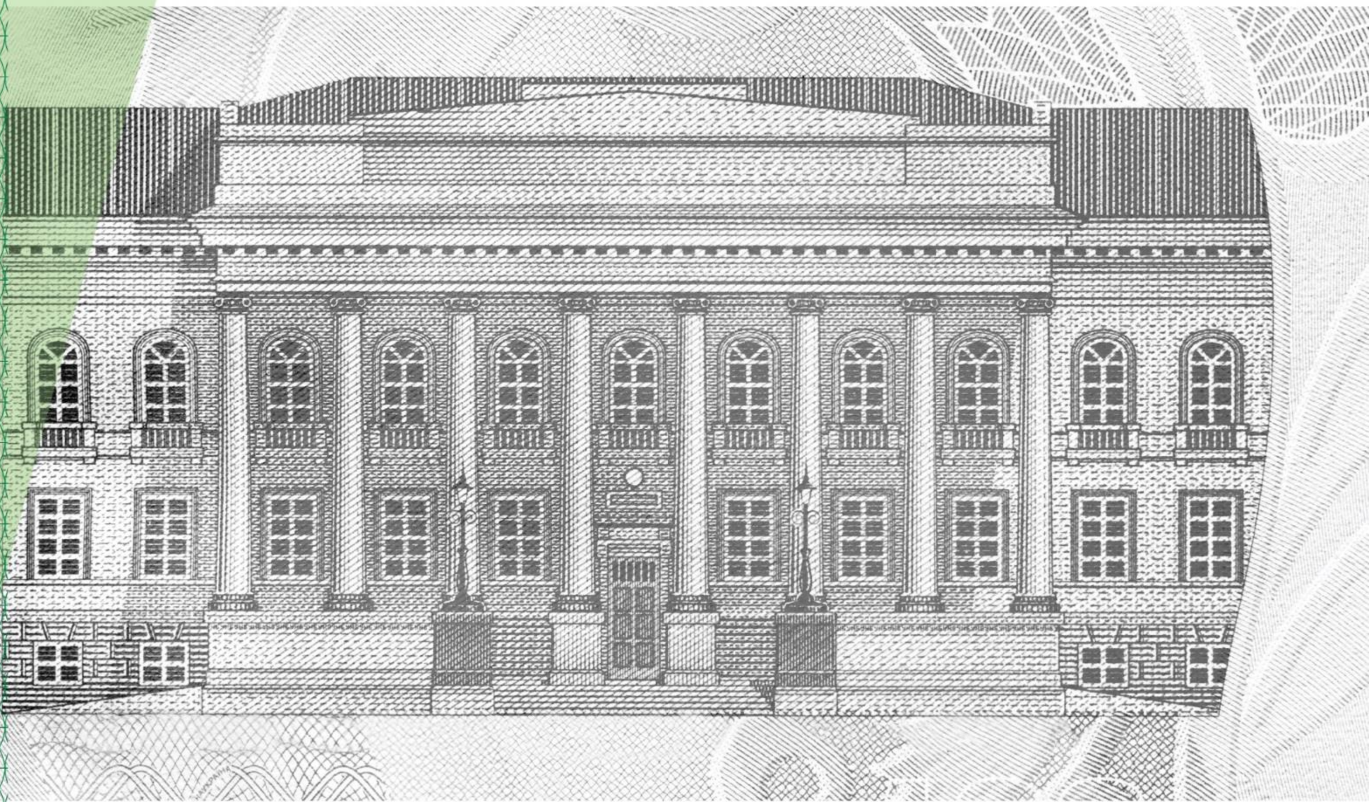
National Bank of Ukraine

Financial Stability Report

June 2018



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Introduction

This report is the fifth Financial Stability Report (hereinafter the report) issued by the National Bank of Ukraine. It covers the risks that threaten the stability of Ukraine's financial system.

The report primarily concentrates on banking risks. The risk map on page 6 shows the expected change over the next six months for major risks: credit, capital adequacy, liquidity, profitability, currency, and legal. On top of that, the report makes recommendations to the authorities and banks on actions to enhance the resilience of the financial system and mitigate current and emerging risks. Most of the recommendations from previous reports remain relevant.

In addition to the comprehensive risk analysis of key sectors of the economy, the report contains annexes that comprise the findings of relevant financial stability studies. This report includes research on lending to banks' related parties and on mortgage lending.

Financial stability is closely related to the priority task of the National Bank – maintaining price stability. Promotion of financial stability and banking system stability is one of the key functions of the regulator under the Law *On the National Bank of Ukraine*.

Financial stability depends on actions of all branches of power as well as market participants. Promotion of financial stability requires coordinated efforts from all stakeholders.

The report is primarily aimed at financial market participants, authorities and those interested in financial stability of Ukrainian financial system. The report contains analysis and findings that should help economic agents and media to better understand urgent risks, their potential impact on financial stability, as well as guiding principles and intentions of the regulator.

The report was approved for publication by the Financial Stability Committee of the NBU on 11 June 2018.

Key findings

In H1 2018, the banking sector did not experience any notable shocks, and macroeconomic conditions were favorable thanks to a higher rate of economic growth, an absence of sharp fluctuations in the foreign exchange market, and a continued slowdown in inflation. By NBU estimates, over the last six months, the credit risk and profitability risk of the banking sector have declined. Liquidity risk remains low.

The key challenge Ukraine faces over the next two years is the need to refinance its external debt. Without cooperating with international financial institutions it will be impossible to raise the necessary funds on favorable terms. The chances that the IMF program will be renewed this summer have substantially increased since the Law *On the High Anti-Corruption Court* was adopted. To accomplish that, however, Ukraine will have to fulfill a number of commitments it has undertaken. If Ukraine receives two more loan tranches before the current program is over, short-term and medium-term risks to macroeconomic and financial stability will be minimized.

Insufficient protection of creditor rights remains the key impediment to financial sector development. Removal of barriers for efficient loan workout and collateral foreclosure would facilitate rapid recovery of retail and corporate lending. This requires in particular adoption of new laws that would minimize chances for a borrower's non-performance. Higher efficiency of financial sector can also be promoted by adoption of the law *On Currency* and the law that enhances corporate governance standards at state-owned banks.

Favorable macroeconomic trends have ensured the stable operation of the banking sector. The banks have sustainable domestic funding: annual growth rate for hryvnia deposits exceeds 15%, with customer deposits surpassing 80% of the sector's total liabilities. However, this also creates certain liquidity risks in the case of an external shock, as the resources raised in the domestic market have short maturities. Banks have to hold a sufficient amount of high-quality liquid assets to meet their commitments in full, even under shock scenarios.

Retail lending continues to grow rapidly. The growth rate of the household loan portfolio has remained at 40% yoy. In its previous Financial Stability Report, dated December 2017, the NBU pointed out that a sharp recovery in consumer lending could lead to an accumulation of hidden risks to banks and the economy. But the volume of household loans is still not material compared to total household income, and an increase in retail loan portfolio is equivalent to only 1.6% of total consumer expenditure in 2017. The ratio of household debt to banks to annual household income stands at about 10%. For the most vulnerable households, however, the debt burden is heavier.

The banks must take an extremely conservative approach to assessing risks of new loans and make adequate provisions. Nowadays, provisioning for such loan portfolios varies dramatically across banks. This could indicate that certain banks are underestimating the potential losses from loan impairment. Special attention should be paid to the transparency of lending conditions. Independent studies reveal that banks have not been providing sufficient information on lending conditions as required under the Law of Ukraine *On Consumer Lending*. To banks, this also poses the risk of loan losses if clients underestimate interest payments and fees when taking out loans.

The growth rate of the corporate loan portfolio is insignificant. The general statistics are greatly influenced by written-off and recovered loans on banks' balance sheets (for gross portfolios) and by making or releasing provisions for legacy loans (for net portfolios). The high ratio of non-performing loans – 56.2% in late April – is forcing banks to apply further extremely conservative criteria while assessing the solvency of corporate borrowers. At the same time, according to the NBU estimates, loans to non-defaulting borrowers have been rising by over 20% yoy.

The sector's financial performance continues to improve. This is driven by high operating profit and a substantial drop in provisioning. The banks' net interest income is growing rapidly thanks to significantly lower funding costs. Net commission income has risen, driven by a revival of demand for banking services. PrivatBank has been the leader in improving operating performance thanks to revised approach to corporate governance, which yielded quick and notable positive results. As most banks have completed provisioning against non-performing loans, there has been a sharp drop in provisioning, despite the transition to provisioning for expected loss under IFRS 9. The NBU estimates that the banking sector's provision charges will hit a ten-year low this year.

Although the banking sector's profitability tends to recover, the operation of a number of banks remains a risk factor. Two state-owned banks are showing extremely weak operating performance. Several private banks are at risk due to their low operating performance and substantial gaps between their accrued and received interest income. This points to an insufficiently prudent approach to recognizing certain income that will likely never be received. These banks find themselves under especially close NBU supervision.

Overall, banks have successfully migrated to IFRS 9. Most financial institutions have already adopted new approaches to evaluating financial instruments and provisioning against expected credit losses. The equity impact of a first-time implementation of IFRS 9 is estimated at about UAH 10 billion, but this decrease has been almost fully offset by the sector's earnings in Q1 2018. That figure has yet to be verified and may increase substantially after all financial institutions have transitioned to the new standard. An accurate estimate of the impact of IFRS 9 implementation will only become possible after audited financial statements for the entire 2018 have been submitted.

The NBU is continuing to streamline its regulatory framework, capital and liquidity requirements, and the banks' risk management systems. The banks are launching test-mode calculations of the liquidity coverage ratio (LCR), which will become an obligatory prudential requirement starting in December 2018. Meeting this requirement should significantly reduce the likelihood of a liquidity crunch in the banking sector if there is a negative economic shock.

The NBU and the banking community have started to discuss a new capital instrument – perpetual subordinated debt – which will become part of tier 1 capital. This is the first step to aligning the banks' regulatory capital structure with Basel standards and the requirements of European acquis. The adoption of the new capital structure is planned for 2019.

Over the next two years, the banks will be required to develop effective risk management systems. This is a requirement under the NBU's new Regulation *On Organizing the Risk Management System in Banks and Banking Groups of Ukraine*. The regulation is a synthesis of key Basel recommendations. First and foremost, it gives the banks' governing bodies a new set of powers when managing risks. The regulation sets out tight requirements for how risks (including credit, market, operational, liquidity, and interest risk in the banking book) are assessed, managed, identified, and responded to by authorized persons and the banks' management bodies. The regulation imposes an obligatory stress-testing requirement to assess risks and resilience to them.

By mid-August, the NBU will have completed the first annual assessment of the banking sector's resilience. Most banks only undergo an asset quality review by independent external auditors. The 25 banks that are most significant for banking sector and that jointly account for 90% of the banking sector by assets, will be stress-tested under base-line and adverse scenarios. In late 2018, the NBU will publish the results of the banks' resilience assessments for the first time.

Banking Sector Risk Map

Credit risk continued to decline as the financial standings of households and businesses improved, a number of large borrowers restructured their bad debts, and the share of unprovisioned past due loans decreased. The financial standing of borrowers is expected to improve further by the end of the year, which will contribute to a recovery in loan quality.

Capital adequacy risk remained unchanged. In Q1 2018, the banks' operating profits almost completely offset the decrease in equity resulting from the transition to IFRS 9. Several banks received additional capital from their shareholders. A few small financial institutions are still exposed to capital adequacy risks.

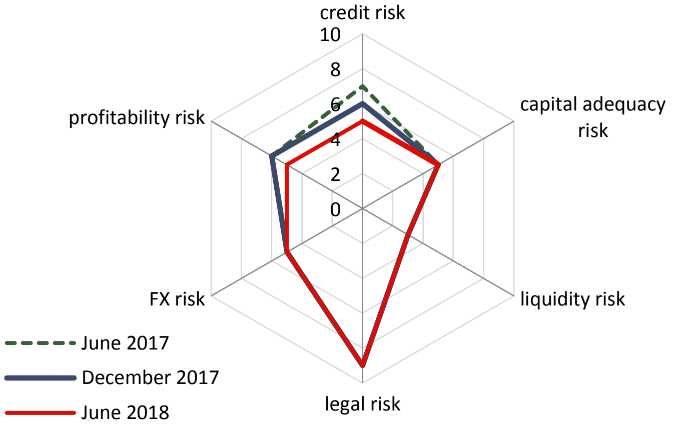
Liquidity risk has not changed, remaining low. Retail and corporate bank deposits continue to grow at a fast pace, which has reduced funding costs significantly. The sector's robust liquidity is expected to be confirmed by the half-year test calculations of the LCR indicator by the end of the year.

Legal risk remains high. The election of the new makeup of the Supreme Court, which was done on the basis of an open competition for the first time, gives cautious hopes that there will be a change in judicial practices towards unbiased and objective consideration of cases, on their merits alone.

Foreign exchange risk remains at the same level. The dollarization of the banks' assets and liabilities is still high, although foreign exchange positions at most financial institutions are not large. Uncertainty over further cooperation with the IMF creates risk for the hryvnia exchange rate and thus for the banks' balance sheets.

Profitability risk has decreased. Reducing the cost of borrowing boosts net interest income, while commission income is growing thanks to stronger demand for banking services. Provisioning continues to decline. These trends are expected to continue.

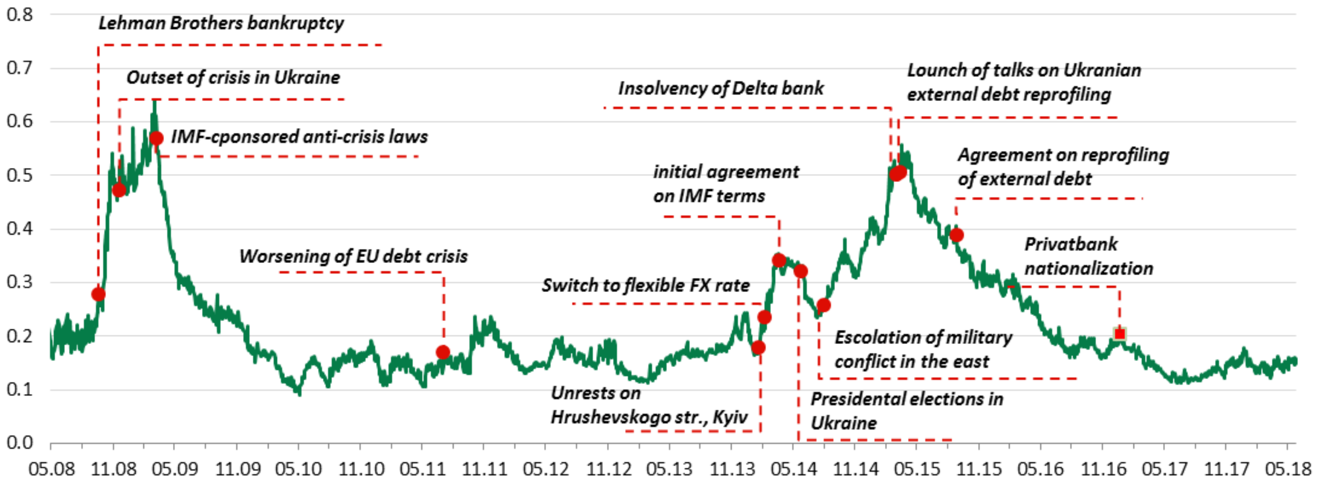
Banking Sector Risk Map*



** The NBU assesses risks on a scale from 0 to 10, where 10 represents the highest risk.*
The assessment reflects the situation expected over the next six months.
Source: NBU estimates

Note:
Credit risk reflects expected changes in the share of non-performing loans in the banks' 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 estimates 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 results of banks.
Profitability risk reflects the ability of banks to generate net profit.

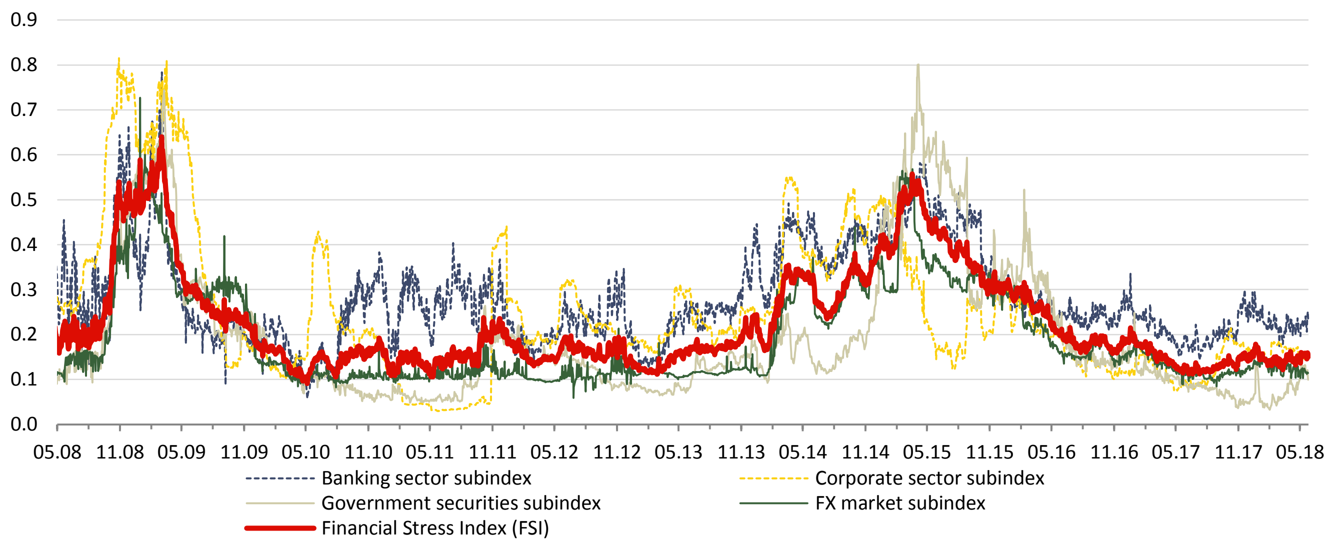
FINANCIAL STRESS INDEX



Source: NBU

The financial stress index (FSI)[1] has increased slightly over the past six months, but still remains at the level of the pre-crisis year of 2013. The only component that changed significantly and that had a moderate negative impact on the FSI in recent months is the government securities subindex. Its reading grew as a result of the higher market yield on Ukrainian sovereign Eurobonds, driven by the uncertainty about cooperation with the IMF and the adverse impact of the Fed's tighter monetary policy on emerging markets.

The low level and weak dynamics of the FSI indicate that there are no significant stress drivers in the financial sector of Ukraine. However, the index only reflects current conditions in the sector, and does not have any predictive power for risks over short-term or long-term horizon.



Source: NBU

[1]The calculation method for Ukraine's Financial Stress Index was outlined in the December 2016 Financial Stability Report.

EXTERNAL CONDITIONS AND RISKS

External conditions and risks

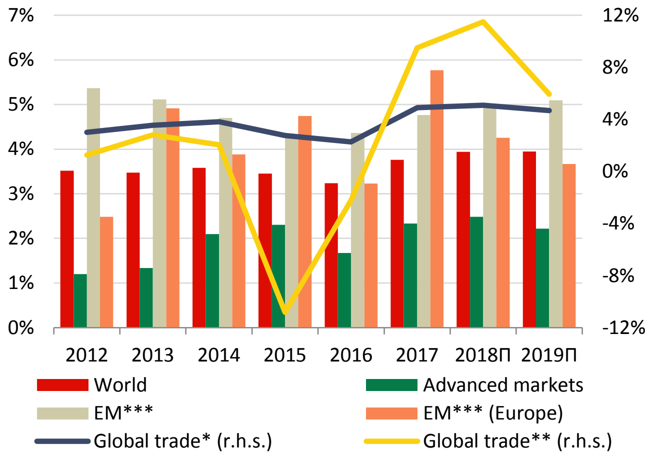
In spite of high geopolitical and geoeconomic risks, the global economy is growing at a fast pace. This is pushing global commodity prices up, while also buoying up demand for Ukrainian exports. Meanwhile, the increasingly tighter US monetary policy is raising the risk of capital outflow from emerging markers. This risk could materialize in the coming quarters, threatening, among other things, Ukraine's financial stability. The military conflict in eastern Ukraine remains unresolved.

The global economy is growing at a fast rate

In April, the IMF estimated that global GDP growth will be 3.9% in 2018, 0.1 pp higher than last year. Economic growth in Ukraine's trading partners is expected to speed up (the Euro area, Russia, India and Egypt) or at least remain robust (China, Poland and Turkey). This is evident from the strong growth seen in Q1.

Global trade recovery surged in 2017 – its volume was up by 4.9% and was two times higher than WTO projections and the figure for 2016. In monetary terms, trade rose by 9.5% after falling for two consecutive years. Emerging markets also benefited from the rapid recovery in trade and buoyant global economic growth, as the rates of foreign capital inflows to these economies increased noticeably. The IMF reported that foreign direct and portfolio investment had surged by 66% yoy in 2017, the first increase in the last five years.

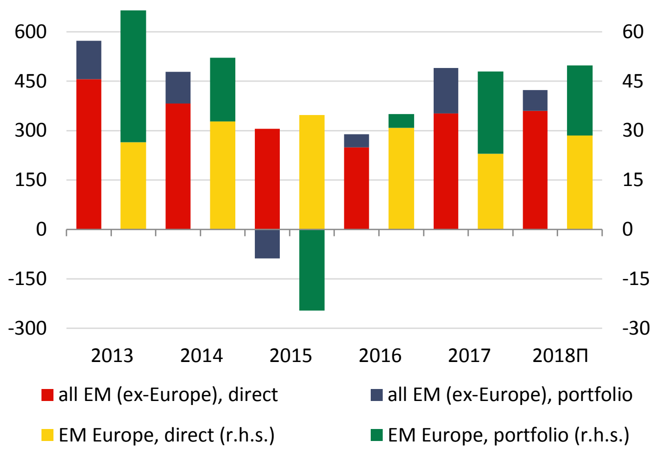
GDP of some country groups and global trade



** In terms of volume; ** in monetary terms; *** emerging markets.*

Source: IMF

Net foreign investment in emerging markets, USD billion



** European emerging markets include Poland, Romania, Turkey, Hungary, Bulgaria, Serbia and six other Balkan countries.*

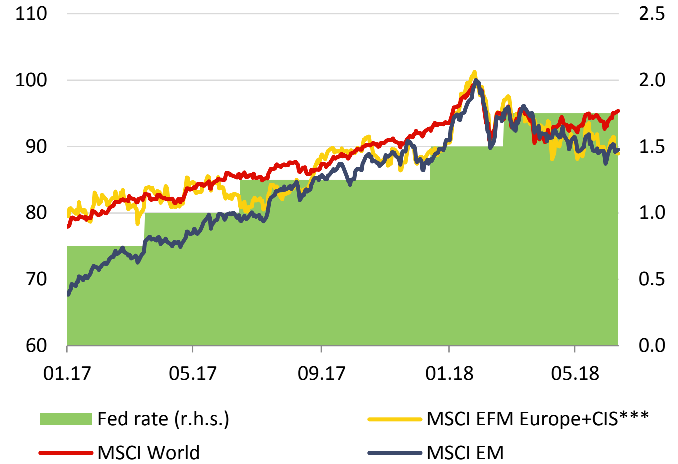
Source: IMF

Downside risks remain high on the financial markets, especially in emerging markets

The Fed continues to tighten its monetary policy, negatively affecting the financial markets, especially those in emerging markets. On the one hand, the Fed is tapering by offloading securities from its balance sheet. As a result, the monetary base shrank by over USD 150 billion between late December and late May. On the other hand, Fed rate hikes are pushing up the yields of US treasuries, with the yield of ten-year treasuries reaching 3% for the first time since early 2014. This yield is comparable with those in Poland (3.2%), Hungary (3.2%), China (3.7%) and Thailand (2.7%), i.e. countries that have very different credit ratings. A higher cost of money could have an adverse effect on risky assets, both in terms of types (low-rated corporate bonds and shares) and countries (assets of emerging markets). The tax reform approved by the United States in late 2017 is expected to reinforce this trend by widening the budget deficit and increasing the supply of US treasuries. Combined, this could lead to capital outflow from risky assets and emerging markets.

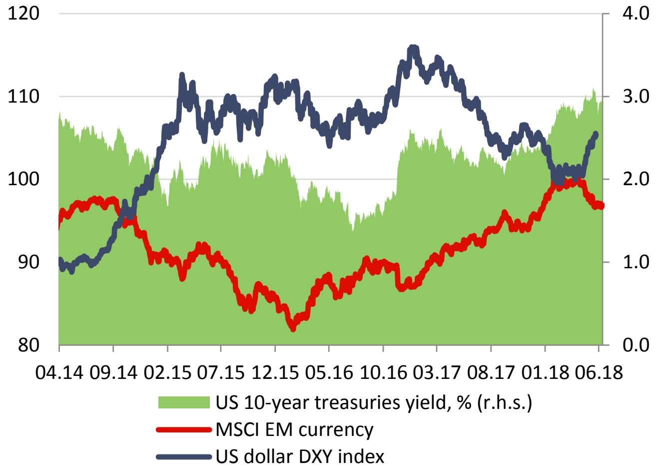
Signs that this scenario is materializing became evident over the last few months. The stock markets failed to rebound after February price corrections, and remain sluggish, in spite of high global economic growth rates. The US dollar is strengthening, while the currencies of emerging markets are weakening. Countries are responding to this in various ways: the Institute of International Finance reported that Ukraine, China, South Africa, Turkey and Argentina are the most vulnerable to the loss of investors' risk appetite, and to capital outflows. The markets have already reflected the weaknesses of the latter two: the price for Eurobonds of these countries fell dramatically since the start of the year. Any further tightening in US monetary policy will increase the risks of a sizeable capital outflow from emerging markets. Risks for Ukraine will also rise due to its need to access the international debt markets by the end of this year regardless of whether or not cooperation with the IMF continues. This will threaten the country's financial stability.

