	Loss given default
LTV	Loan-to-value ratio
Naftogaz	National Joint Stock Company Naftogaz of Ukraine
NBFI	Non-bank financial institution
NBU	National Bank of Ukraine
NCFS	National Commission for regulation of financial services
NGCT	Non-government-controlled areas
NFC	Non-financial corporations
NFSR	Net stable funding ratio
NIM	Net interest margin
NPE/NPL	Non-performing exposure / loan
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
OR	Operational risk
Parliament	Verkhovna Rada of Ukraine (Supreme Council)
PD	Probability of default
PPP	Purchasing power parity
PrivatBank	Public Joint-Stock Company Commercial Bank “PrivatBank”
Regulation No 351	Regulation of the NBU of 30 June 2016 No 351 approving Regulation on credit risk calculation by Ukrainian banks
ROA	Return on assets
ROE	Return on equity
RWA	Risk-weighted assets
SIB	Systemically important bank
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
TTM	Trailing Twelve Months
VAT	Value added tax
US	United States of America

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