Fed rate* and stock indices, 26 January 2018=100%**



** Higher boundary of rate range; **date of MSCI EM index peak before correction; ***emerging and frontier markets of Europe and the CIS, excluding Russia.*
Source: Thomson Reuters

MSCI EM index*, DXY U.S. dollar index and the yield on US 10-year treasuries, 26 January 2018**=100%**



** An index for the currencies of 25 emerging markets (eastern Europe, Asia, Latin America, and the Mediterranean region) to the US dollar; **an index of the US dollar to the euro, yen, sterling, Canadian dollar, Swedish krona, and Swiss franc.*
Source: Thomson Reuters

Geopolitical risks remain high, also fueled by geoeconomic risks

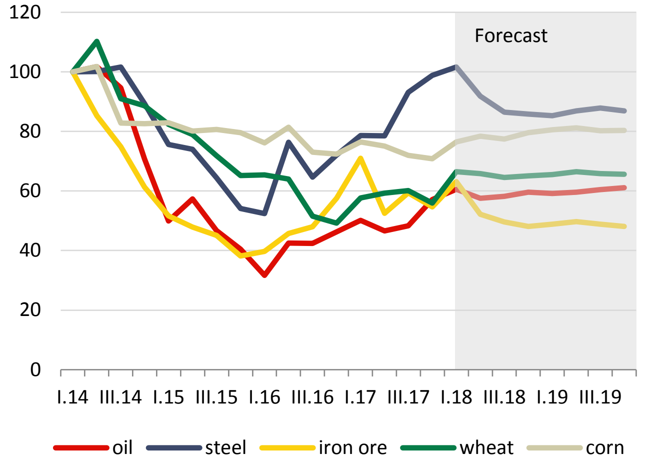
Over the last six months, the total level of geopolitical risk has remained high, driven by an intensification in the Syrian war, new sanctions imposed by the UK on Russia for poisoning a former Russian military intelligence officer, hurdles in Brexit negotiations, and the United States pulling out of the Iran nuclear deal. Meanwhile, geoeconomic risk has also increased, due to certain actions taken by the United States. This includes imposing protectionist import tariffs on steel and aluminum, threating to impose tariffs on a wide range of Chinese imports, imposing sanctions on some Russian and Chinese companies, and threating to impose sanctions against all those who support the construction of the Nord Stream 2 gas pipeline. Although these factors have not yet had any noticeable direct impact on Ukraine, they have already influenced some commodity markets, such as the oil, gas, aluminum and steel markets. If geopolitical, and especially geoeconomic, risks persist, financial asset prices are unlikely to rebound.

For Ukraine, the key geopolitical risks are the unhelpful stance taken by some EU countries. These include Germany's support for the construction of the Nord Stream 2 gas pipeline, suggestions made by some German and Italian politicians that sanctions against Russian businesses be either eased or lifted, as well as Hungary's threats to block any Ukrainian attempts at rapprochement with the EU and NATO because of Ukraine's new education law.

Global commodity market trends are benign for Ukraine

Overall, global commodity prices are expected to remain high in the coming quarters, propelled by rising global demand. However, the higher supply of iron ore compared to demand is pushing iron ore prices down. Although falling input (ore and coal) prices are expected to result in a steel price correction, steel prices will remain rather high by historical standards. New protectionist measures could push Ukraine into lower margin metal markets. Grain prices are expected to go up on the back of the expected decline in US grain output and increased consumption in Asia. In the meantime, Ukraine expects a grain harvest no worse than last year. Oil prices are likely to come up, driven by the OPEC+ policy and stronger global demand. An additional factor is the US decision to withdraw from the Iran nuclear deal, which could block the access of Iranian energy supply to the advanced markets. However, China's willingness to support Iran production and sale of oil could offset the impact of this factor on global supply.

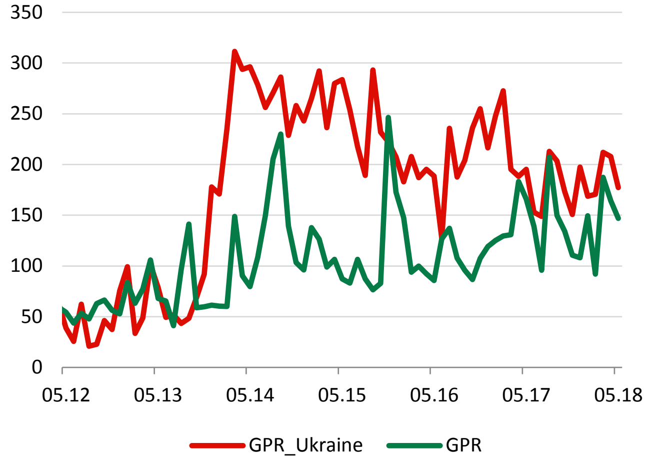
Global commodity prices*, 1 January 2014=100%



** Brent oil; steel square billets; iron ore concentrate, China; wheat and corn – global quarterly average.*

Source: NBU

GPR index[2]



Source: Dario Caldara and Matteo Iacoviello

The Donbas conflict remains unresolved

The full Easter ceasefire in eastern Ukraine lasted only a few days, after which fighting resumed. Decision to send UN peacekeeping forces to the conflict area is still pending. The first meeting of the German chancellor and the Russian president after the elections in both countries yielded no visible results in resolving the conflict. The fact that Russia has been legally declared the country that controls the non-government controlled areas (inter alia by the PACE) has increased the probability that Russia will bear responsibility for the conflict. An additional factor was the Netherlands and Australia officially accusing Russia of shooting down Malaysia Airlines Flight MH17, based on the findings of the international Joint Investigation Team. However, there are currently no mechanisms for forcing Russia to withdraw its troops and compensate Ukraine for its losses.

Naftogaz has won its legal battle with Gazprom

Following two rulings by the Stockholm arbitration court, Gazprom will have to pay Naftogaz USD 2.56 billion in damages. The fact that this risk to financial stability has not materialized will have a beneficial effect on public finances.

An important precedent could be the ruling made in early May by the Hague Arbitration Court awarding damages of USD 159 million to the 18 Ukrainian companies that had filed a lawsuit against Russia claiming compensation for sustained losses and the expropriation of their assets in Crimea[3]. A number of similar lawsuits are pending settlement. Since Russia is likely to refuse to pay the damages awarded, Ukraine will have to continue recovering the losses its companies suffered in Crimea by requesting the seizure of Russia's foreign property.

[2] The geopolitical risk index (GPR) measures the aggregate level of global geopolitical risks, by calculating the instances of words related to geopolitical tension appearing in leading global and regional media publications. Dario Caldara and Matteo Iacoviello constructed the index. Separate indices are calculated for emerging markets like Ukraine. This index is used widely by international experts and by the IMF in particular.

[3] In June 2015, 18 Ukrainian companies and Oleksandr Dubilet filed a lawsuit against Russia for violating Ukrainian-Russian investment protection agreement of 1998.

Domestic Conditions and Risks

Macroeconomic risks

The economy has been recovering after the crisis for three consecutive years, but the pace of GDP growth is slow. Institutional problems in the economy, such as corruption and weak protection of creditors' and investors' rights, significantly limit the potential for further growth. The high rate of labor migration, which puts significant pressure on the labor market, as well as the need to refinance external debt in 2018 – 2020, are among the biggest problems in the medium term. Resuming cooperation with the IMF is thus the government's main task for the near future. The chance of renewing the IMF program substantially increased after the adoption of the law on the Anti-Corruption Court.

Economic growth may remain sluggish for a long time

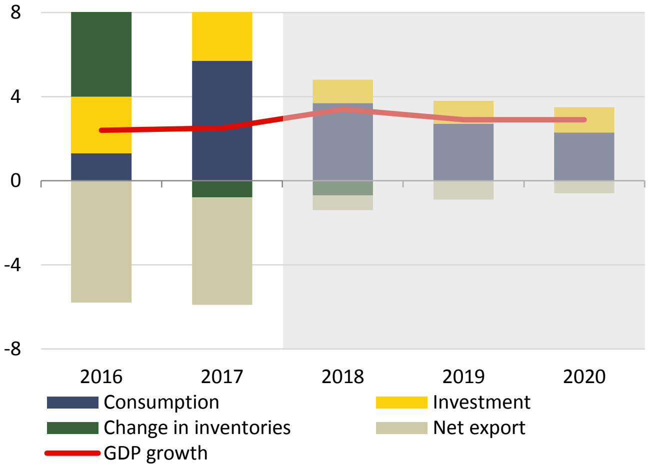
According to preliminary estimates, real GDP grew by 3.1% yoy in Q1 2018, and it is expected to accelerate by the end of the year, in particular due to a low basis of comparison: the results of Q2–Q4 2017 were affected by the suspension of trade with the non-government controlled areas (NGCA). This allows the NBU to forecast that Ukraine's economy will grow by 3.4% in 2018.

Increase in social standards, primarily the minimum wage hike in 2017 – 2018, is an important growth factor. However, further unscheduled reviews of social spending, particularly of the minimum wage, are unlikely, as the budget resources are limited.

Wages are growing rapidly, which is pushing up the share of wages in GDP calculated according to the income approach. After dropping to a historical low of 36.6% in 2016, the share of wages increased to 38.9% in 2017. In 2018, household income will continue to rise as the competition for labor gets fiercer.

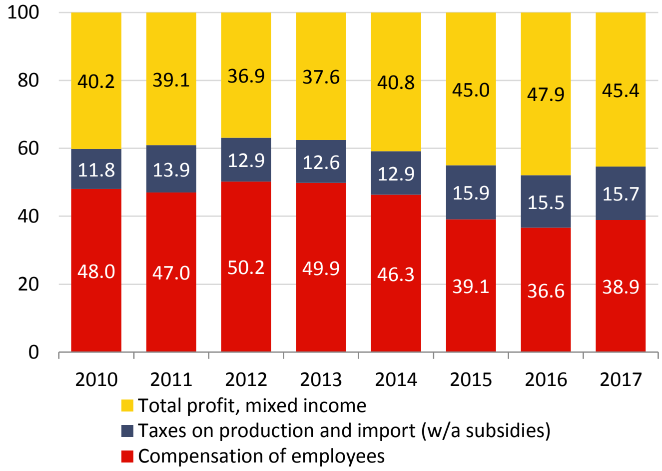
The current and expected GDP growth is quite slow, especially against the major drop in production in previous periods. This year's forecast for Ukraine is below the levels of many Eastern European countries (around 4% on average) and developing countries (4.9%). Economic growth may remain sluggish for a long time. Fast economic growth requires structural reforms that would remove the barriers to inflows of investment and create a more favorable environment on the labor market, in particular, geographic and inter-sectoral mobility of workers.

GDP growth, expenditure approach, pp



Source: SSSU, NBU

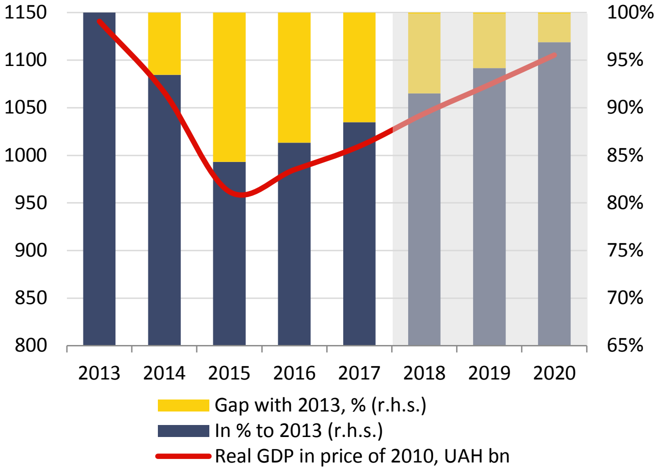
GDP by the income approach, pp



Source: SSSU

International competitiveness ratings and surveys of the real and financial sectors highlight those areas that need to be reformed first. In the most recent Doing Business rating, Ukraine received the lowest scores in the categories that are important for international investors: resolving insolvency (recovery rate, effectiveness of the relevant laws and regulations, etc.), getting electricity, trading across borders (time and cost to export and import). According to a survey of the key financial sector players conducted by the NBU in May, corruption and the weak protection of investors' and creditors' rights pose the highest risks to the sector.

Real GDP growth in 2013–2020*



** Excluding the temporarily occupied Autonomous Republic of Crimea and City of Sevastopol, and, starting in 2015, the zone of the Anti-Terrorist Operation/ United Forces Operation.*

Source: SSSU; NBU estimates

Forecast of real GDP growth in 2018, %

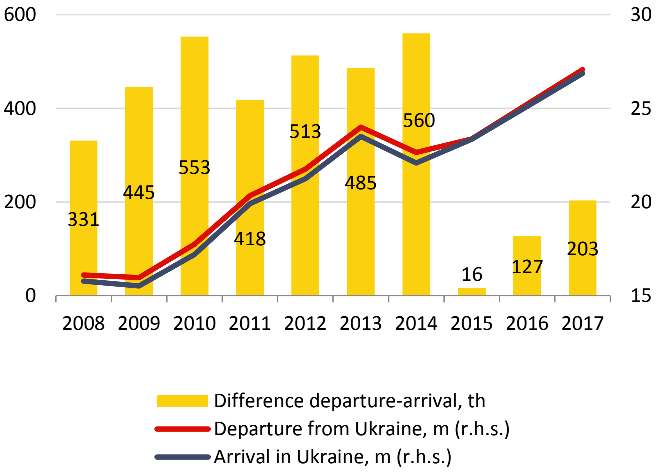
Source: IMF (WEO, April 2018), NBU (forecast for Ukraine)

Labor migration: benefits today but risks in the long run

Private remittances from abroad are an important source of foreign currency for Ukraine. They ensure there is stability on the domestic foreign exchange market and support consumption and savings. Taking into consideration new data about the number of Ukrainian citizens working abroad and the level of their income (a survey by the SSSU, a report by Narodowy Bank Polski, and an estimate by the Central Bank of Russia), the NBU has raised its own estimates of remittances for 2015–2017 by USD 1.8–2.1 billion (to USD 9.3 billion or 8.3% of GDP in 2017). However, mass labor migration poses high risks in the long term. It reduces potential GDP and puts an excessive pressure on government finances, as labor migrants rarely pay taxes or make social contributions.

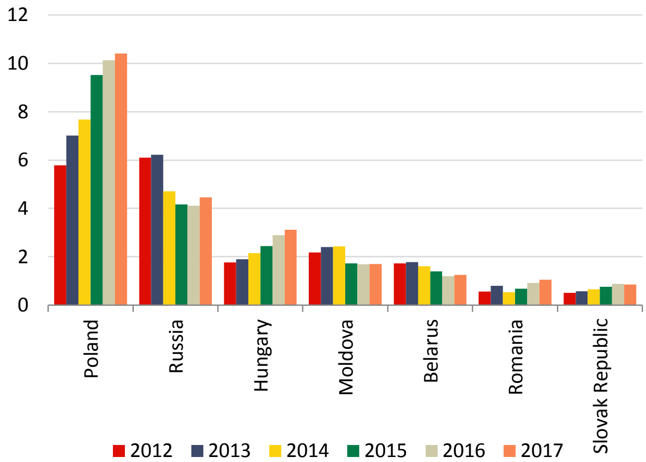
An accurate estimate of labor migrant numbers is practically impossible. Most do not remain labor migrants for long, and return to Ukraine when their employment ends. However, according to the State Border Guard Service of Ukraine, from 2008 to 2017, 3.7 million citizens left Ukraine and did not return. Many of them went to a permanent place of residence abroad and do not plan to go back. The scale of migration indicates the need to conduct a second all-Ukrainian population census, which was planned for 2012 and has been postponed three times, to 2013, 2016, and now to 2020.

Ukrainian citizens crossing the state border in 2008–2017



Source: State Border Guard Service of Ukraine

Ukrainian citizens crossing the borders of neighboring countries, million persons



Source: State Border Guard Service of Ukraine

The resumption of cooperation with the IMF is the key objective of the government

The suspension in cooperation with the IMF has already lasted for more than a year. This also makes it difficult to receive loans from other international organizations, in particular the World

Bank and the EU. The current Extended Fund Facility expires in March 2019, and Ukraine has still not received 6.2 billion SDRs (around USD 9 billion) out of 12.3 billion SDR that can be drawn under the Facility.

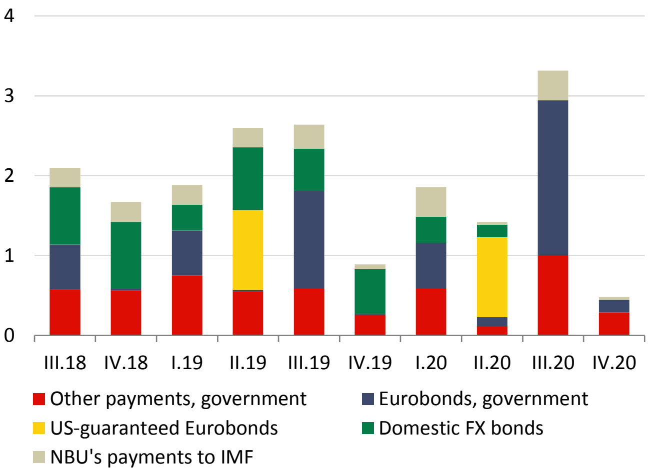
Last year, the government was able to service its external debt without difficulties due to large balances of foreign currency on its accounts. However, receiving further financing from International Financial Organizations (IFOs) will become critical in the coming months. Ukraine (the NBU and the government) is to repay more than USD 2 billion in external debts (principal and coupons/interest on loans) in H2 2018 and around USD 6 billion in 2019.

Principal and interest repayments on the external debt are starting to put pressure on foreign reserves. Over the first five months of 2018, the reserves declined by 3.7%, to USD 18.1 billion. The current level of foreign reserves is still comfortable, but a decrease could fuel depreciation expectations, disturb the foreign exchange market's equilibrium and negatively affect the readiness of external creditors to refinance private sector debt.

Under any scenario of relations with the IMF, Ukraine will still have to access the international debt market. This will happen against the backdrop of higher yields on Eurobonds, driven by the monetary policy tightening in the US. No cooperation with the IMF would markedly increase Ukraine's sovereign risk. As a result, external borrowing may become too expensive – not only for the government, but also for Ukrainian corporations, particularly those in need of external debt refinancing. This would put additional pressure on the balance of payments and government finances in the medium term, and could cause financial instability. The absence of cooperation with IFOs would limit the number of investors interested in Ukraine's government and private external debt, and would hamper long-term borrowing.

A resumption of cooperation with the IMF would minimize refinancing risks over the period of large-scale repayments of external debt in 2018–2020, ensure stability on the foreign exchange market, and financial stability as a whole.

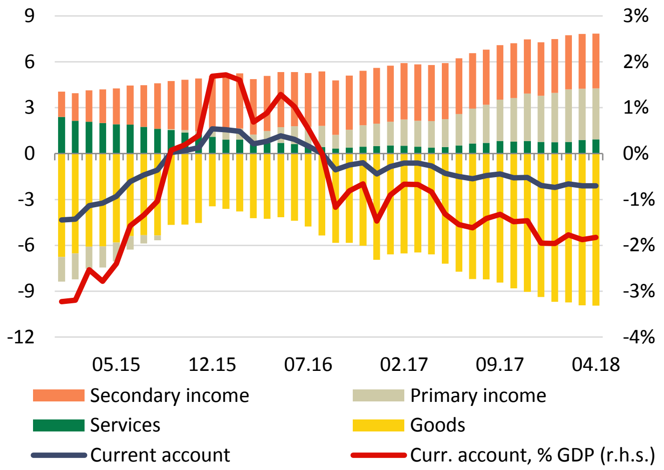
FX repayments on public and publicly guaranteed debt, USD billion*



** Including interest.*

Source: NBU estimates

Current account balance, USD billion*



** Data for the last 12 months (TTM – Trailing Twelve Months).*

Source: NBU

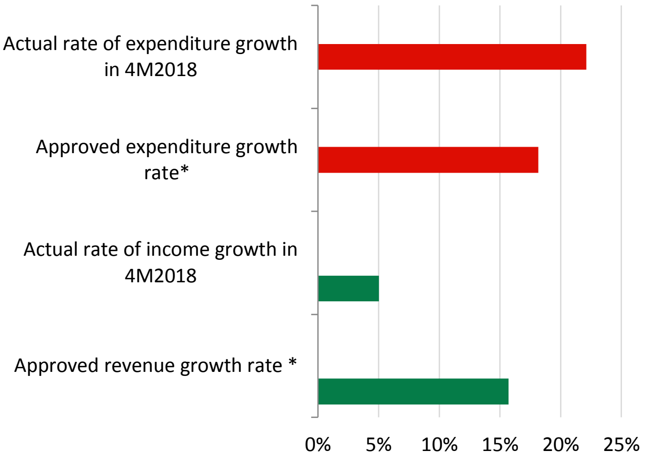
FISCAL SECTOR AND RELATED RISKS

Public finance risks have risen substantially. Overly optimistic forecasts of budget revenues at the budgeting stage led to difficulties during budget execution in the first four months of 2018. The situation has been complicated by failed plans for privatization. Achieving the planned budget deficit target may require adjustments to both budget revenues and expenditures. The introduction of medium-term budget planning needs additional impetus. Among other advantages, this will improve the predictability of the government's liquidity.

Achieving the planned budget deficit requires tight control over expenditures

There are high risks to proper execution of the budget in 2018. At this time, the revenue and expenditure indicators in the Law *On the State Budget of Ukraine for 2018* look too optimistic. The budget's revenues are growing more slowly due to a lack of revenue from taxes on imported goods and services, excise taxes on domestically manufactured goods, and royalties and profits of the NBU, while expenditures may increase at a higher rate than foreseen in the law. These conditions pose substantial risks that the planned budget deficit (2.5% of GDP) will be exceeded this year.

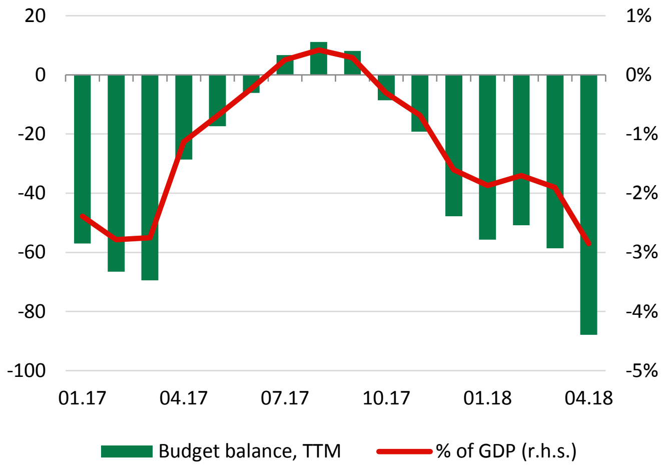
Growth of state budget revenues and expenditures in the first four months of 2018



** Approved by the Law On the State Budget of Ukraine for 2018.*

Source: STSU; NBU estimates

State budget balance for the past 12 months*, UAH billion

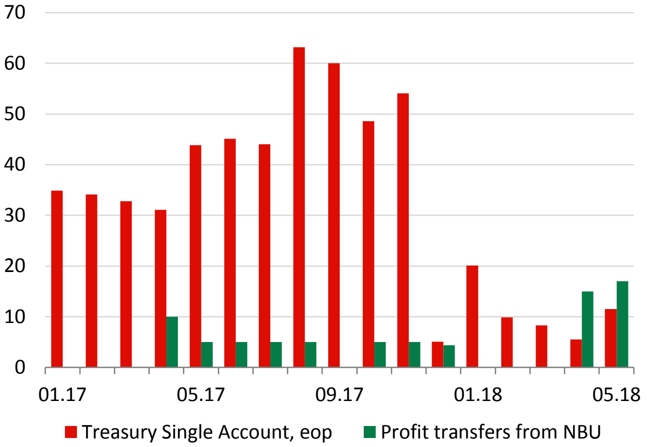


** TTM – Trailing Twelve Months. GDP – Trailing value at the end of the previous quarter.*

Source: STSU; NBU estimates

To achieve budget targets, the government will probably resort to saving on capital expenditure and exerting tight control over transfers. The first steps in that direction have already been taken: on 1 May, changes to housing subsidy rules came into effect to reduce the incidence of abuse of government aid and improve its targeting. At the same time, after the increase in the price of gas for households (which will affect whether Ukraine qualifies for the next IMF loan tranche and whether NJSC Naftogaz of Ukraine remains financially sound), the number of social aid recipients may rise again.

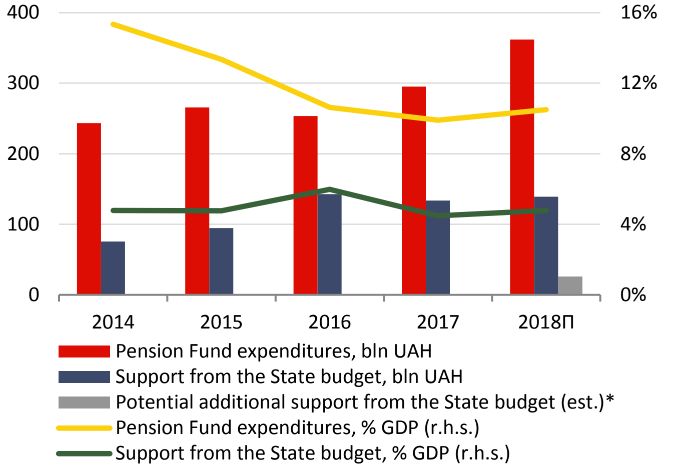
Treasury Account balance and transfers of NBU profit to the state budget, UAH billion



** Approved by the Law On the State Budget of Ukraine for 2018.*

Source: STSU; NBU

Expenditures of the Pension Fund and its budgetary financing, UAH billion



** Estimated potential additional support of the Pension Fund in 2018.*

Source: PFU, SSSU, NBU estimates

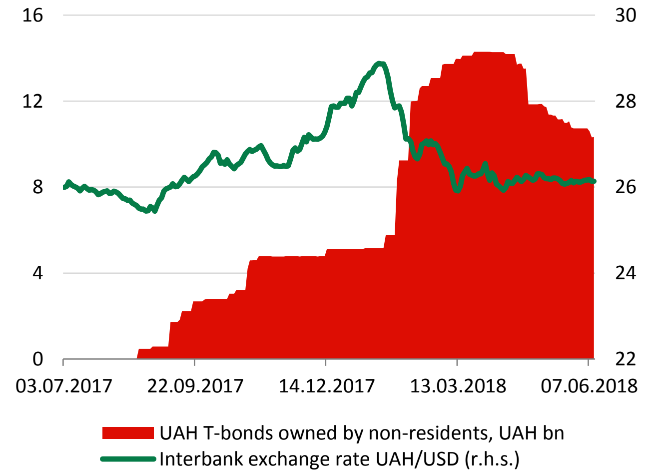
External demand for domestic government bonds is high, but the resumption of cooperation with the IMF is of critical importance

To maintain macrofinancial stability, Ukraine must resume its cooperation with the IMF. Delays in approving the necessary decisions narrow the window of opportunity to raise funds to finance the state budget deficit and make substantial repayments of public debt in 2018–2020.

Exchange rate movements and the high yield on domestic government bonds encouraged non-residents to return to the government securities market in H2 2017 and increase their presence in early 2018. That contributed to a strengthening of the national currency from the end of January 2018. After redeeming short-term government bonds in April-May, non-residents reevaluated the potential yield because of the hryvnia strengthening since the beginning of the year, and reduced their volume of investments. Until now this source only had a small and erratic impact on the total amount of funds raised for the state budget.

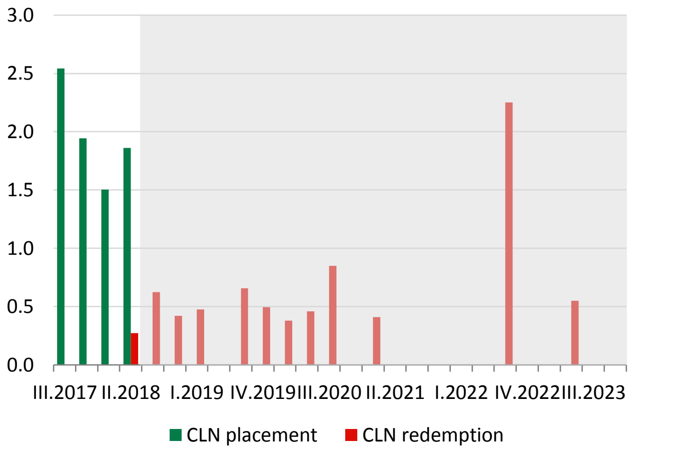
The fluctuations in the volume of government securities in non-resident portfolios has a countercyclical impact on the foreign exchange market – putting funds into bonds prevents the hryvnia from weakening too much, while moving funds abroad through the sale of bonds keeps the domestic currency from strengthening too much. Under certain conditions, however, these flows could become pro-cyclical and increase turbulence in the foreign exchange market. To minimize this risk, it is important to place domestic government bonds with longer maturities and schedule future repayments more evenly.

Hryvnia government bonds in non-resident ownership and the hryvnia exchange rate



Source: NBU

CLN placement and redemption by foreign banks to buy hryvnia government bonds, UAH billion

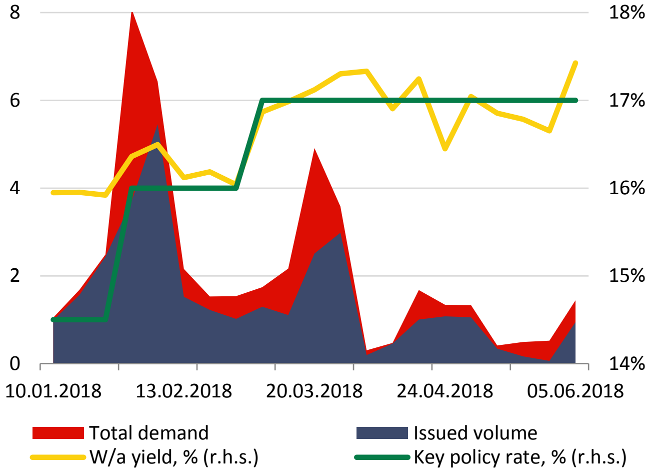


Source: Irish Stock Exchange, Cbonds

Launch of privatization – an important budget execution driver

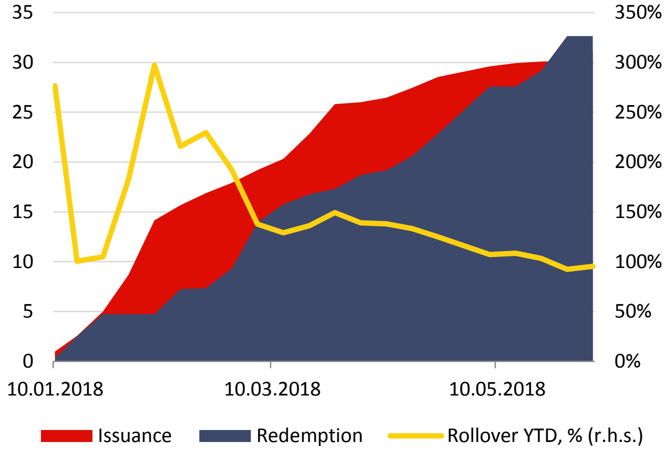
As usual, the implementation of the privatization plan is in question. Planned budget receipts from the privatization of property total UAH 21.3 billion. The plan is once again overly optimistic, given the need to pass a number of bylaws to fulfill it, and taking into account the low pace of preparations for privatization auctions and their repeated postponements. Actual proceeds from privatization will be times less than the planned ones, the NBU estimates. This will force the government to look for other means to fill liquidity gaps – by borrowing more from the domestic market, among other things. A recent Cabinet of Ministers initiative to allow local communities to invest their temporarily free funds in government securities may raise the demand for domestic government bonds. But directing local budget resources to the government securities market is a temporary solution that does not deal with the problem in principle. Allocating local budget funds to domestic government bonds may also cause delays in capital investment and interfere with the implementation of infrastructure projects at the local level.

Total demand for and placement of hryvnia government bonds in 2018, UAH billion



Source: MoF, NBU estimates

Issuance and redemption of hryvnia government bonds in 2018, UAH billion



Source: MoF, NBU estimates

Reform of the sector of public finances needs to accelerate

The progress in implementing a raft of important fiscal sector reforms needs new impetus, especially with regard to medium-term budget planning. Despite a substantial amount of work being done to advance that goal, parliament has postponed the adoption of certain relevant bills indefinitely. The introduction of the three-year planning of expenditures within which chief administrators of funds must conduct their operations will increase the efficiency of government spending, reinforce controls over fiscal risks, and raise the accountability of all parties involved. This will also facilitate long-term forecasting of the government's liquidity and treasury account balance.

It is also necessary to intensify the reform of Ukraine's State Fiscal Service and customs service, put more effort into bringing the economy out of the shadows, and reduce VAT refund fraud, smuggling, and the use of offshore schemes. Progress on these priorities would generate substantial amounts of state budget revenues, even under conservative scenarios.

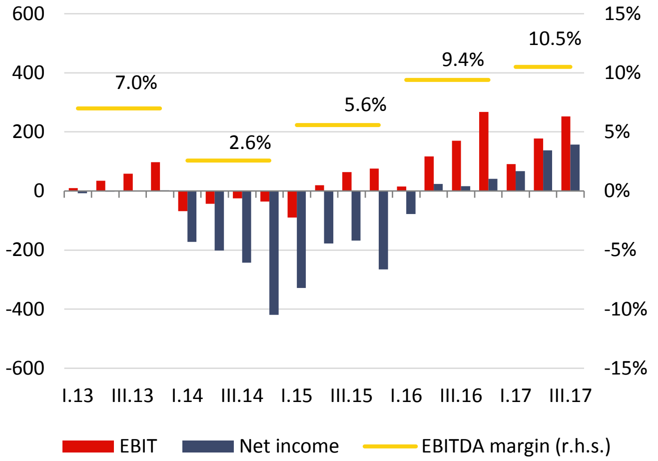
Real Sector and Related Risks

The real sector's profitability has been growing for three years in a row, and is expected to increase again this year, driven mainly by a favorable external environment. There are prospects for profitability growth and lending increase in the mechanical engineering, transportation, agriculture and some segments of the food industry, as well as for energy producers and distributors. However, despite a strengthening in the financial standings of many sectors, payment discipline has not significantly improved. The borrowers with the largest debts did not resume servicing their loans even after the most acute phase of the crisis was over. Today, borrower dishonesty is a far larger barrier to the resumption of corporate lending than the financial standings of companies.

In 2017, the financial standing of real sector companies improved moderately

In the first three quarters of 2017[4], the EBITDA margin of Ukrainian companies came in at 10.5% (up by 0.5 pp yoy) compared to 9.4% in 2016. Almost all sectors saw a decline in their leverage. In 2018, the NBU expects further increase in profitability for all of the main sectors, apart from the chemical industry and construction.

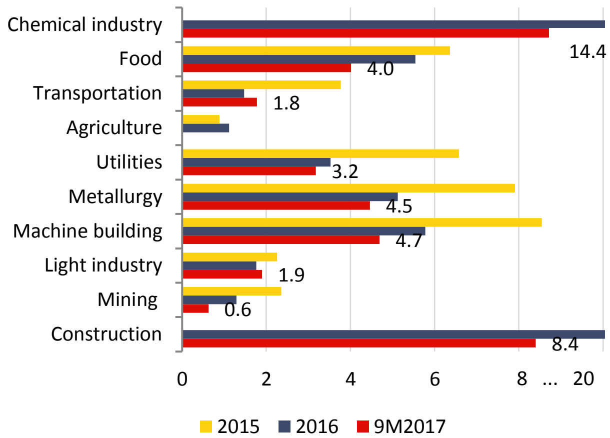
Financial performance of non-financial corporations, UAH billion



** Cumulative basis.*

Source: SSSU, NBU estimates

Debt-to-EBITDA ratio, 12-month trailing, by sector



Negative values are not shown.
Data for 9M2017 on agriculture is missing.

Source: SSSU, NBU estimates

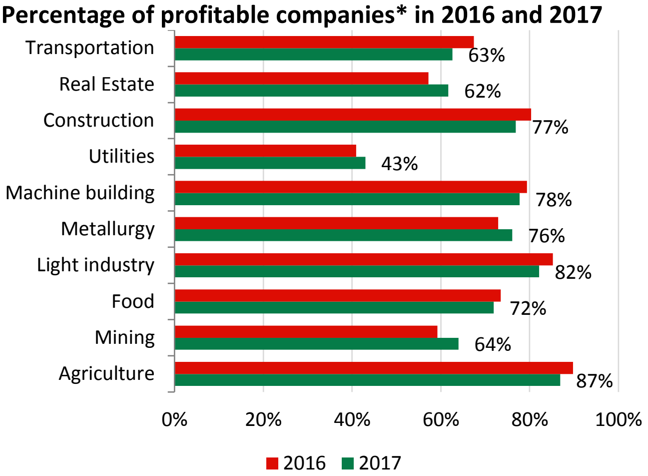
High commodity prices and stronger exports have pushed profits up

The total profit before tax of Ukrainian companies (excluding financial and insurance companies) came in at UAH 138.6 billion in 2017 (up by 53% yoy). In contrast to 2016, however, this profit was unevenly distributed. The profit of mining, food and mechanical engineering companies grew most of all, as expected[5].

Pre-tax losses across some sectors, such as the agricultural, transportation and energy sectors, resulted mainly from one-off non-operational expenses at some companies. These were mostly 'accounting' expenses, such as writing off or making provisions for non-performing receivables, revaluation losses, etc. In particular, financial statements show that only 13% of agricultural companies sustained losses. However, their total pre-tax loss was UAH 65 billion in 2017, compared to the total profit of UAH 53 billion made by profitable companies.

[4]The latest available data at the time of Financial Stability Report release.
[5]For more details, see the June 2017 Financial Stability Report.

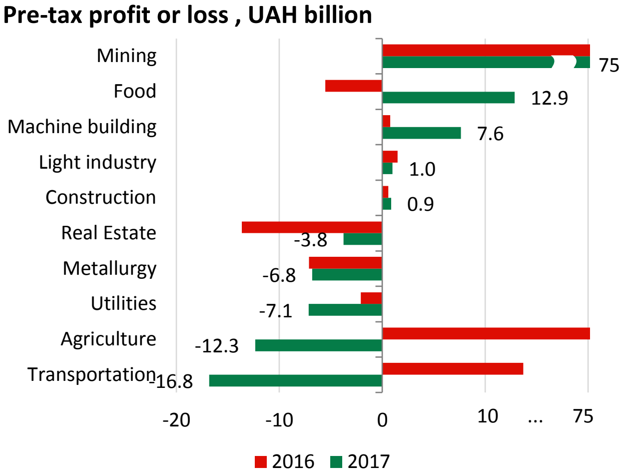
Percentage of profitable companies* in 2016 and 2017



** On the basis of their pre-tax profit/loss.*

Source: SSSU

Pre-tax profit or loss , UAH billion



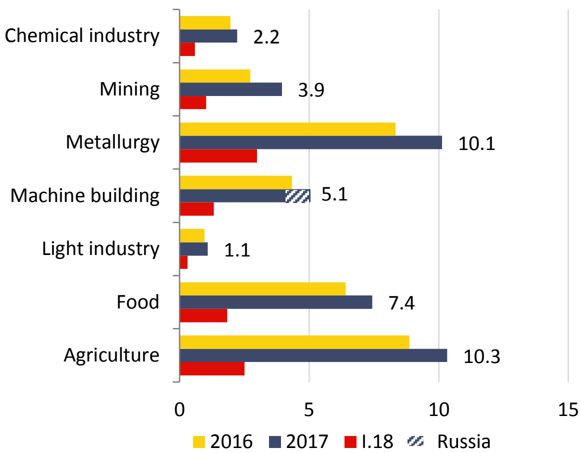
Data for 2017 are preliminary and might be revised.

Source: SSSU

Although the rates of growth in mining output declined in real terms in 2017 compared to 2016, the decline was offset in the latter half of the year by an increase in commodities prices. Indeed, the EBITDA of the industry's most profitable company – Ukrgazvydobuvannya – was up twofold, to UAH 46.4 billion, while its EBITDA margin almost doubled, to 61%. This was due to the decrease in gas production royalties in late 2016. The higher profit of the food industry was attributed to an increase in exports of sunflower oil and sugar, which account for about 40% of the industry's total output. Exports of sunflower oil rose by 16% yoy in 2017, to USD 4.3 billion, driven largely by an expansion of exports to Asia (Indonesia, Yemen, Bangladesh and Sri Lanka).

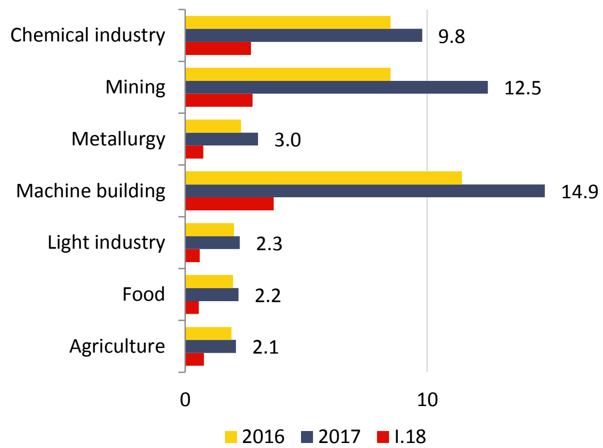
The output of the mechanical engineering industry has been growing for two years running, propelled mainly by increase of investment demand in construction, metallurgy and mining, as well as a rise in exports, mostly exports of components and parts.

Exports of goods by industries, USD billion



Source: SSSU, NBU estimates

Imports of goods by industries, USD billion



Source: SSSU, NBU estimates

Promising sectors: mechanical engineering, transportation, agriculture and the power industry

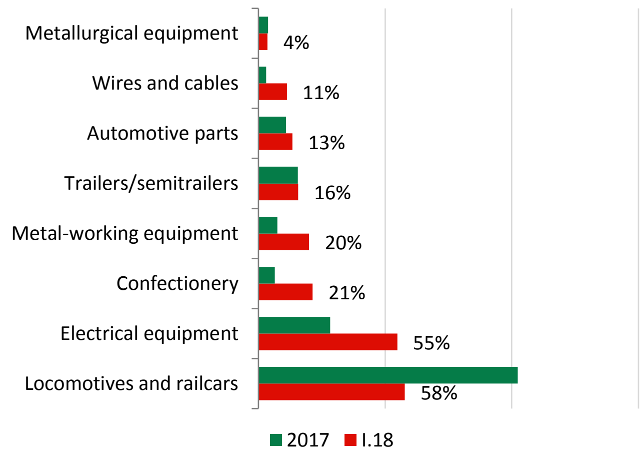
The main drivers in the passenger segment of the transportation are visa-free travel to the EU and an increase in households' solvency. The profit of the transportation is expected to rise, fuelled by higher transportation fares and a further increase in passenger and cargo turnover.

Ukrzaliznytsia's investment plans (the company intends to significantly renew its locomotive and car fleet) will help boost the profit of transportation and related sectors. Ukrzaliznytsia has ordered 30 diesel locomotives from General Electric, which are to be delivered by Q1 2019. Overall, the company intends to purchase a total of 255 locomotives from General Electric over 15 years.

Higher electricity prices will push up the power industry's profit. The introduction of new rules (RAB tariffs) for oblenergos (regional electricity distributors) is likely to bring about rapid growth in the profitability of these companies.

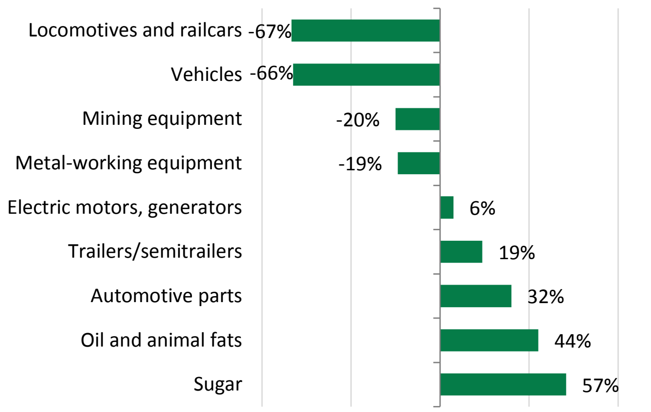
In the mechanical engineering sector, there are good growth prospects for companies that produce intermediate consumption goods - components and parts, such as wires, cables, and spare parts for motor vehicles and agricultural machinery, etc. Demand for these goods is buoyant both in Ukraine and abroad. The mechanical engineering industry, mainly its power and metallurgical engineering branches, could receive considerable impetus for growth from the faster implementation of the investment programs of large private companies and state-owned monopolies.

Leaders in terms of output growth in mechanical engineering, % yoy



Source: SSSU, NBU estimates

Leaders and outsiders in terms of industrial output growth, % 2017/2013



Source: SSSU, NBU estimates

Exports to Russia are still important for some major machine building companies, but no longer critical for the industry as a whole. From 2014 to 2017, the share of Russia in machine building exports decreased from 44% to 22%. The sector's main risk is its low competitiveness. Imports of machinery and equipment were up by 30% yoy in 2017, and by another 17% yoy in Q1 2018. Imports of agricultural, foundry and food industry machinery and equipment are rising at the fastest rate (by 26% yoy).

The agricultural sector has the lowest risks. This year, the harvest of staple crops is expected to be at least at last year's level. Global prices are also favorable because of droughts and lower harvests in several of the largest agricultural exporters.

Despite there being certain risks, animal breeding is attractive to lenders

Last year, pig livestock declined by 8% in the wake of an outbreak of African swine fever, and this trend continues into 2018. Cattle numbers also fell (by 4% in 2017). Nevertheless, in the medium-term this segment is the most promising, due to rises in domestic demand for meat and external demand for dairy products, mainly butter. Favorable global beef prices pushed up beef exports by 42%, to USD 117 million, in 2017.

Butter exports saw the strongest performance of all exports of dairy products – in 2017 butter exports were up by 4.2 times yoy, to USD 116 million. As this branch has a long production cycle, it requires large investment in its fixed and working capital, which makes it attractive for lending. However, the output of milk and dairy products is currently falling, driven by the decline in cattle numbers.

Poultry breeding remains the only branch of livestock raising that is increasing its output. The restrictions the EU imposed on chicken and egg exports from some regions did not have any significant impact on the profit of large producers, which also received subsidies from the state.

The chemical industry and construction are the riskiest sectors. The profit of the metals industry is expected to decrease slightly

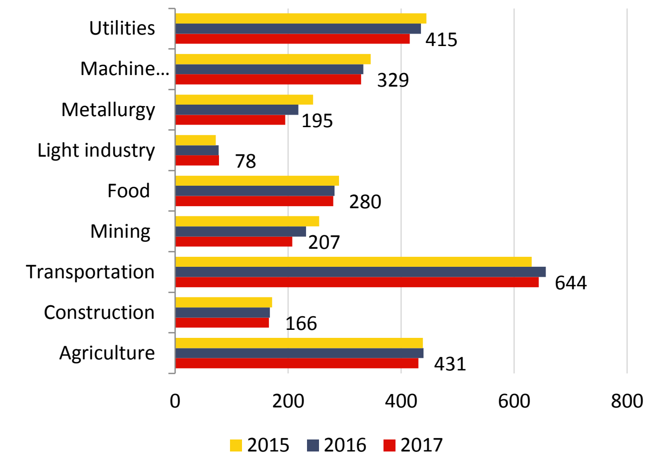
Chemical and construction companies are prone to risk. The products of Ukrainian fertilizer manufacturers cannot compete with imports because of outdated equipment and high prices compared to Russian products. In construction, especially residential, the growth in demand is slowing, while costs are rising.

In H1 2017, the profits of metallurgical companies suffered badly from the halt of trade with NGCA and the irregular operation of the Avdiivka Coke Plant. In H2 2017, it was partly compensated by high global metal prices. The main risk of the sector is the fall in prices expected in H2 2018. However, prices are unlikely to slump since global demand is high, and the sanctions imposed on Iran are fueling demand for Ukrainian metals in the Middle East. Domestic demand for metal products will remain depressed, as investment this year will be too low to significantly stimulate the consumption of rolled metal products.

Wage costs will rise amid a fall in staff numbers

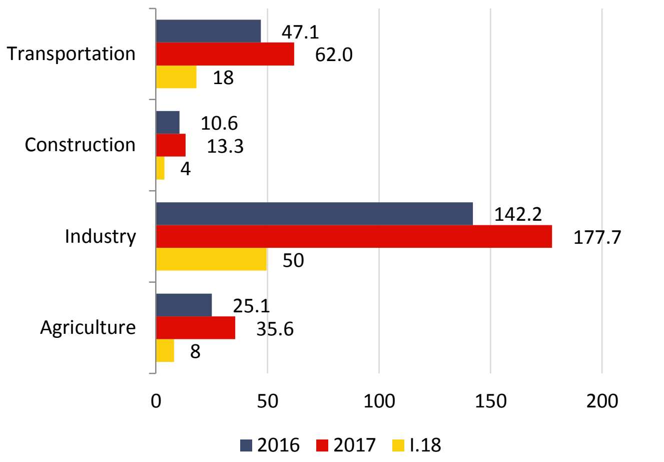
In 2017, the total number of people employed in the real sector dropped by 2% yoy. The industrial sector reduced its workforce by about 4% yoy, the agricultural sector by 1% yoy, and the transportation sector by 3% yoy. There were also cuts in other sectors, such as the metals, mining, mechanical engineering and construction sectors. Only the food industry reported a significant rise in its workforce. High labor migration, a lack of qualified staff, and increases in the minimum wage are pushing up wage costs in spite of a reduction in staff numbers. This trend is at its strongest in the metals industry, as in Q2 2018 alone the three largest metallurgical plants raised wages by 10-35%. These processes will continue, driving up wage costs, together with their share of total costs. Recruitment and training costs will also increase.

Average number of staff employees, thousand people



Source: SSSU, NBU estimates

Wage pool for staff members, cumulative for the period, UAH million

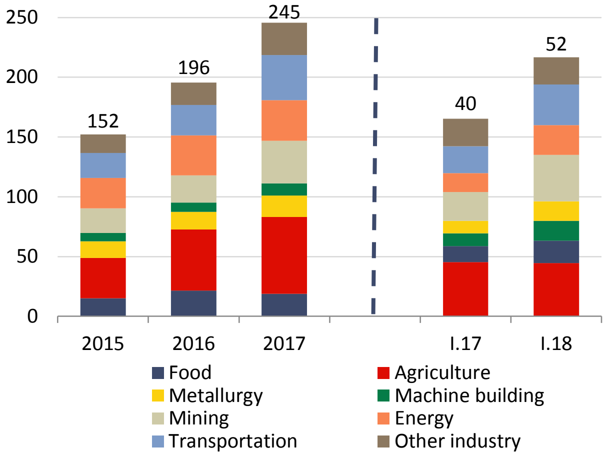


Source: SSSU, NBU estimates

Capital investment is growing rapidly

The increase in the real sector's profitability seen in 2016 revived the sector's investment programs or sped up their implementation. Capital investment was up by 15.5% yoy in 2017 and by 37.4% yoy in Q1 2018. Although rising for four consecutive quarters, the ratio of fixed investment funded by bank loans is still very low, at 8%, compared to over 20% before the crisis.

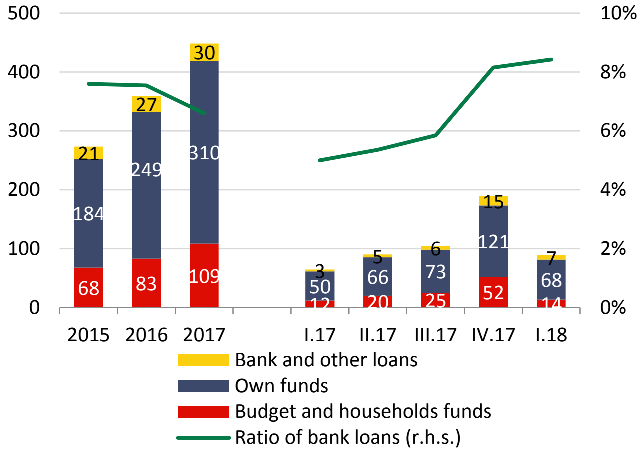
Capital investment*, UAH billion



** Prices are compared to 2017 prices.*

Source: SSSU, NBU estimates

Funding sources for capital investment, UAH billion

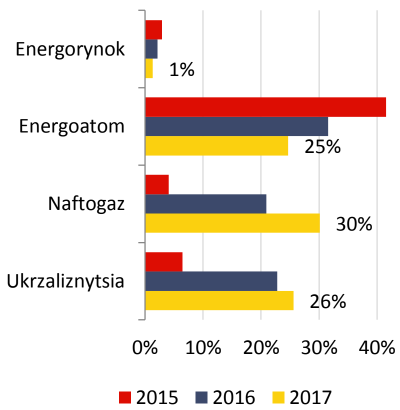


Source: SSSU, NBU estimates

State-owned monopolies are able to take out loans at low rates because of their financial health

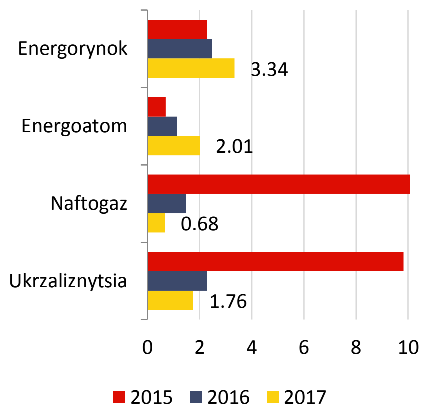
Before the 2014 crisis and during its acute phase, the largest state-owned monopolies sustained large losses, which led to problems with their borrowing. The financial standings of these companies have improved significantly over the last two years. Last year, the three largest state-owned companies – Naftogaz, Ukrzaliznytsia and Energoatom – were the best performing companies in their sectors in terms of profitability and debt burden. Earlier, lending by state-owned banks was practically the only source of funding for state-owned monopolies. Today, they are able to take out loans at lower rates and on better non-price lending terms than most real sector companies, from both foreign and domestic banks. The NBU has assigned all state-owned monopolies to a borrower class with a low probability of default (about 5%) and a low credit risk for banks.

EBITDA margins of state-owned monopolies



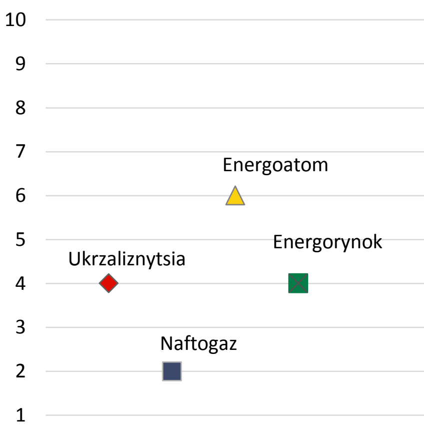
Source: company reports, NBU estimates

Net debt-to-EBITDA ratio of state-owned monopolies



Source: company reports, NBU estimates

Breakdown of state-owned monopolies into borrower classes



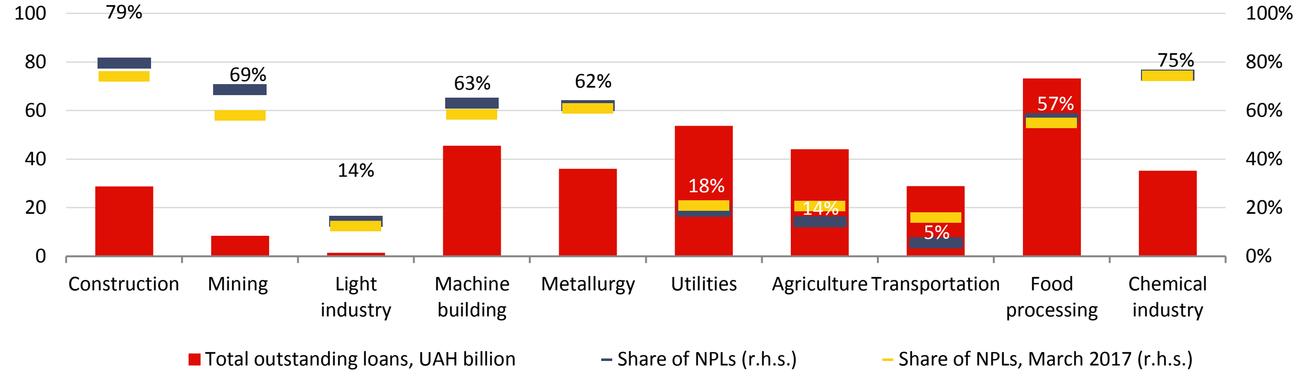
A lower class defines lower probability of default.

Source: NBU

Dishonest large borrowers are still making no loan payments

Today, light industry, the energy sector, transportation, and agriculture have the lowest NPL ratios, with the construction and chemical industries carrying the highest ratios. Over the last year, there has been no noticeable improvement in loan servicing by large businesses. There has even been a moderate increase in the percentage of NPLs in some industries with high NPLs concentrations, such as the mechanical engineering and mining industries. Meanwhile, the proportion of NPLs dropped noticeably in sectors with significantly lower concentrations (transportation, agriculture and the food industry).

Non-performing loans issued to non-financial corporations, March 2018

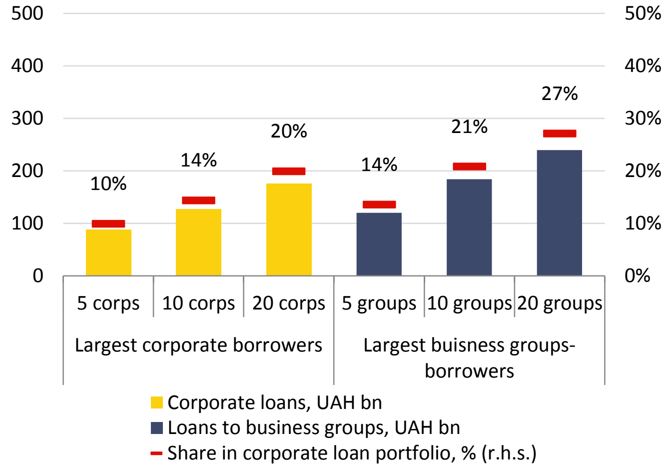


Banks that were solvent as of 1 April 2018 (excluding PrivatBank).

Source: NBU

Large business groups have accounted for the bulk of NPLs over the last few years. These groups are either unable or unwilling to service the debts they accumulated before the crisis. Although the financial health of many of these groups improved markedly last year, and the groups are generating enough cash flows to pay interest in full and to gradually repay their debts, they are in no haste to do so. NPLs account for 86% of the total loans granted to the 20 largest groups (or for 76% when Privat Group is excluded), being over 25 pp higher than the average figure across the system. A number of successful debt restructurings for some large borrowers seen last year did not greatly affect the situation. The largest groups are deliberately putting off debt restructuring in the hope that banks will offer them preferential terms, such as writing off a large portion of their debts, or zero interest rates for several years with full repayment at the end of that period. If banks take no joint action to address the debts of large groups, these debts will never be repaid.

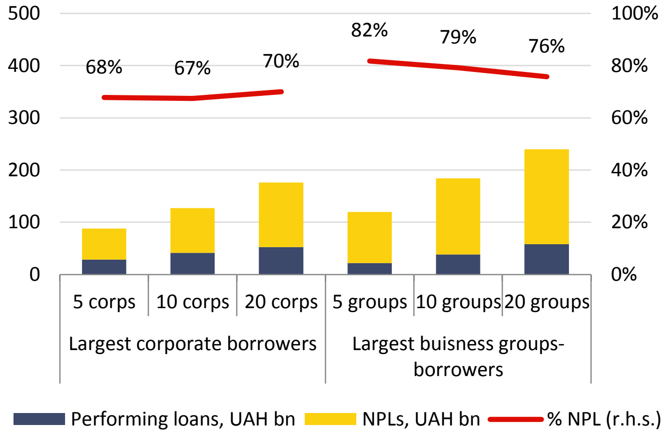
Gross loans issued to the largest borrowers* as of 1 April 2018



** Banks that were solvent as of 1 April 2018 (excluding PrivatBank).*

Source: NBU

Volumes and percentages of NPLs of the total debt of the largest borrowers as of 1 April 2018



** Banks that were solvent as of 1 April 2018 (excluding PrivatBank).*

Source: NBU

Real Estate Market and Related Risks

Housing prices have stabilized for the first time in the last four years. Housing supply continues to grow, in spite of good reasons to expect that the growth will slow down. Although mortgage lending is picking up, its volumes are still small and have no impact on demand. Demand for commercial real estate is rising on stagnating supply.

The supply of new housing continues to increase

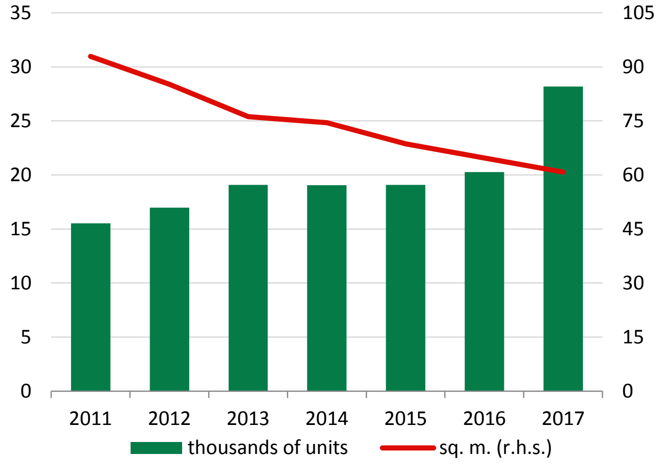
The volume of residential housing commissioned in Ukraine was up by 13% yoy in 2017, totaling 5.9 million square meters. Although it still lags behind in terms of housing per capita (fewer than 400 flats per 1,000 people compared to 486 in the EU), last year Ukraine outperformed the EU in terms of the number of newly built dwellings per 1,000 people (2.9 compared to 2.8). In 2017, the number of issued residential housing construction permits dropped by 25% yoy, which could suggest that the growth in residential housing will decelerate in the coming years. In Q1 2018, the volume of commissioned residential housing edged down by 15% yoy, to 975,000 square meters.

There are regional mismatches in the supply of new residential housing. The city of Kyiv and Kyiv Oblast accounted for over 43% of all commissioned residential buildings. Odesa and Lviv oblasts were second and third.

The number of newly constructed dwellings in Kyiv surged by over 40% yoy in 2017, while the average area per dwelling shrank from 64.7 square meters to 60.8 square meters. One-room flats continue to dominate the supply, accounting for 54% of all new dwellings.

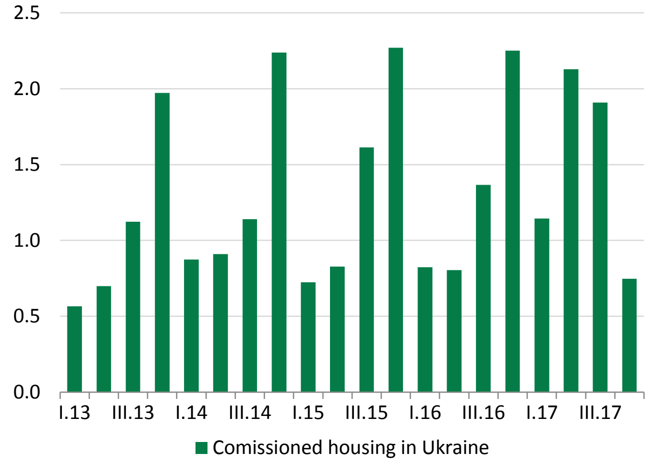
City Development Solutions, a consultancy, reported that in late 2017 there were over 57,000 new dwellings for sale in Kyiv. Last year, flats in 59 new housing complexes and in 45 new lines of existing ones became available for sale.

Number and average area of new flats in Kyiv



Source: Kyiv Main Statistics Office

Supply of new flats in residential buildings, millions of square meters



Source: SSSU

Prices on the primary residential real estate market have stabilized

In March 2018, the average price per square meter of Kyiv residential housing on the secondary market fell by 2% yoy in the dollar equivalent, or by 14% in the euro equivalent. The prices of old dwellings trend further down.

Meanwhile, primary market prices edged up by 1% yoy in the dollar equivalent, while remaining practically unchanged in the hryvnia equivalent. The temporary halt in the price correction was attributed to, among other things, an increase in construction costs and the level of house completeness (prices are lower for dwellings that are yet to be built compared to those for dwellings in commissioned buildings). Primary market prices were practically unchanged in Lviv, while those in Odesa were up by 3% yoy.

In Ukraine, housing costs are still mostly measured in US dollars. While this is explicit on the secondary market, on the primary market hryvnia prices are either indexed if there are any significant moves in the US dollar exchange rate, or are directly pegged to the US dollar in construction agreements.

Construction costs continue to rise. Ukraine's State Statistics Service reported that the cost of construction and installation work in residential buildings rose by 15.0% yoy in 2017 and by 25.2% yoy in March 2018. Ukraine's Ministry for Regional Development, Building and Housing increased its average cost estimates per square meter of housing by 16.2% yoy, to UAH 11,138 as of 1 January 2018.

Rents are also on the rise. In March, the cost of one square meter of rented housing in Kyiv in the US dollar equivalent was up on average by 13% yoy compared to last year. This was due to the robust demand fully absorbing the ever-growing supply. In the mid-term, however, investment in residential real estate for rent could become less attractive because of the market's saturation.

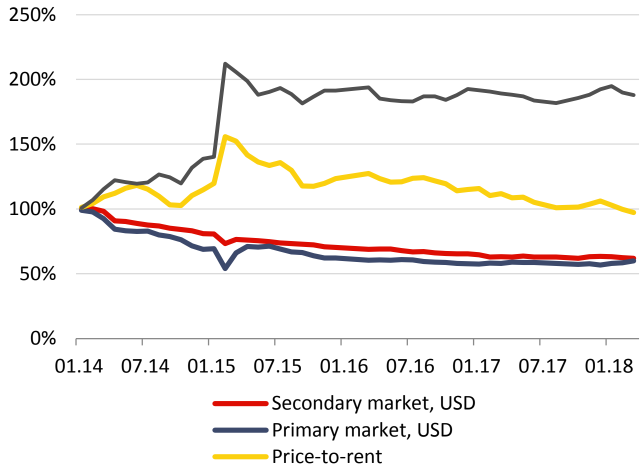
The supply of housing is still significantly higher than demand

Housing in Ukraine is less affordable compared to that in the EU, in terms of the ratio of household income to housing costs. That is why effective demand remains depressed even amid a rise in Ukrainians' nominal income. Demand is almost solely generated by Ukrainians whose income is pegged to foreign currencies (such as IT specialists) and those who, despite all of its risks, still regard residential real estate as an investment tool.

The Ministry of Justice reported that in 2017 the number of housing purchase and sale agreements had risen by 12.1% in Ukraine and by 7.9% in Kyiv. Private and public notaries said that last year 31,800 housing purchase and sale agreements had been concluded in Kyiv. Most of these are likely to have been secondary market deals. Intermediaries estimate that 12,000 to 16,000 flats are sold on Kyiv's primary market every year.

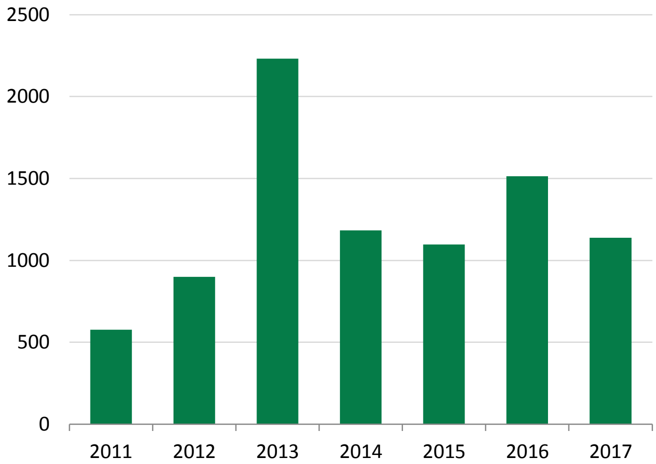
To stimulate demand, construction companies are offering small dwellings, 5-20% discounts for 100% downpayments, 2 to 5 year installment plans, and exchange of old dwellings for new ones. However, this is not proving very effective in raising demand.

Kyiv housing prices, December 2013 = 100%[6]



Source: real estate agencies, NBU estimates

Number of permits issued for apartment construction in Ukraine



Source: SSSU

In the medium term, movements on the housing market will be driven by several trends. The profitability of housing construction is declining, chiefly due to intensified competition and higher prime costs. The number of land plots suitable for construction continues to shrink. Adding to this trend, Ukraine's Ministry for Regional Development, Building, and Housing has approved new construction regulations, limiting, among other things, the developable share of a land plot, depending on building height. Residential property lending is still on the rise, but its

[6] The price-to-rent is the ratio of the housing price to its rental price. The ratio is calculated using the formula: $\frac{Price\ per\ square\ meter}{Rent\ per\ square\ meter * 12}$

volumes (UAH 1.48 billion in 2017, read more in special focus “Growth in Mortgage Lending will Continue”) are having marginal influence on the market. Even if high lending rates persist, this will not cause demand to exceed supply in the medium term.

Taking into account current trends, there are two possible scenarios for developments on the housing market. Under the favorable scenario, demand will grow on the back of revived mortgage lending as the growth in supply slows and becomes more regionally diversified. In that case, risks to Ukraine’s financial stability will be minimized. In contrast, under the adverse scenario, housing supply growth will continue to outpace demand, and the gap between them will widen. An additional factor in the adverse scenario will be attempts by developers to procure permits before tighter site improvement and infrastructure development requirements take effect. This may trigger a short-term boom in new housing construction. If materialized, this scenario will pose elevated risks to certain developers as the number of unfinished construction projects grows and the financial standing of banks that lend to developers and house buyers deteriorates. Important risk mitigation measures should include protections for the buyers of apartments in new housing projects, legislation to govern legal relations in the primary housing market, developing market statistics, and requiring that banks comply with prudential standards when lending to developers.

Volumes of new commercial real estate supply are negligible

While supply in the housing market is growing despite weak demand, new supply in the commercial real estate market is low, even though demand is increasing. These conditions are causing commercial real estate vacancy rates to fall and rents to rise.

Only 8,000 square meters of commercial real estate was commissioned in Kyiv last year – the lowest amount since 2008. The opening of shopping and entertainment centers that were scheduled for launch several years ago has been continually postponed due to there being insufficient funds to finance the completion of projects. The resumption of bank lending to the segment will be slow, as commercial real estate developers account for a substantial share of the banks’ NPLs.

As the banks currently prioritize the sale of their on-balance-sheet collateral, investment activities concentrate in the secondary market. Consultancy Kushman & Wakefield estimates that investment deals in the commercial real estate market totaled close to USD 137 million in 2017 (up by 56% yoy). In the coming years, secondary-market investment in commercial real estate is expected to continue to revive.

HOUSEHOLDS AND RELATED RISKS

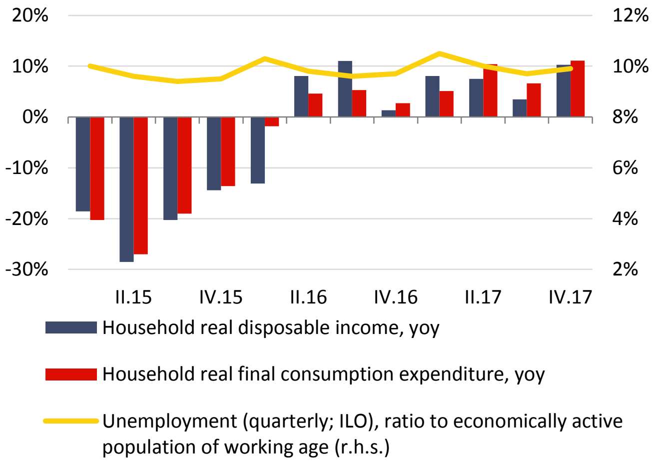
The financial standings of households improved in 2017 and are expected to strengthen further, driven by a rise in wages, migrant remittances, social transfers, and a slowdown in inflation. The solvency of medium-income households is gradually edging up, as these households are building up savings. In the next few years, the importance of households as net bank creditors will increase, thanks to inflows of deposits from both the wealthy sections of society and the middle-class. The current rebound in consumer lending is posing no threat to the financial system so far: although growing at a high rate, consumer lending is still having only a marginal impact on consumer demand.

The growth in real disposable household income is accelerating

Real disposable household income was up by 7.4% in 2017 (compared to a rise of 2.0% in 2016). The growth was mainly propelled by a rise in nominal wages by 37% and real wages by 19%. Household income also benefited from the recalculation of social benefits to reflect new subsistence minimum, which were raised three times last year, as well as the indexation and modernization of pensions and the cancelling of restrictions on pension payments to working pensioners.

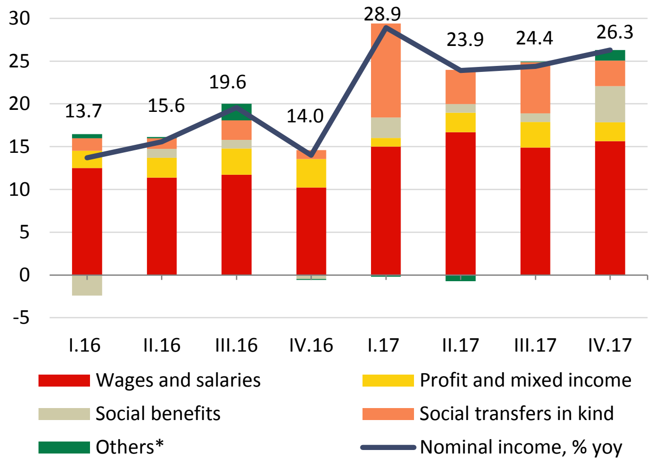
Wages earned abroad are gradually becoming an important component of household income. These wages are not included in the GDP calculation according to the income approach. Last year it accounted for 20.2% of the salary component of household income. After Ukrainians were allowed to travel visa-free to EU countries, Poland and the Czech Republic, which experience a strong demand for labor, both simplified employment procedures for Ukrainians. Revised data show that the percentage of migrant remittances in Ukrainians' total nominal income increased from 6.9% in 2015 to 9.4% in 2017.

Changes in household real income, consumer expenditures and level of unemployment



Source: SSSU (revised data), NBU estimates

Factors of household nominal income growth, pp



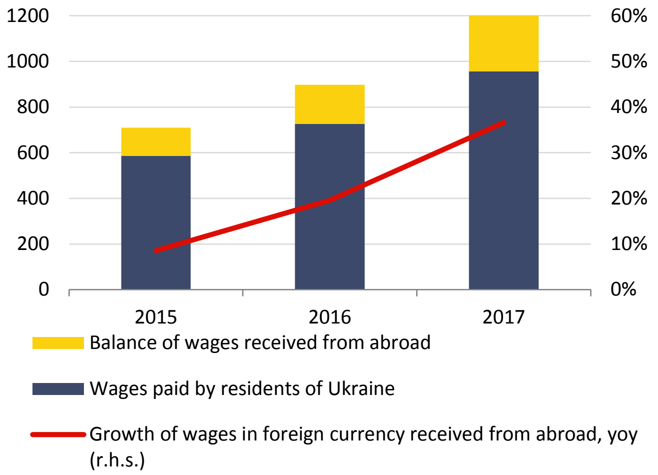
** Including property income and other current transfers received.*

Source: SSSU, NBU estimates

Incomes will continue to grow in 2018. On 1 January, the minimum wage was raised from UAH 3,200 to UAH 3,723. This contributed to the increases in nominal and real wages seen in Q1 by 26.1% yoy and 10.8% yoy respectively. In 2017, wages accounted for 46.5% of nominal household income, the record high since surveys began. The increase in the percentage of wages in total income is making households attractive to banks, and helping sustain the high rates of growth in household lending. The subsistence level is also to be raised three times over the current year, and, in July, the government of Ukraine plans to start paying utility compensation to low-income households.

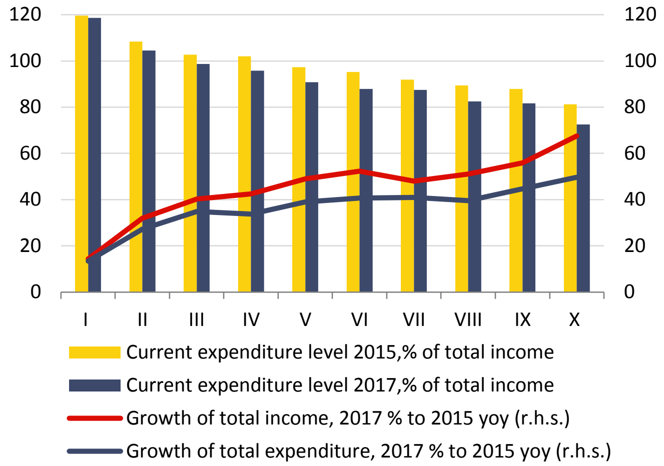
Extensive employment of Ukrainians abroad will persist in 2018 and 2019. Competition for Ukrainian workers in neighboring countries will also contribute to an increase in migrant remittances and the solvency of Ukrainian households. However, workforce outflows are posing significant medium- and long-term risks, both to the labor market and to economic growth as a whole.

Wages earned in Ukraine and abroad, UAH bn



Source: SSSU, NBU estimates

Income and expenditure growth, current expenditure level per household by decile groups



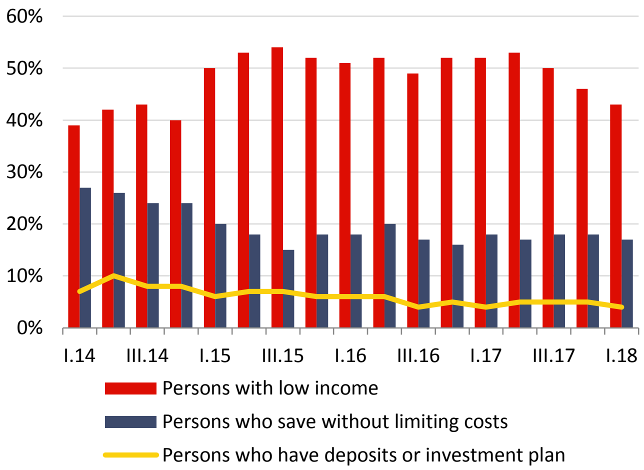
Source: SSSU, NBU estimates

The financial standings of households are gradually improving

The growth in income has improved consumer sentiment and ramped up consumer demand. Expectations of further wage increases have also picked up, which, together with eased lending conditions, have contributed to a recovery in household lending. In 2017, hryvnia household loans were up by over 40%, and they continued to rise in Q1 2018. The ratio of new household loans to consumer spending was 5.3%, while the increase in outstanding consumer loans (loans granted less loans repaid) made 1.6% of consumer spending. Thus, the impact of consumer lending on the volumes of and changes in consumer spending is still limited and does not pose any significant risk to the financial system.

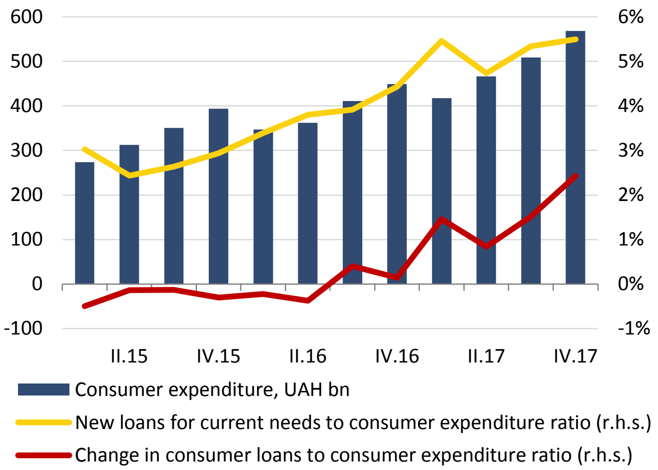
Overall, households' financial situations improved in 2017, the nominal income growth of all decile groups (in breakdown by their income levels) outpaced their expenditures. This growth, however, was not evenly distributed across the groups: higher income groups experienced faster income growth and slower growth in current expenditures. For most groups, the ratio of current expenditures remains high at over 80% of total income. Meanwhile, the number of groups with insufficient income to cover consumption declined from four in 2015 to two in 2017.

Distribution of households by their propensity to save



Source: GfK Ukraine, monthly surveys of households (aged 16+)

Effect of consumer lending* on consumer spending



** Gross consumer loans issued by solvent banks.*

Source: SSSU, NBU estimates

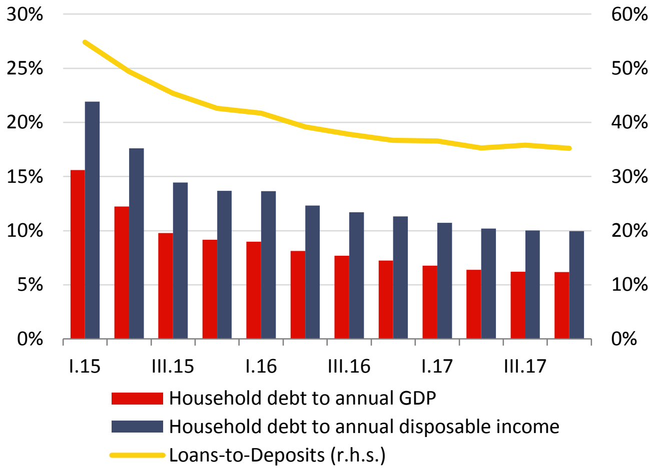
The monthly surveys of households carried out by GfK Ukraine from January through March also provide evidence that households' financial standings are improving. In Q1 2018, the percentage of households that described their income as low was 43%. This figure was significantly smaller than the high of 54% recorded in Q3 2015. Nevertheless, the proportion of households that can save without curtailing their consumption, remains small - at 17%. This was significantly lower than the figure of 27% seen in Q1 2014. The percentage of respondents that have time deposits or intend to make deposits was only 4%.

The debt burden of households is decreasing

The improvement in households' financial standings increased their importance as net bank creditors. In 2017, solvent banks saw a UAH 42 billion increase in household deposits, of which UAH 38 billion were hryvnia deposits. Meanwhile, retail hryvnia loans grew by only UAH 29 billion. As a result, the loan-to-deposit ratio (LTD) edged down by 1.5 pp, to 35.2%, the total debt burden of households declined from 11% to 10% of their annual disposable income.

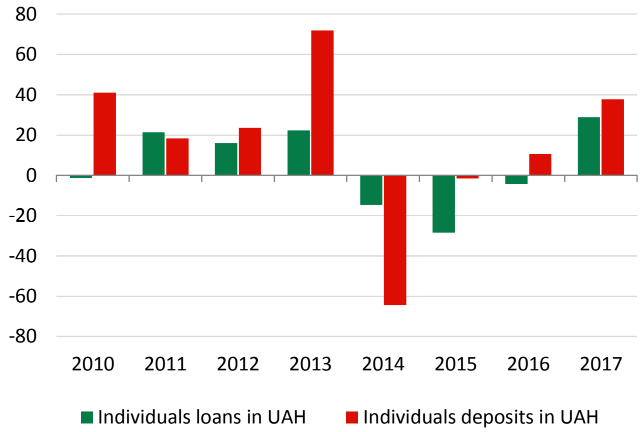
Any increases in household income over 2018-2019 will enhance the role of households as net creditors of banks, even if the high rates of growth in household lending persist. The wealthiest groups will be a source of deposit inflows into banks, while a rise in the subsistence minimum, subsidies and benefits for low-income groups will somewhat increase the amounts held in bank current accounts. Until the end of 2018, the bank lending will continue to focus on consumer loan segment.

Household debt burden



Source: SSSU, NBU estimates

Changes in volume of hryvnia household loans and deposits*, UAH billion



** Data for solvent banks.*

Source: NBU

BANKING SECTOR CONDITIONS AND RISKS

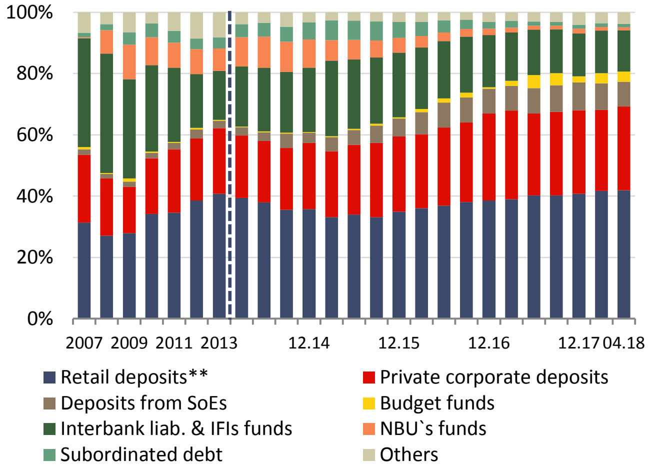
FUNDING

Household and corporate deposits continue to rise, with their percentage of total liabilities already exceeding 80%. This trend is raising liquidity risk, as practically all corporate deposits are either demand deposits or deposits with ultra-short maturities, while the bulk of household deposits have maturities of up to three months. In order to minimize the likelihood of a liquidity crisis, banks must hold a stock of highly liquid assets. Banks should also revise their interest rate policies to encourage customers to make deposits with longer maturities, even if this reduces bank profits.

Domestic sources provide the bulk of banks' funding

Since H2 2017, the proportion of retail and corporate deposits in banks' liabilities has stabilized at around 80%. About half of them are retail deposits. The percentage of subordinated debt in banks' liabilities dropped to 1.2%, down from a high of 6.5% in Q1 2015, following the large-scale debt-to-equity conversions in 2015 and 2016. While subordinated debt used to be an important source for replenishing banks' equity, today, the potential for its further conversion is virtually exhausted. Thanks to macrofinancial stability and high liquidity, banks did not require the NBU's support, as a result of which the ratio of NBU loans in total liabilities fell to 1.0%, the lowest in the last 10 years.

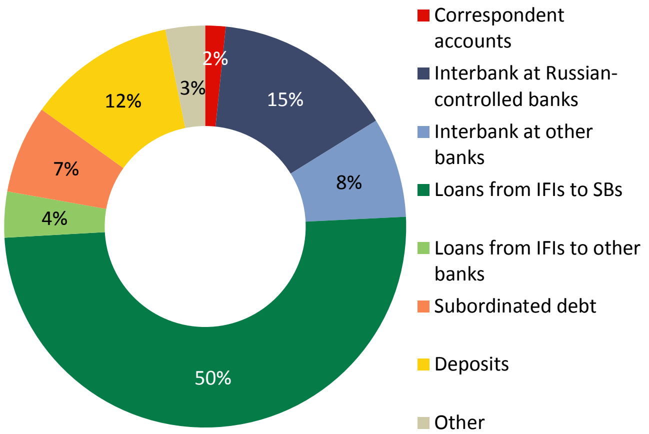
Banks' liabilities by instruments*



** Including accrued interest.*
*** Including certificates of deposit.*

Source: NBU

Composition of external funding* as of 1 May 2018

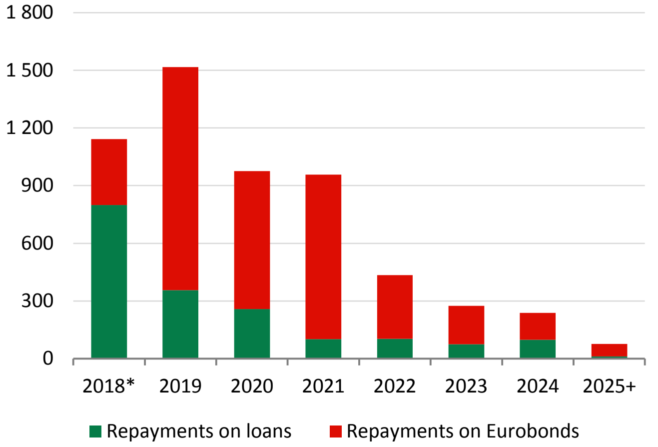


** Foreign debt.*

Source: NBU

The banks' demand for foreign currency funding is weak due to sluggish recovery of the foreign currency lending. Interest rates on foreign currency deposits are still at historical lows, at 3.4% for 12-month US dollar retail deposits. Over the year, domestic foreign currency deposits, including budgetary funds and deposits from non-bank financial corporations, have risen by only 1.5%, to USD 14.3 billion in late April, of which USD 8.4 billion were household deposits. The banks' gross external debt has been decreasing annually by one third for three years running, and, in late 2017, it stood at USD 6.2 billion. Almost half of this debt are loans from international financial institutions to state-owned banks. The interbank loan for one Russian-owned bank from its parent company also accounts for a significant portion of this debt. The NBU does not expect any large debt-to-equity conversions in the near future. Further developments in external funding will depend on whether state-owned banks choose to repay or roll-over their Eurobonds, many of which mature in the coming three years. Repayments will peak in 2019.

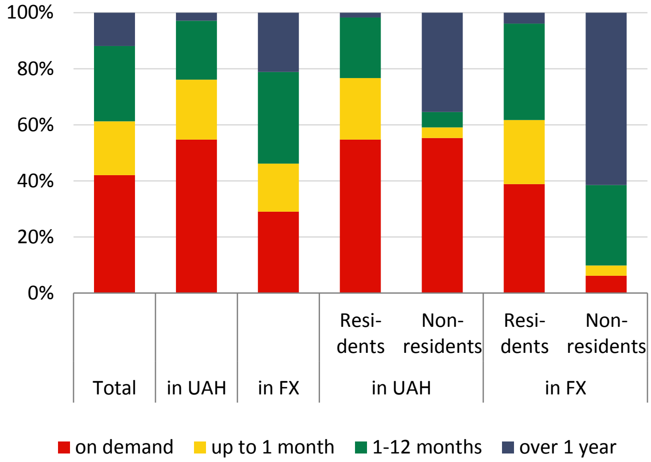
Scheduled repayments of banks' external debt, USD million



** Repayments planned for Q2 – Q4.*

Source: NBU

Banks' liabilities by maturities as of 1 May 2018

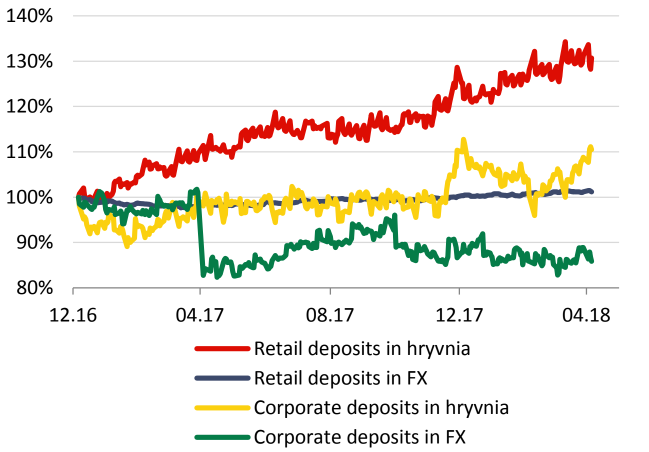


Source: NBU

Most liabilities have short maturities, which creates liquidity risks

A decline in long-term external funding, and an increase in the proportion of deposits, worsened the composition of liabilities in terms of maturities. By late April, the percentage of liabilities with residual maturities of up to one month had risen by 2.7 pp yoy, to 61.3%. This percentage was even higher for hryvnia liabilities, at 76.1% (up by 3.8 pp yoy), with over half of hryvnia liabilities being demand deposits. Over the year, hryvnia retail and corporate deposits have grown by 20.1% and 10.0% respectively, with foreign currency deposits rising on average by only 5%.

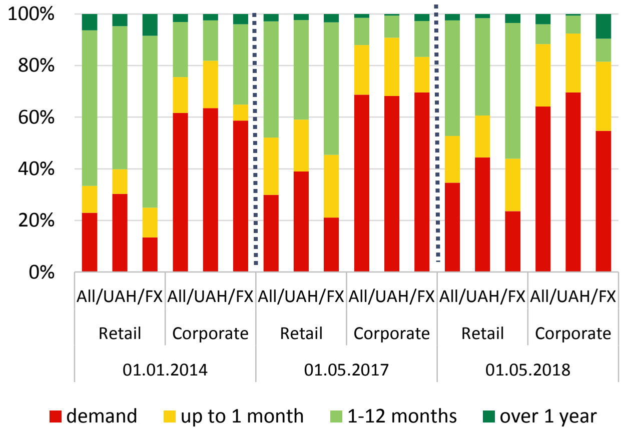
Household and corporate deposits, 2016 = 100%*



** Held by banks that were solvent as of 1 May 2018, including accrued interest and certificates of deposit.*

Source: NBU

Composition of household and corporate deposits by maturity

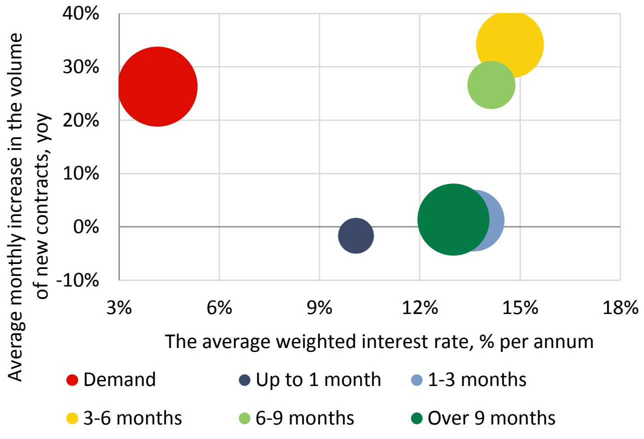


Source: NBU

The short maturities of banks' liabilities coupled with an increase in the ratio of customer deposits, are generating liquidity risk for the banking sector. The current composition of liabilities is making the system vulnerable to liquidity shocks. Thus, banks must diligently forecast customer account flows and hold large stocks of high-quality liquid assets. In order to minimize risks that banks fail to meet their obligations during crises, the NBU introduced a new ratio – the liquidity coverage ratio (LCR). For six months, banks will calculate it in test mode, while compliance with this ratio will become compulsory from December 2018. During the tests, the NBU will determine the time over which banks will have to ensure a 100% LCR (for more details see the supplementary (thematic) material "LCR: The New Short-Term Liquidity Requirement" published in the December 2017 Financial Stability Report.

Interest rate policies do not facilitate improvements in the deposit composition by maturities
Since October 2017, the NBU has raised the key policy rate four times (from 12.5% to 17%). The banks responded by halting further decreases in interest rates on hryvnia retail deposits. The interest rate on 12-month deposits remained reasonably stable, hovering at around 14.1% to 14.3% per annum for over six months. Meanwhile, there was some increase in interest rates on three- to six-month deposits. As a result, at the beginning of May, interest rates on six-month deposits were still higher than those on 12-month deposits. Although this discrepancy disappeared in early June, this is not enough to encourage people to make longer-term deposits. In general, banks should offer more incentives for depositors to make long-term deposits by increasing the spread between interest rates on short- and long-term deposits.

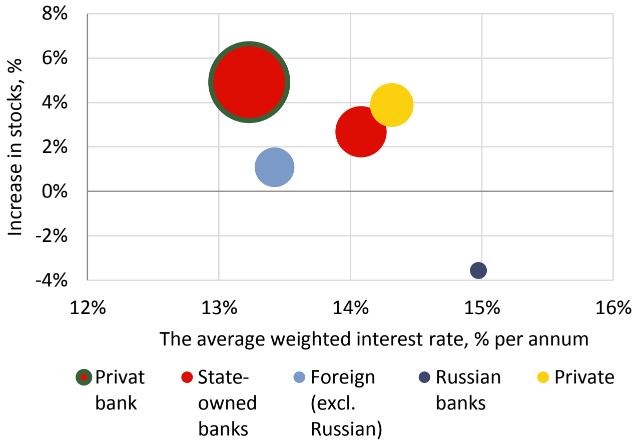
Change in new hryvnia* household deposits and interest rates as of 1 May 2018



** The size of the circle indicates the average monthly volume of new deposit agreements.*

Source: NBU

Change in the volume of hryvnia* term household deposits and interest rates in Q1 2018



** The size of the circle indicates the volume of new deposit agreements per quarter.*

Source: NBU

Hryvnia demand household deposits, which yield practically no income to depositors, were up by 35% yoy, thanks to, among other things, higher social standards and, consequently, larger amounts held in payroll and pension accounts. In Q1, the proportion of cashless payments rose, driving down the ratio of cash withdrawals from ATMs by 6 pp yoy, to 56% of total operations. Therefore, money that was previously withdrawn as cash now remains in the banking sector.

The ability of financial institutions to attract deposits increasingly depends on customer confidence in banks, quality of services, and the technological accessibility of their products. That is why deposits with large foreign-owned banks are rising despite these banks offering low deposit rates. Meanwhile, Russian-owned banks are having trouble attracting deposits, despite significantly above-market deposits rates that they offer. Although state-owned banks are cutting their rates, many depositors still prefer to have deposits with them. Thus, PrivatBank generated the largest deposit growth of all four state-owned banks, in spite of having the lowest rates among them.

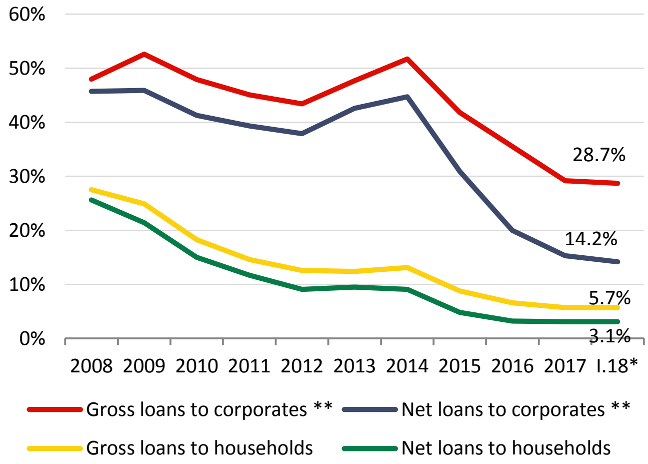
LENDING RECOVERY PROSPECTS

Bank lending remains sluggish, with only consumer loans rebounding at a fast rate (+39% yoy on the net basis). Although household lending currently poses no systemic risks to the financial system, the NBU believes that the approach some banks are applying to measuring risks from new loans is not conservative enough. Banks have to to comply with the NBU's consumer lending recommendations, as outlined in the December 2017 Financial Stability Report. Non-performing loans are putting pressure on the corporate portfolio – only every third customer with a loan of over UAH 2 million has never defaulted on a loan. Meanwhile, lending to reliable corporate borrowers that have not defaulted in previous periods is growing at a pace of over 20% yoy.

In April 2018, the banks' net loan portfolio was up by 3.0% yoy when recalculated at a fixed exchange rate. Net household loans increased further at a fast pace (by 22.2% when recalculated at a fixed exchange rate, with hryvnia loans rising by 39% yoy). However, hryvnia corporate loans declined by 0.4% yoy, while foreign currency ones dropped by 0.3% yoy in the dollar equivalent, which significantly slowed down the resumption of lending.

The ratio of household loans to GDP has changed very little over the past year, remaining very low compared to neighboring countries, at 5.7% for gross loans and 3.1% for net loans. Gross corporate loans decreased further to 28.7% of GDP.

Loans to GDP

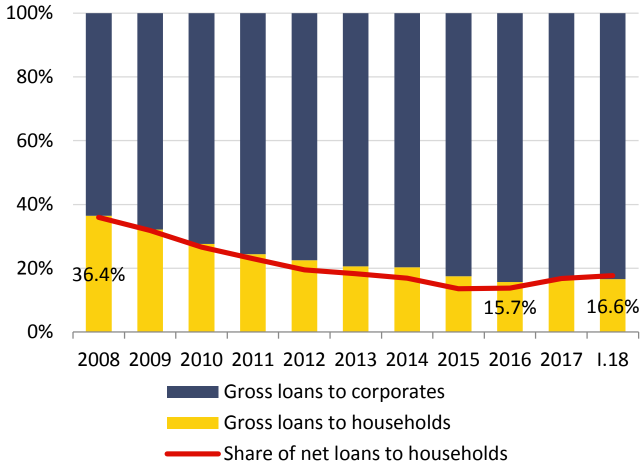


** Data for the last 12 months, including the NBU's projections.*
*** Including data for non-bank financial institutions.*
Source: NBU

Following the 2008 crisis, the banks mostly focused on corporate lending. Therefore, the percentage of household loans in the gross loan portfolio shrank from 36.4% in 2008 to a low of 15.7% in 2016. Last year, the recovery in consumer lending reversed this trend. This was especially notable for net loans. As a result, the percentages of gross and net retail loans were 16.6% and 17.7% respectively in April 2018.

The banks' interest income from corporate loans fell on the back of numerous loan restructurings at lower rates and a deterioration in the loan portfolio quality. In contrast, interest income from retail loans grew, thanks to the rebound in consumer lending and the significantly higher yields of such loans. This pushed up the proportion of interest income from household loans to 33.8% in January – March 2018. The banks are currently earning approximately twice as much from each hryvnia of household loans compared to corporate loans.

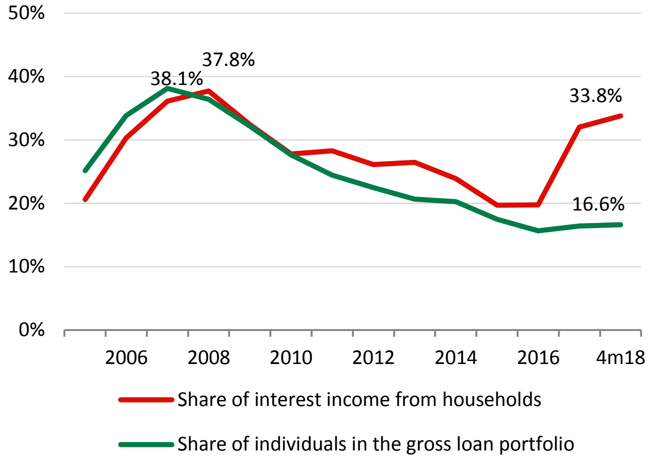
The share of retail loans in the total loan portfolio



Issued by banks that were solvent as of the reporting date.

Source: NBU

The impact of retail lending on the volume and yields of bank loan portfolios



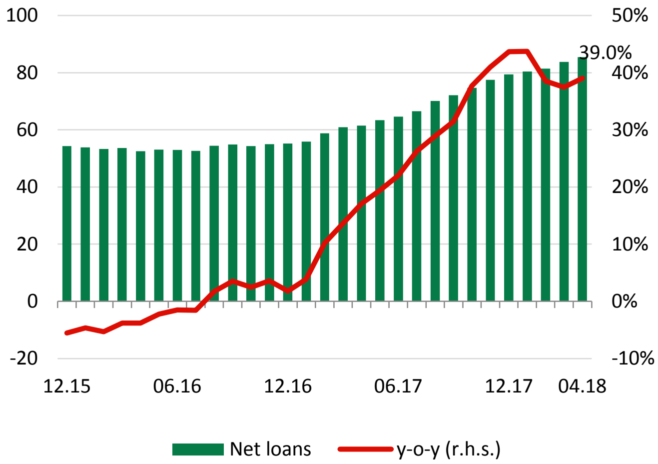
Issued by banks that were solvent as of the reporting date.

Source: NBU

Household loans remain the driver of portfolio growth

The household loan portfolio continues to grow at a fast rate. In April 2018, net hryvnia household loans were up by 39% yoy. The uptrend persisted unchecked, despite the growth decelerating at the start of the year due to statistical effects. The household loan portfolio in all currencies could have generated stronger growth if it were not for the repayment and writing-off of old foreign currency loans. Practically all of these loans remain NPLs. This situation will not change unless legislation is passed to tackle the problem of foreign currency mortgages, and the moratorium on foreclosing on the collateral for such loans is lifted.

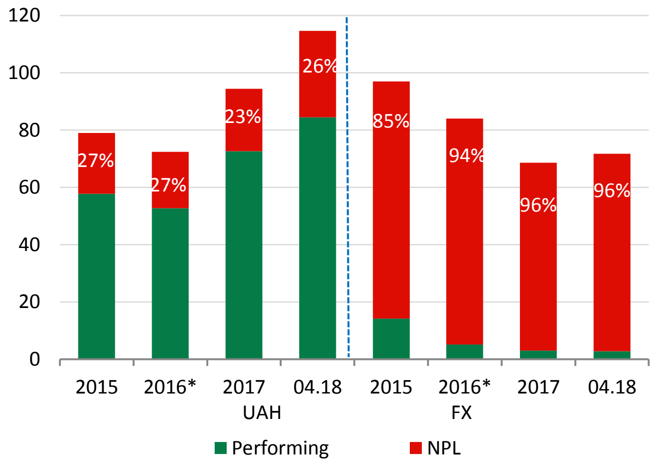
Net hryvnia retail loans, UAH billion



Issued by banks that were solvent as of 1 April 2018.

Source: NBU

Gross retail loans (including loans to sole proprietors), UAH billion

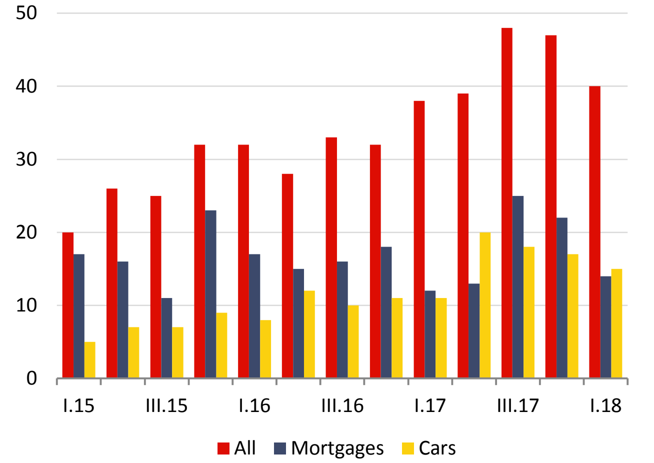


Issued by all reporting banks.
** As of 1 February 2017 (the first reporting date according to the new rules for measuring credit risk).*

Source: NBU

By the end of 2017 and in Q1 2018, all the banks that were able to enter the consumer lending market had done so. About half of all financial institutions ramped up retail lending in Q1 2018. The concentration of retail loans is rather high, with five banks accounting for 65% of the sector's total portfolio. Concentration is at its highest in the car loan sector, where five banks account for 80% of the market. As more banks are offering real estate loans, the concentration of such loans is decreasing.

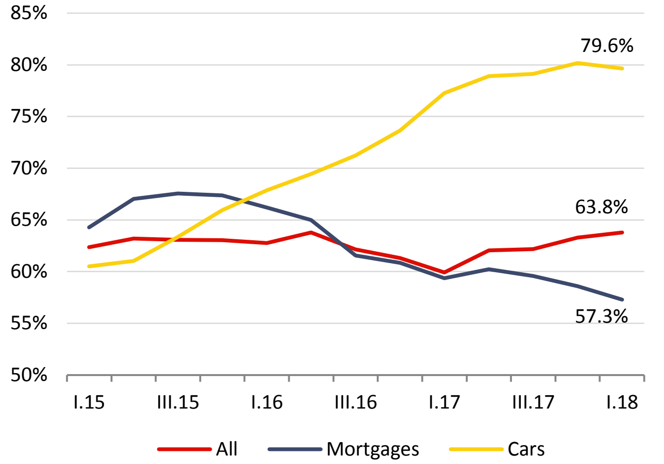
Banks* that increased their gross hryvnia household portfolios over the quarter**



** Out of 82 banks that were solvent as of 1 April 2018.*
*** Excluding accrued interest.*

Source: NBU

Shares of the top-5 banks in the sector's loan portfolio by loan purpose*



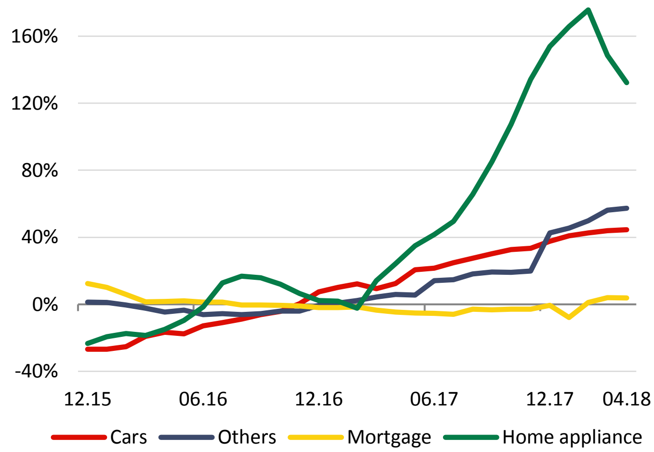
** Top five banks in terms of loans for each purpose Excluding accrued interest.*

Source: NBU

Loans for home appliance purchases are rising at the highest pace (by over 130% yoy). This segment is dominated by PrivatBank and private banks. However, the breakdown by loan purpose is rather arbitrary, since borrowers use unsecured loans (card loans, cash loans and paying by installments) for various purposes, which are impossible to track exactly. Small consumer loans, apart from mortgages and car loans, increased by 50.4% yoy.

About 98% of new loans are consumer loans, and card loans in particular. This is due to these loans having high turnover.

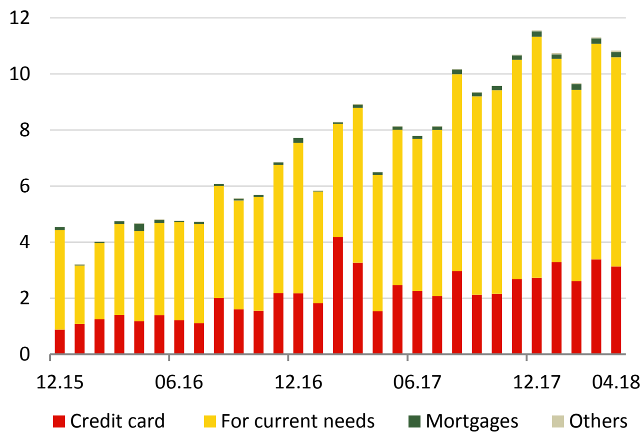
Change in gross hryvnia retail loans by components, yoy



Issued by banks that were solvent as of 1 April 2018.

Source: NBU

New hryvnia loans by purpose, UAH billion

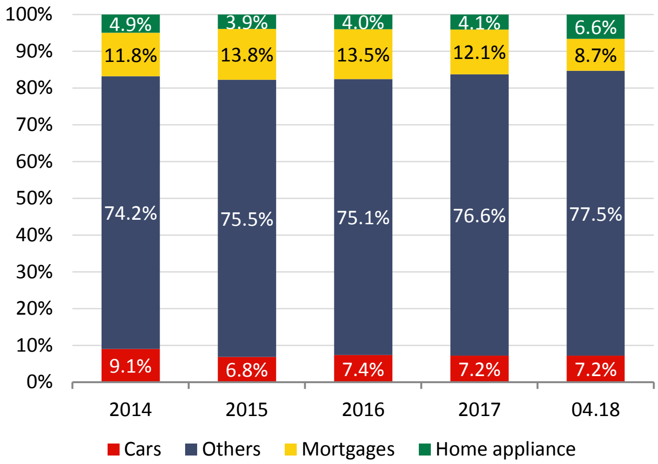


Issued by banks that were solvent as of 1 April 2018.

Source: NBU

Most hryvnia retail loans are granted by PrivatBank and those of foreign-owned banks, in which such loans make a significant part of assets.

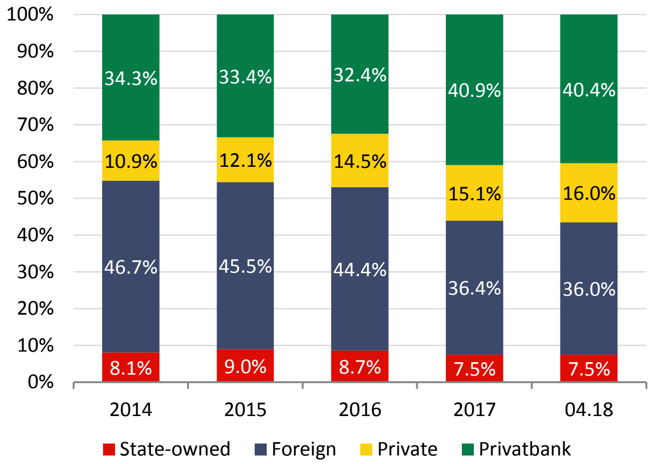
Gross hryvnia retail loans by purpose



Issued by banks that were solvent as of 1 April 2018

Source: NBU

Gross hryvnia retail loans by bank groups

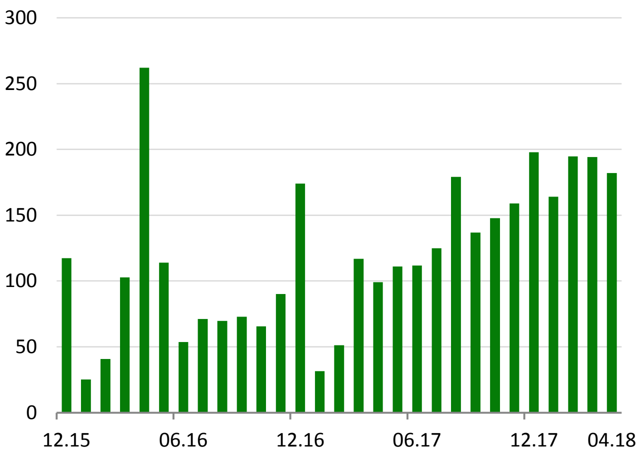


Issued by banks that were solvent as of the reporting date

Source: NBU

At the start of 2018, hryvnia mortgage lending picked up in annual terms for the first time since the 2014 crisis. Although their volume is still small, mortgage loans are now being granted on a more regular basis. There was also an increase in the number of banks that ramped up mortgage lending. For more details about risks from real estate lending, see the special focus “Growth in Mortgage Lending will Continue”. Banks reported a softening in the criteria for approving mortgage loan applications, which will help gradually revive mortgage lending to households.

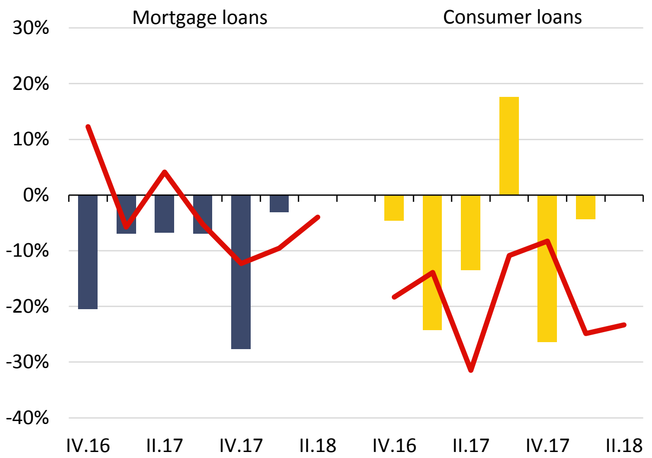
New mortgage loans, UAH million



Issued by banks that were solvent as of the reporting date.

Source: NBU

Changes in the criteria for approving retail loan applications, balance of responses*



** A positive balance of responses indicates a tightening of the criteria for loan application approval. The columns represent quarterly data, with the lines showing expectations for the next quarter.*

Source: Lending Survey

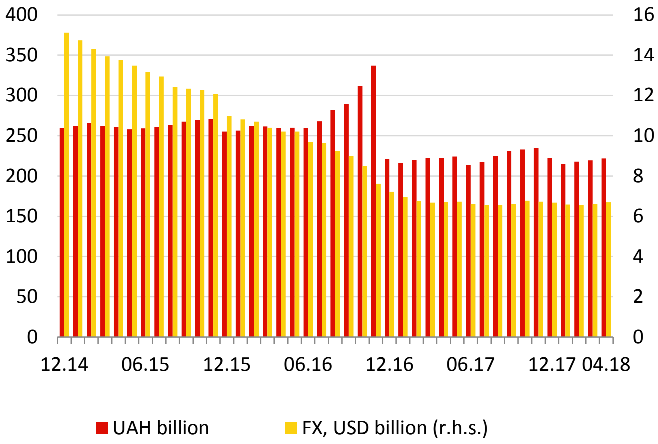
The NBU is carefully following developments on the consumer lending market

In its December 2017 Financial Stability Report, the NBU outlined potential systemic risks that could arise from rapid growth in consumer lending, and said it was prepared to take macroprudential measures to rein in this growth, if required. Since consumer lending currently poses no systemic risks, the central bank does not intend to impose any restrictions in the near future. However, the regulator believes that some banks are not conservative enough in assessing risks from retail loans and making provisions against such loans. The NBU will hold consultations with these banks and will check whether or not their credit risk assessments are accurate. The NBU emphasizes that financial institutions must meet the consumer lending recommendations set forth in its December 2017 Financial Stability Report.

Corporate loans remain practically unchanged

Net corporate loans were practically unchanged year-over-year[7] – hryvnia loans dropped by 0.4% yoy, while foreign currency loans fell by 0.3% yoy in the dollar equivalent. Meanwhile, gross loans to reliable borrowers that have not defaulted in previous periods picked up at a reasonably fast pace – hryvnia loans were up by 26% yoy[8], with foreign currency ones rising by 20.8% yoy in the dollar equivalent.

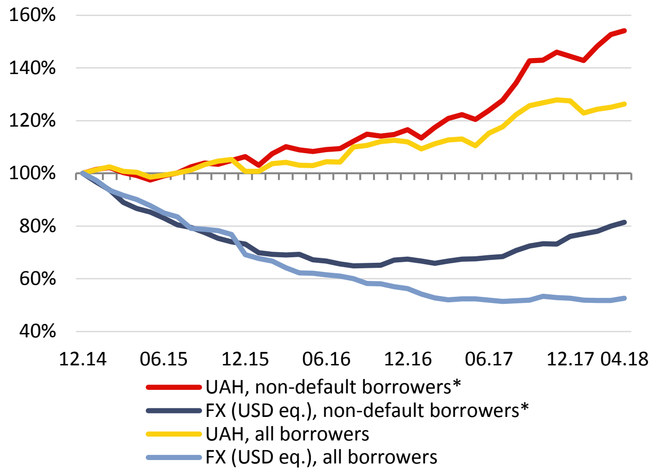
Change in net corporate loans



Issued by banks that were solvent as of 1 April 2018.

Source: NBU

Net corporate loans (excluding loans by PrivatBank), 2015=100%

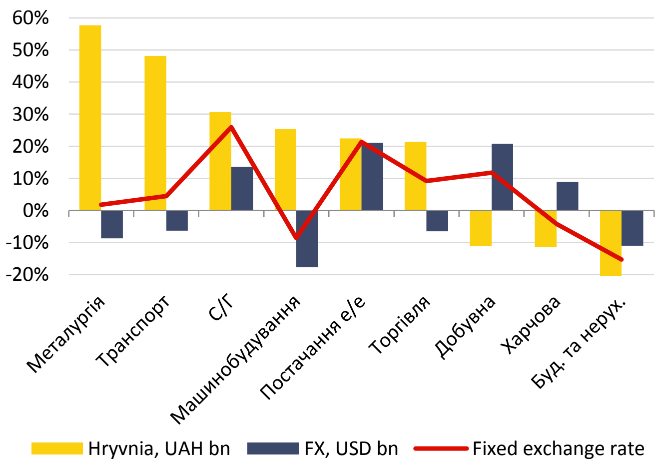


Issued by banks that were solvent as of 1 April 2018.
** Loans to businesses that did not default in 2014–2017.*

Source: NBU

Credit increased for most sectors. The ongoing debt restructuring in the metallurgical sector pushed down the percentage of foreign currency loans, while increasing that of hryvnia loans. In the transportation sector, credit growth was mostly generated by loans to state-owned companies and storage companies. The agricultural sector saw lending growth and several important debt restructurings. However, a decline in lending to the mechanical engineering, construction and real estate sectors slowed growth in the total portfolio.

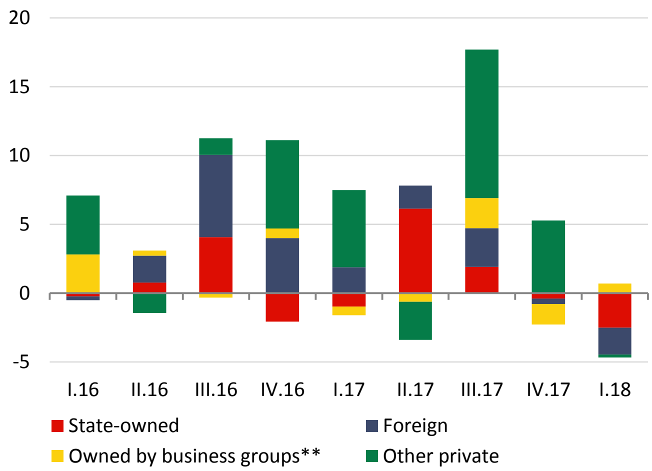
Annual change in net corporate loans as of 1 May 2018*



** Issued by banks that were solvent as of 1 April 2018.*

Source: NBU

Change in net hryvnia loans by groups of non-financial corporate borrowers, UAH billion*



** Issued by banks that were solvent as of 1 April 2018, excluding PrivatBank.*
*** Top 40 business groups.*

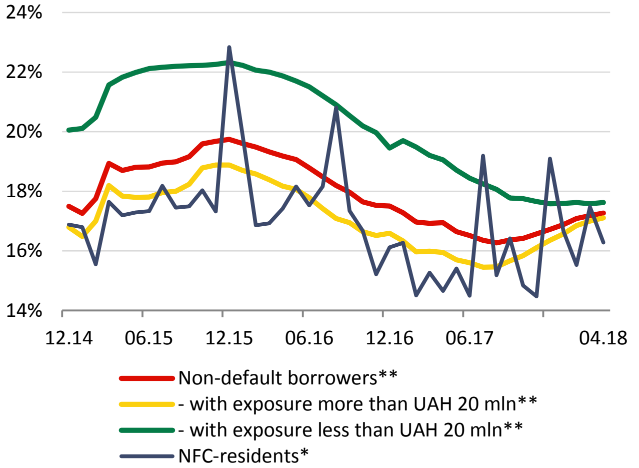
Source: NBU

[7] Issued by banks that were solvent as of 1 April 2018.
[8] Until the end of this chapter, excluding PrivatBank data.

The Q1 2018 Lending Survey reported that overall corporate demand for loans had declined on the back of a sluggish economic recovery and higher cost of credit. However, this was mostly true of large companies. In contrast, interest rates on loans to small- and medium enterprises (SMEs) are falling, with demand for loans remaining high and stable. Lending to SMEs is generally less risky thanks to lower concentration of loans, more reliable borrowers, and better collateral. As banks are interested in lending to this segment, they cut interest rates for these borrowers, despite the general uptrend in loan rates seen in H2 2017 – Q1 2018.

In April, hryvnia loan rates for borrowers that have never defaulted on their loans stood at 17% per annum, while the spread between interest rates on different loan amounts shrank noticeably. In October 2017, the NBU introduced loan reports in terms of borrower size[9]. These reports showed that there were many borrowers with no foreign currency loans.

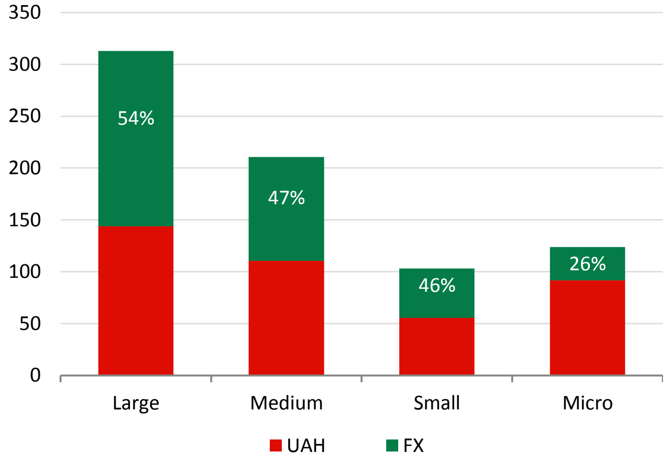
Weighted average interest rates on hryvnia loans, % per annum



** Monetary and financial statistics.*
*** Loans worth a total of over UAH 2 million granted by all banks, excluding PrivatBank, to companies that did not default on their loans in 2014 – 2017.*

Source: NBU

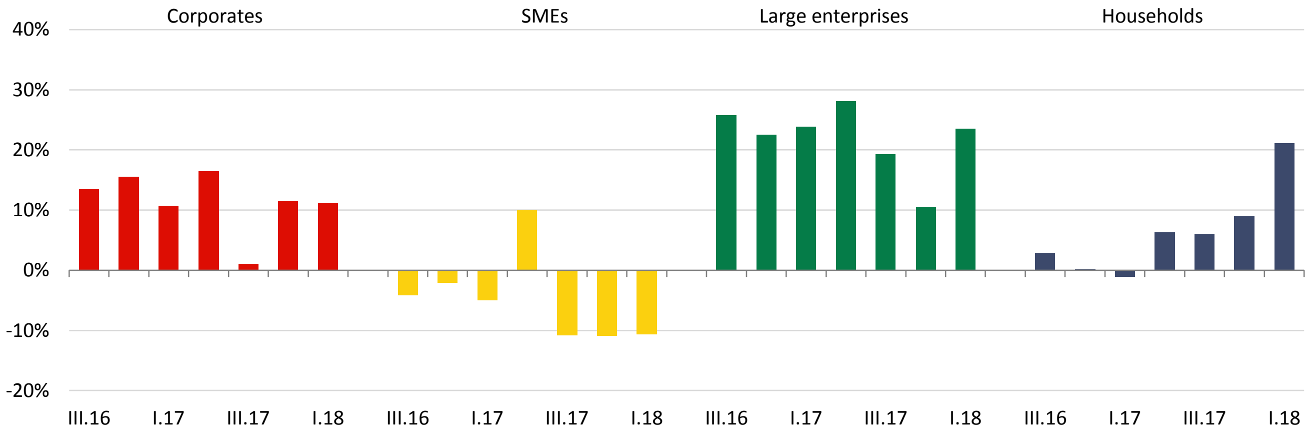
Loans to non-financial corporations by company size and currencies, UAH billion



Source: NBU

A survey of credit managers revealed that the SMEs were believed to be the most promising borrowers. Lenders said that the leverage of these companies was significantly lower than that of large companies.

Current debt burden, balance of responses*



** Higher values of balances of responses correlate with higher values of debt burden. A positive value indicates a high debt burden, while a negative value shows a low debt burden.*

Source: Lending Survey

[9] Companies are broken down into segments on the basis of their staff number and annual income from any activity (Article 55 of Ukraine's Commercial Code). Large companies have an income of over EUR 50 million and employ more than 250 people. Medium companies have an income of up to EUR 50 million and employ up to 250 people. Small companies have an income of up to EUR 10 million and employ up to 50 people. Micro companies have an income of up to EUR 500,000 and employ up to 10 people.

BOX: FINDINGS OF A STUDY OF THE CONSUMER LENDING MARKET

In June 2017, law No. 1734-19 *On Consumer Lending* (the law) came into effect. The law was adopted in November 2016 to protect the consumer rights, and to boost trust between consumers and financial institutions. Throughout 2017 and Q1 2018 consumer lending in Ukraine picked up at a fast pace. It is now possible to analyze how effective the law is under current conditions, how is it affecting the credit market, and whether it is improving the attitude of financial institutions to consumers. To that end, the USAID Financial Sector Transformation Project, together with GFK Ukraine, conducted a range of studies. The first round of studies was carried out before the law came into effect. The second round of studies took place between December 2017 and February 2018. The studies aimed to find out whether financial institutions were compliant with the law six months after it came into effect. Main findings: the disparity between the law's provisions and practice is deeply ingrained and profound. However, there has been some improvement compared to the first round.

The second round of studies comprised:

- a desk study of promotional products. A total of 415 copies of promotional products were analyzed
- mystery shopping[10]. Consumer loans were contracted after 20 consultations, while in 147 other cases no deal was concluded.
- a desk study of agreements. Experts checked the content of agreements and whether they were in line with the information provided before these agreements were signed, as well as whether or not they complied with existing laws
- a desk comparison of the lending practices of banks and non-bank financial institutions. Most of the loans from non-bank financial institutions are not governed by the law (their maturities are less than one month or the amount is smaller than a minimum wage).

A third final round of studies is scheduled for June 2018, a year after the law came into force.

The studies checked the following main provisions introduced by the law:

- No deceptive advertising. The law prohibits advertising interest-free loans and 'loans for everyone', and requires lenders to state the actual annual interest rates in all ads that mention loan costs.
- Lenders are required to provide information before and at the time of signing an agreement. 'Passport of the consumer credit' (product data sheets) is introduced consistent with agreement terms
- Lenders are also required to exercise underwriting procedures.
- No unlawful changes to loan terms and conditions. The law prohibits unilateral altering of agreement terms and conditions or requiring borrowers to enter into an insurance agreement with a given company.
- Limiting penalties on borrowers. The law introduces limits on the amount of penalties and fines.
- The law gives borrowers the right to cancel their loans (apart from car and mortgage loans) within 14 days without giving any reasons, and to repay all loans before they fall due.

The studies revealed the following gaps between the law provisions and practice:

- Although advertising interest-free loans is prohibited, it still occurs in 10% of all cases. There was even a slight worsening compared to the first round of studies (8.8%).
- Ads fail to provide actual interest rates. In 76% of all cases, consultants either give no rate or give the wrong rate in conversation, and in 90% of all cases provide no rate in writing. Only two banks indicated actual annual rates, with other banks giving rates several times lower than the actual one. Same was true for non-bank financial institutions.
- It is common practice to hard sell insurance policies, predominantly leaving the customer with no choice of an insurance company.
- Draft agreements were provided only in 22% of all cases, and product data sheets in 15% of all cases.
- Often consultants misinform about the possibility of cancelling a loan or repaying it before it falls due.

The mystery shoppers revealed that lending procedures were in breach of the law at all lending stages:

- in 100% of the cases, clients were told that they could not choose an insurance company because only one option was available
- in 70% of all cases, discrepancies were found between information provided orally by a consultant and the information written in an agreement or a product data sheet
- in 44% of all cases, considerable discrepancies were discovered between agreements and product data sheets
- in 20% of all cases, financial institutions hard sold additional credit limits
- a total of 10% of all borrowers had to pay additional fees for repaying their loans before they fell due (cancelling their loans).

[10] Specially trained GFK Ukraine employees called for financial institutions (banks, credit unions, financial companies) and pretended they wanted to take a loan.

At the same time, the second round revealed some positive changes compared to the first one:
- loan costs were stated in 28% of all ads (26% during the first round)
- the maximum loan maturity and amount were indicated in 64.7% of all cases (25.8%)
- the actual annual interest rate was given in 18.1% of all cases (0%)
- draft agreements were provided in 22% of all cases (15%)
- borrower rights to repay loans before they fall due were violated in 38% of all cases (54%)
- lenders reserved the right to unilaterally alter agreement terms and conditions in 44% of all cases (58%)
- financial institutions had contractual rights to establish unilaterally the order of repayments in 23% of all cases (38%)
- agreements provided for dispute resolution by a court of arbitration in 23% of all cases (26%)
- lenders reserved the right to disclose bank secrets and borrowers' personal data in 38% of all cases (58%).

The above data show that despite improved statistics, the main problems of the consumer lending market have not been resolved. To address these problems, Financial Sector Transformation Project experts have put forward a range of recommendations, which the NBU also supports:
- requiring banks to draw up model agreements in line with applicable laws, and to check their existing agreements against them
- requiring that financial institutions prepare sectoral codes of conduct in order to set consumer lending rules
- paying special attention to training bank staff (training events, tests, mystery shoppers) to ensure that they provide clients with more accurate information that is also in line with applicable laws
- granting the regulators (the NBU and the National Commission for the State Regulation of Financial Services Markets) appropriate mandate to enforce the Consumer Lending Law. To that end, parliament should pass bill No. 2456-д amending some Ukrainian laws on enhancing the protection of the rights of consumers of financial services. This bill has already passed the first reading. It will provide regulators with necessary tools, such as imposing penalties for failure to provide all the required information before signing an agreement
- establishing a financial ombudsman service as an alternative and unbiased channel for resolving disputes between consumers and financial institutions. That requires passing bill No. 8055, on establishment of the Financial Ombudsman, which is awaiting first reading.

CREDIT RISKS

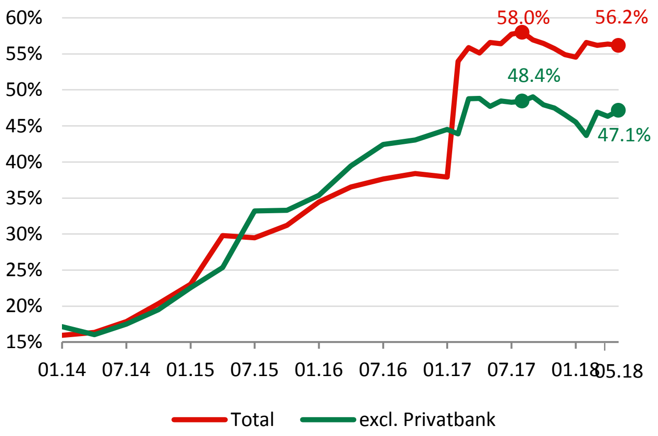
The non-performing loan ratio continues to decline, but at an extremely low rate. Overall, this means that the overwhelming majority of NPLs were made to unscrupulous borrowers, who are unlikely to resume servicing their debt. Under current judicial practice, the banks have no real means of protecting their rights. The low collateral coverage ratio is another significant problem for the sector. It became a factor of the high losses from non-performing loans. Given the low level of creditor rights protection the banks have to extend credit to most borrowers only against high-quality collateral.

The non-performing loan ratio continues to shrink

The non-performing loan ratio shrank during H2 after peaking in July 2017. However, in January 2018 it increased by 2 pp. This was because of a statistical effect of a change in the chart of accounts: the transfer of a portion of unpaid accrued interest income to provisions. These changes should ensure more accurate statistics on NPL ratio. As a result, total assets and non-performing exposures saw a one-time increase, while net assets did not change. Another factor behind the temporary growth in NPLs was the hryvnia depreciation seen at the start of the year that augmented the foreign currency component of the loan portfolio, which has lower quality. A retrospective calculation of the NPL ratio based on the new chart of accounts shows that the historical maximum of this measure would have been about 1 pp higher – at almost 59%.

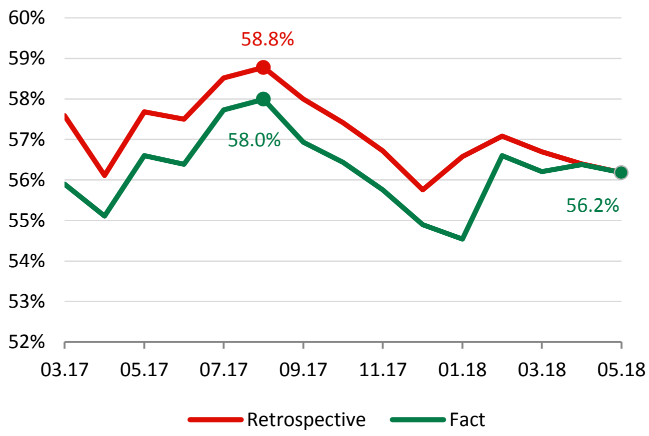
There is a continued trend toward a gradual shrinking of NPLs, even though the rate of fall is low. The share of NPLs is declining mainly due to new loans and the overall growth of the loan portfolio. In terms of value, NPLs were almost flat in late April, at UAH 629 billion (the equivalent of USD 24 billion).

NPL ratio in Ukraine



Source: NBU

NPL ratio*



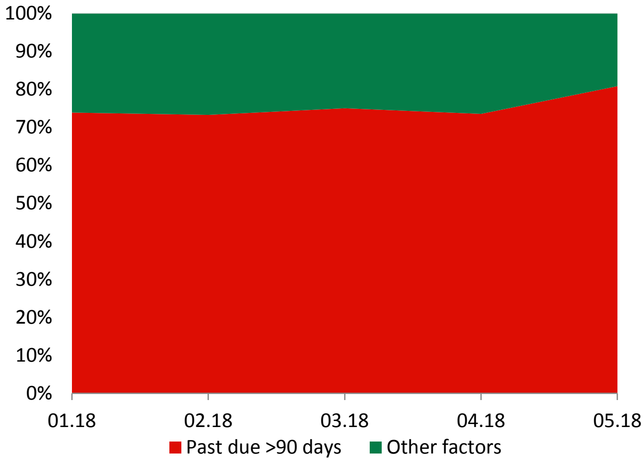
** For retrospective calculation, it was assumed that the current chart of accounts (approach to financial instruments accounting) was previously in effect.*

Source: IMF (financial soundness indicators, FSIs), NBU

90 days past due remains a core trigger of default

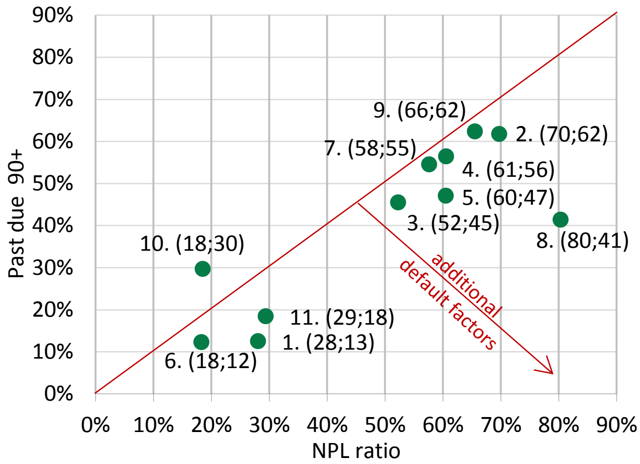
Over 80% of loans qualified as NPLs under the 90 days past due criterion. For most sectors, nearly all NPLs are related to this factor. Agriculture is the only sector where an additional trigger of default prevails: provisions made due to it exceed 50% of NPLs.

Breakdown of non-performing loans by criteria of default



Source: NBU

NPLs and loans 90 days past due, as of 1 May 2018



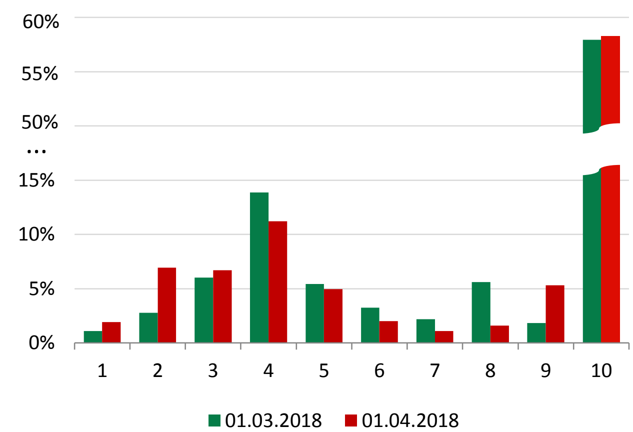
Abbreviations: 1. Agriculture; 2. Mining industry; 3. Food industry; 4. Metals industry and finished metal products; 5. Machinery production; 6. Energy and water supplies, waste management; 7. Other industries; 8. Construction and real estate; 9. Commerce; 10. Transport and telecommunications; 11. Other economic activities. (NPL; 90+)%.

Source: NBU

The quality of performing loans is rising

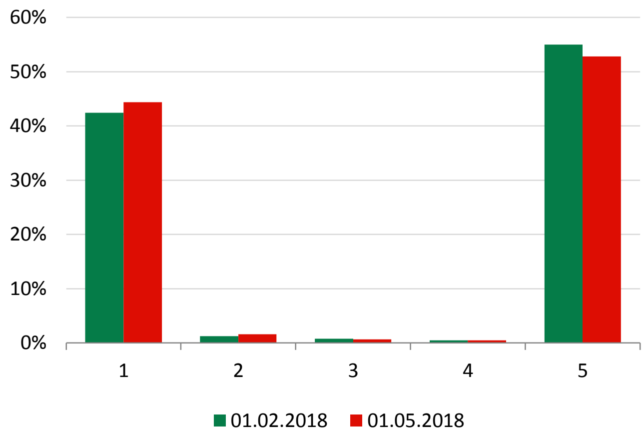
In April 2018, the NBU put in place a new model for assessing borrower default probability for legal entities (for details, refer to the subsection "The NBU is updating its model for assessing borrower default probability" on page 43 of the December 2017 Financial Stability Report). As expected, this shifted leftwards (improved) the distribution of the loan portfolio in terms of borrower classes. The share of the loan portfolio in classes 1–5 increased by 2.5 pp. At the same time, a portion of the loan portfolio migrated from class 8 to class 9, as the new version of Resolution No. 351[11] stipulates that loans with high credit risk characteristics are automatically lowered to class 9 from the previously applicable class 8.

Distribution of loans to business entities by class



Source: NBU

Distribution of loans to households by class



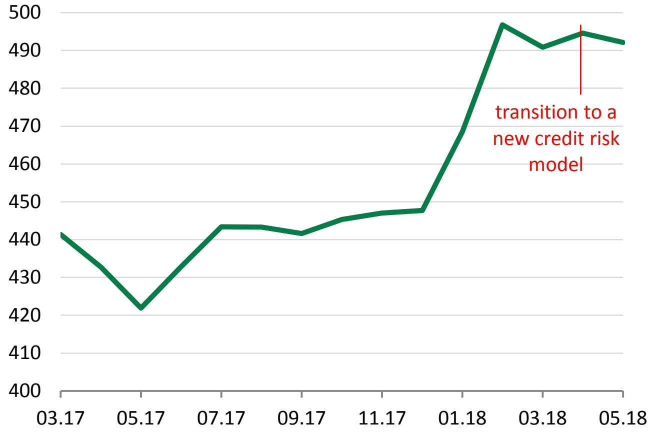
Source: NBU

In addition to the updated scoring model that banks are required to apply new probability-of-default curves to calculate credit risk. The overall impact of these innovations on the size of the credit risk (prudential provisioning) was negligible.

The share of NPLs in retail portfolio is gradually falling thanks to new loans. This trend has continued for several quarters. However, the volume of NPLs has started to pick up gradually in terms of value in recent months, as some of the loans issued post-recession have gone into default.

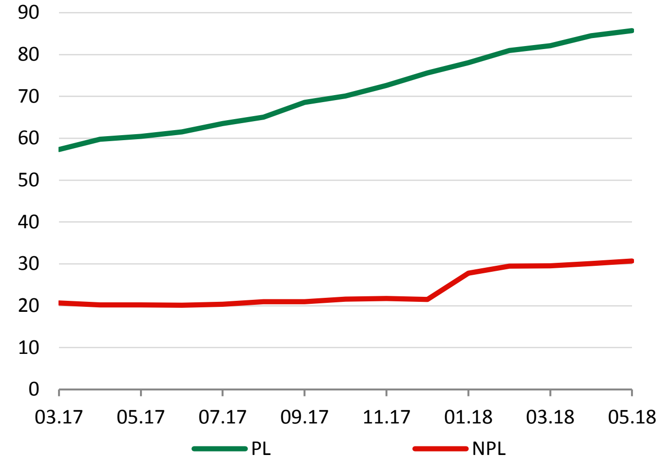
[11] NBU Board Resolution No. 351 *On the Approval of the Regulation for Measuring Credit Risk Generated by Banks' Asset Operations* dated 30 June 2016.

Credit risk (regulatory provisions) on the corporate portfolio, UAH billion



Source: NBU

Non-performing[12] and performing loans in domestic currency, UAH billion



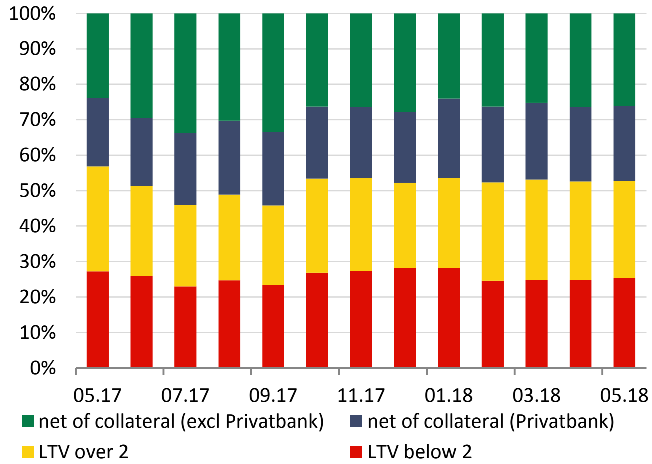
Source: NBU

The collateral coverage ratio for corporate loans remains low

The corporate segment is characterized by high share of unsecured loans or loans with low LTV ratios. Unsecured loans or loans with LTV ratios above 200%[13] make up about 47% and 27% of the corporate loan portfolio, respectively. The significant share of unsecured loans in the sector (21 pp) is a result of the situation at PrivatBank, as its former shareholders converted old loans into new unsecured loans to non-operating companies before its nationalization.

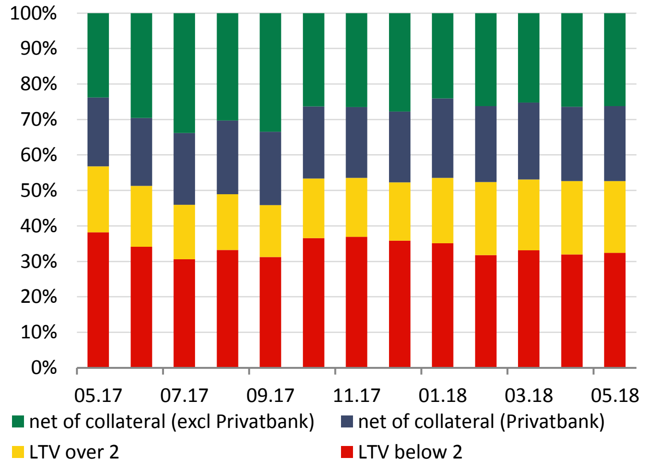
The share of loans with LTV ratios lower than 100% accounts for less than 10% (23% if not adjusted for the liquidity haircuts) for the entire portfolio, and 21% (59% if not adjusted for the liquidity haircuts) for performing loans. This poses a risk of losses to the banks in the case of borrower default and forces them to recognize significant credit risk (to form regulatory provisions).

Loan portfolio by LTV ratio, adjusted for liquidity haircuts



Source: NBU

Loan portfolio by LTV ratio, not adjusted for liquidity haircuts

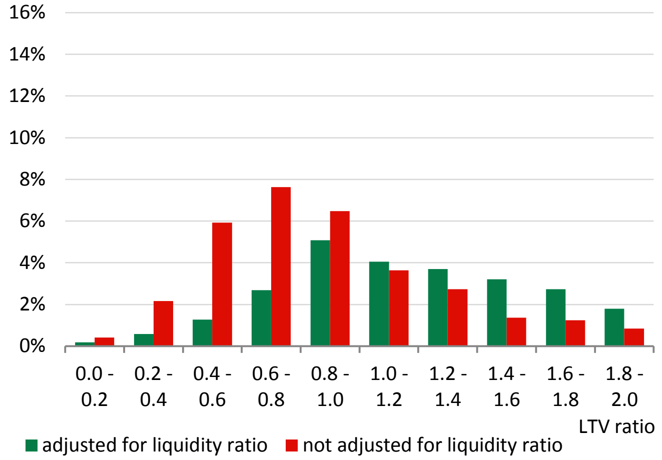


Source: NBU

[12] The reason for January's increase in lending was the effect of a change in the chart of accounts: a portion of unpaid accrued interest income was transferred to provisions in the chart of accounts. This was primarily reflected in non-performing loans with a higher level of unpaid interest.

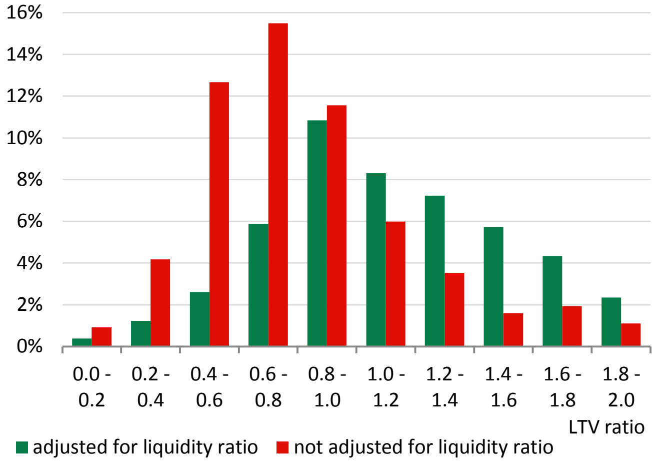
[13] The analysis was conducted for corporate borrowers with loans over UAH 2 million, which represent close to 98% of the banks' corporate portfolio. All of the presented collateral appraisals are based on the liquidity ratios set by NBU Resolution No. 351, unless otherwise specified.

Breakdown of corporate loans by LTV ratio between 0 and 2 as at 1 May 2018



Source: NBU

Breakdown of performing corporate loans by LTV ratio between 0 and 2 as at 1 May 2018

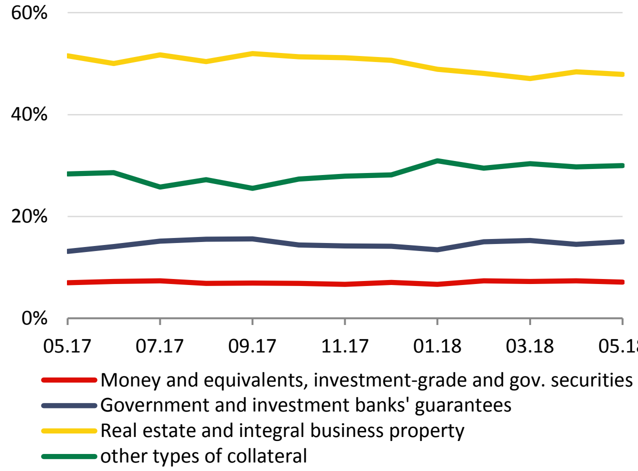


Source: NBU

The bulk of collateral consists of real estate, most of which is non-residential real estate (not including land plots). The share of real estate is gradually shrinking, as the share of other types of collateral such as motor vehicles is increasing.

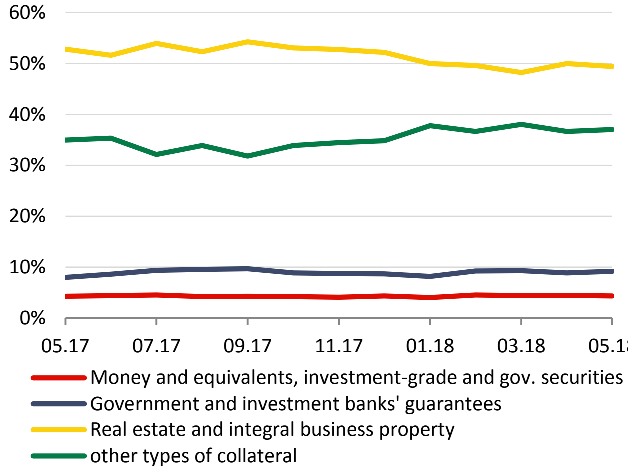
The most liquid collateral in the form of cash, domestic government bonds, and securities, represents a small share of 7%. Government guarantees and investment grade institutions account for a somewhat greater share of 15%. However, both shares are small.

Collateral by groups adjusted for liquidity haircuts



Source: NBU

Collateral by groups not adjusted for liquidity haircuts



Source: NBU

The low level of coverage of loans with eligible collateral that meets NBU requirements indicates at risky corporate lending practices. In the case of default, banks often lack sufficient controls to force unscrupulous debtors to resume repayments. Quality collateral has to become a prerequisite for lending, given Ukraine's low level of creditor rights protection.

Progress on enhancing protection of creditors' rights is extremely slowly

Virtually flat NPL rate indicates that creditors' rights are not properly protected. Legislative measures to increase the protection of creditors' rights and improve judicial practice on NPL resolution are making very slow headway. Adding to the problem is that many banks make little effort to restructure and write off impaired debt. Urgent issues requiring rapid solutions are:

- the adoption of laws necessary to enhance the protection of creditors' rights and create an environment for the introduction of a secondary market for NPLs: the bills *On Debt Management* and *On Amendments to Some Laws of Ukraine Regarding Resumption of Lending*.
- the legislative approval of final conditions for restructuring foreign currency mortgages and lifting the moratorium on foreclosure on collateral pledged under such loans

- more active involvement of banks into the practice of collective restructuring of NPLs to borrowers via the creditor committees. The level of cooperation and dialogue among banks during restructuring is now extremely low, reducing the overall effect of negotiations with borrowers
- the more active application of out-of-court restructuring mechanism under the Law *On Financial Restructuring*
- the introduction of requirements for banks to factor in borrowers' credit histories when calculating credit risk. Going forward, the NBU plans to require financial institutions to downgrade the class of borrowers failing to service loans at other banks. The establishment of the NBU's credit register makes this possible;
- an acceleration in the clearing of bank balance sheets of NPLs. By the end of 2018, the NBU will have drawn up recommendations on approaches to NPL resolution. In addition, the NBU is constantly monitoring progress on NPL resolution at some banks.

BOX: RESULTS OF THE SECOND SURVEY OF BANKS ON EXPECTED LOSSES FROM THE TRANSITION TO IFRS 9

In 2018, the banking system transited to the IFRS 9 standard. Banks are now required to base their loan provisioning on the expected loss principle. In December 2017, the NBU conducted its first survey[14] to find out how the banks were assessing possible loan losses. The survey, which covered 30 banks, concerned expected loss parameters over a horizon of 12 months for retail loans that were at the first stage of assessment according to IFRS 9 – i.e. those that had not seen significant growth in credit risk. The survey found that at that time a significant portion of the surveyed banks were still at the stage of developing models, and their assessments had not been finalized. In addition, there was substantial discrepancies between the banks' assessments of similar loans, which showed there was a need for continued monitoring of the banks' provisioning approaches.

Therefore, in April 2018, the NBU held a broader survey of banks on their assessment of possible losses in the event of borrower default. This time, all of the banks were polled about both retail and corporate loans. Banks provided information on quantitative parameters of expected losses for loans at the first stage (according to IFRS 9) and about an algorithm for calculating the lifetime PD. In Q1, most banks had already finalized their models. An analysis of the survey findings shows that, on average, the banks' assessments of the parameters were not much different from the previous ones, while range of assessments across banks remained wide.

Survey period: 12 March 2018 to 16 April 2018.
Sample: All banks (substantive responses received from 64 banks).
Purpose of the survey: to obtain information on approaches to grouping loans, as well as the parameters and algorithm for measuring expected losses on retail and corporate loans at stages I and II according to IFRS 9.
The banks were requested to:

- provide PD and LGD parameters or the expected loss (EL) for their retail loan portfolios. The banks had a choice of loan grouping criteria (product group and currency), and were also able to add their own grouping criteria to identification of individual portfolios
- provide a description of the criteria for identification of different corporate loan portfolios and their corresponding parameters (PD, LGD, or EL)
- provide a description of the algorithm (formulas) for calculation of lifetime PD.

Main results: 64 banks responded, of which 3 banks said they had not finalized their models and were thus not ready to provide information about expected loss parameters. 7 banks determined their loan parameters on a case-by-case basis, due to a small number of loans. Of the 54 banks that shared their loan portfolio parameters, 34 determined these parameters using statistical methods, 6 used expert judgements, and 14 applied both approaches.

Major criteria used by banks when grouping retail loans into portfolios at stage I:

- product type: mortgages, car loans, consumer loans, card loans, loans to small enterprises, and other. A total of 47 banks used this approach
- loan currency (domestic/foreign). This approach was applied by 32 financial institutions.

Apart from the above criteria, the banks grouped loans according to the past due status, region (Crimea, the ATO zone, and other regions of Ukraine), borrower scores, the availability of collateral and LTV rate, the loan amount, and so on.

Consolidated findings of the bank survey (for retail loan portfolios)

	12-month Probability of Default (PD), %					Loss Given Default (LGD), %					Expected Loss (EL), %**				
	2017 Average	2018* Average	2018 Average	2018 min.	2018 max.	2017 Average	2018* Average	2018 Average	2018 min.	2018 max.	2017 Average	2018* Average	2018 Average	2018 min.	2018 max.
Consumer loans	5.1%	6.0%	7.5%	0.0%	41.9%	81.2%	75.9%	76.7%	0.0%	100.0%	2.6%	4.6%	5.7%	0.0%	41.9%
Car loans	9.5%	3.2%	3.6%	0.2%	14.9%	47.8%	61.8%	59.1%	11.4%	100.0%	2.2%	2.0%	1.8%	0.1%	7.8%
Mortgages	5.1%	3.6%	6.4%	0.0%	38.9%	51.9%	58.0%	55.5%	1.0%	100.0%	6.1%	5.4%	4.7%	0.1%	61.0%
Small enterprises	6.3%	17.3%	5.4%	0.1%	35.3%	59.3%	54.0%	54.5%	0.0%	100.0%	3.0%	3.8%	2.7%	0.0%	18.2%
Card loans	-	5.0%	5.7%	0.1%	33.0%	-	81.2%	79.5%	1.0%	100.0%	-	3.6%	4.2%	0.0%	24.9%
Other	-	3.6%	4.9%	0.0%	15.0%	-	87.5%	82.2%	59.0%	100.0%	-	3.2%	3.4%	0.0%	13.7%

** The values given are for the sample of banks that participated in the 2017 survey.*
*** The level of expected loss in the table does not equal the multiplication of the PD and LGD, as the banks provided some assessments without breakdowns by PD and LGD; also, the maximum/minimum estimates of PD and LGD may have been provided by different banks.*

Compared to the results of the first survey, the average expected loss values grew for consumer loan portfolios, but declined slightly or remained almost flat for all other product groups. The growth in expected loss values is primarily seen due to the change in the PD parameter. The range of parameters estimated among the banks that took part in both surveys remained practically the same. All assessments vary significantly across the banking system. For past due loans, the assessment of expected loss is 30 pp higher on average than for loans that are serviced on time (the smallest difference is between car loan assessments, at 8.8 pp).

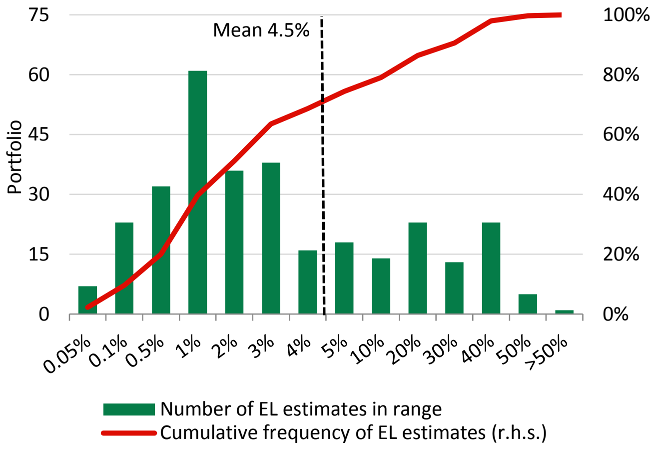
[14] The findings of the first survey are outlined in the December 2017 Financial Stability Report.

Major criteria used by banks when grouping corporate loans into portfolios at stage I:

- borrower class (rating) in line with Resolution No. 351. Ten banks used this parameter in their models
- loan currency (domestic/foreign). Six financial institutions used this approach.

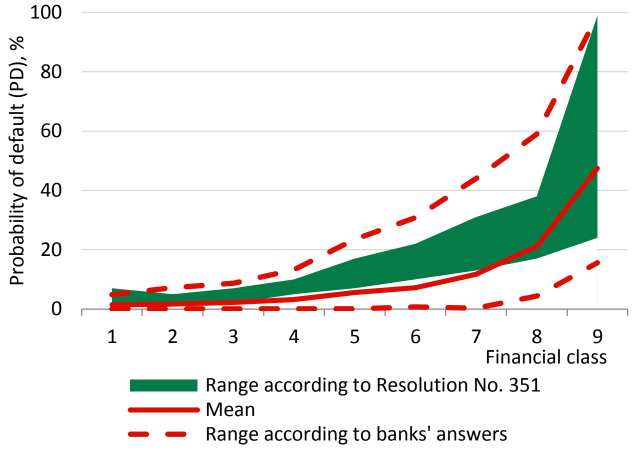
Other criteria applied by the banks in order to group loans were: economic activity, the size of the company, existence and duration of past dues, the region (Crimea, the ATO zone, other regions of Ukraine), borrower rating according to the bank's internal model, and so on.

Distribution of expected losses (EL) for corporate loans at stage 1 by portfolios



Source: NBU

PD assessment when corporate loans are grouped into portfolios by financial classes



Source: NBU

Approaches to grouping corporate loans in order to assess expected loss parameters differ considerably from bank to bank: there are currently 718 different portfolios. Grouping based on financial classes defined by Resolution No. 351 is popular (137 portfolios). However, the assessments of probability of default for IFRS 9 provisioning are, on average, below the lower boundary of PD ranges applied for measuring credit risk (regulatory provisions). The average expected loss across the banking system is estimated at 4.5%, which is a product of the probability of default at 9%, and loss given default 48%.

Of the 57 banks that responded to the question about their algorithm for calculating the lifetime PD, responses from only 44 of them contain a correct description of the procedure. Migration matrices are used most often (18 financial institutions). The banks also use simple cumulative probability of default formulas (9 banks), regression models of probability of default using macroeconomic indicators (12 banks), and adjusting coefficients (5 banks). Few banks have developed combined algorithms that allow the calculation of cumulative probability of default under different assumptions about future changes in macroeconomic parameters, or they provide only a general description of such algorithms. Sometimes, the banks apply PD ranges incorrectly to financial classes under Resolution No. 351: they cannot be treated as approximations of lifetime PD, as they are calculated for a horizon of 12 months.

Key findings:

- There is still a sizable variation in PD and LGD assessments between banks and, thus, in their EL projections for similar loan portfolios. Therefore, the NBU expects the banks to improve their models to increase the convergence between these parameters.
- The banks that took part in the first survey had since then improved their models, somewhat increased their assessments of expected losses on retail loans.
- Some banks lack the information to measure expected losses statistically. That is why they determined the value using expert opinion, primarily in the case of the LGD parameter. This problem is widespread in world practice. The problem should be solved after financial institutions collect the required statistical data.
- The banks' criteria for grouping corporate loan portfolios differ markedly, however the largest inconsistency arise due to the use of internal rating systems.
- Some financial institutions have still not finally approved their approaches to determining expected loss parameters.

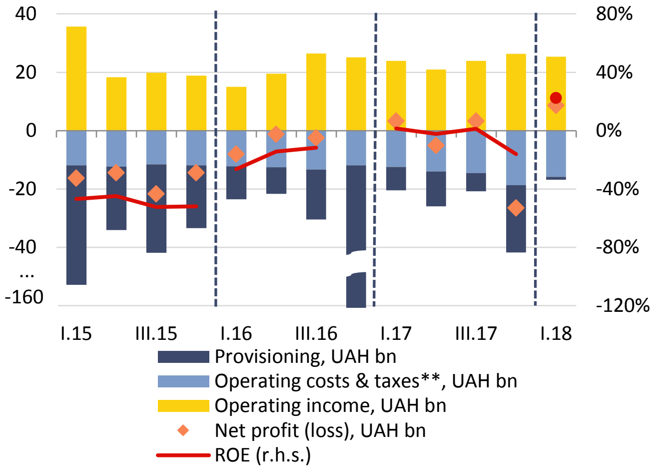
Profit or Loss and Capital

In Q1 2018, the banking sector posted high profits thanks to a sizable decline in provisioning. This compensated for the decrease in equity caused by the transition to IFRS 9. The sector's operating profit shrank: the increase in net interest income and fee and commission income has offset bigger operating costs and trading losses. As the NBU expects that provisioning will remain low in the absence of significant shocks. This will boost the sector's return on equity to over 10% in 2018.

The profitability of the banking sector is on the rise

In Q1 2018, the banking sector's net earnings increased by 2.7 times yoy to reach UAH 8.7 billion. This was driven by a decline in provisioning, which was as low as UAH 1.1 billion, the lowest quarterly result since 2013.

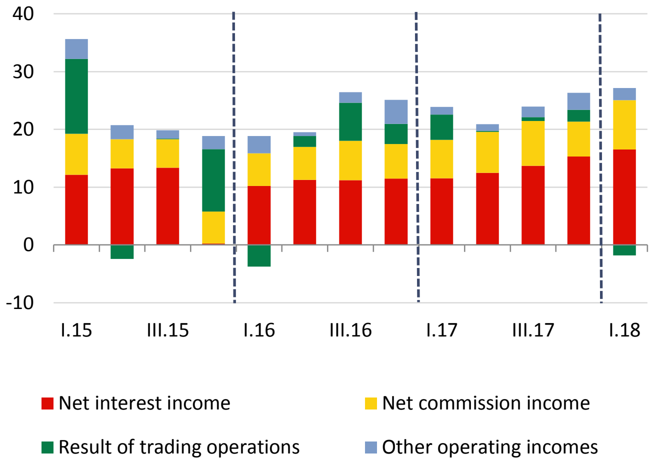
Financial result components* and return on equity



** Volumes per quarter.*
*** Including income tax.*

Source: NBU

Operating income*, USD billion



** At banks that were solvent as of the end of each period.*

Source: NBU

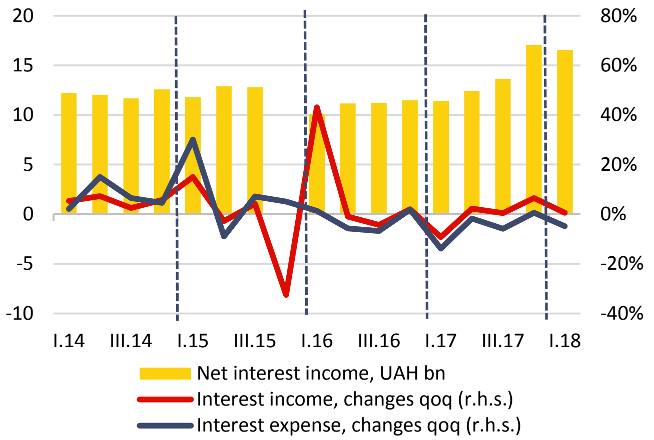
The sector's operating income grew by 6% yoy thanks to an increase in net interest income and fee and commission income. However, this growth was offset by rapidly rising operating costs (up by 25.2% yoy) and trading losses caused by the re-evaluation of indexed domestic government bonds held by state-owned banks.

Net interest income and fee and commission income are growing rapidly

The sector's net interest income rose by 43% yoy, mainly on the back of a substantial decrease in funding costs, especially the cost of retail deposits – interest expenses on retail deposits declined by 17% yoy. Higher yields on retail loans and coupon payments on domestic government bonds compensated for the lower income from corporate loans.

Foreign-owned banks take the lead in terms of the ratio of interest expenses to interest income (32%) thanks to extremely low funding costs, as their deposit interest rates are the lowest on the market. This ratio is the highest at state-owned banks (not including PrivatBank) – this is the only group with almost no changes in this indicator. PrivatBank's ratio declined to 52% in Q1 2018 from 94% in Q1 2017 due to a notable decrease in deposit interest rates.

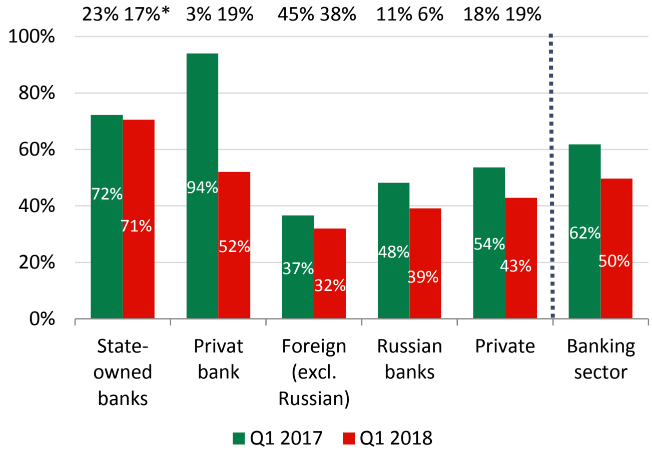
Interest income and interest expenses*



** At banks solvent as of 1 April 18; the absence of net interest income in Q4 2015 and a spike in Q4 2017 are the effects of the transition to IFRS standards and accounting changes.*

Source: NBU

Interest expenses to interest income ratio



** The share of net interest income in the sector; at banks solvent as of 1 April 2018*

Source: NBU

Same as in 2016, last year a number of banks saw a large difference between their accrued and received interest income. This was in part due to the fact that the accrual and receipt of income do not occur at the same time, especially for domestic government bonds with coupon payments made twice a year. Nonetheless, the difference should not be large for the full year. However, the difference still exists, being mostly the product of the incorrect reporting of loan portfolio quality, when banks accrue interest on loans that are not serviced. Financial institutions with a significant difference between these indicators must become more diligent in reporting of their loan portfolio quality.

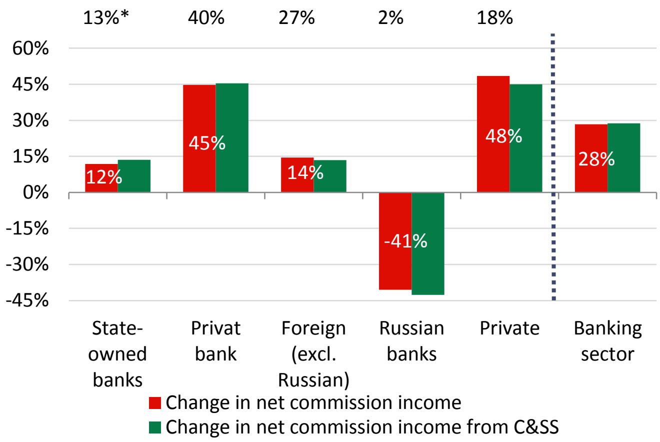
Discrepancies between actually paid and accrued interest incomes at the 25 largest banks

Source: banks' financial statements, NBU estimates

In Q1, net fee and commission income increased by 28.3% yoy, primarily driven by the stronger demand from households and businesses for banking services, particularly for new loans, which generate new fee and commission income. An increase in cashless payments has led to larger volumes of operations that generate fees and commissions. In addition, some large banks raised their fees for cash and settlement services.

PrivatBank showed the highest growth in fee and commission income, by 45% yoy. The bank's share in the sector's fee and commission income increased by 4.2 pp yoy to 40.4%, substantially exceeding its shares by net assets (19.8%) and branches (23.5%).

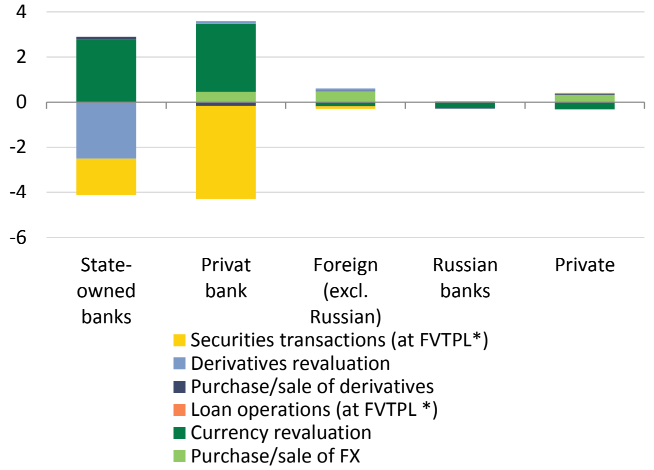
Change in net fee and commission income by bank groups in Q1 2018, yoy



** The group's share of the sector's net fee and commission income; at banks solvent as of reporting date.*

Source: NBU

Components of the result of re-evaluation and purchase-and-sale transactions by bank groups, 1Q 2018, UAH billion

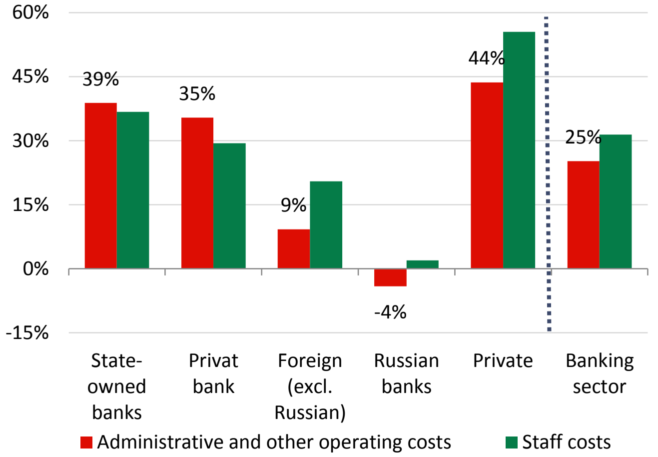


** At fair value through profit or loss.*

Source: NBU

Trading losses partially offset the growth in net interest and fee and commission income. The transition to IFRS 9 changed the rules for assessing derivatives, particularly those for indexed bonds. The key economic parameters of assessment models changed as well (the current and expected exchange rate, risk-free rates in Ukraine and abroad), which reduced the fair value by more than UAH 8.1 billion.

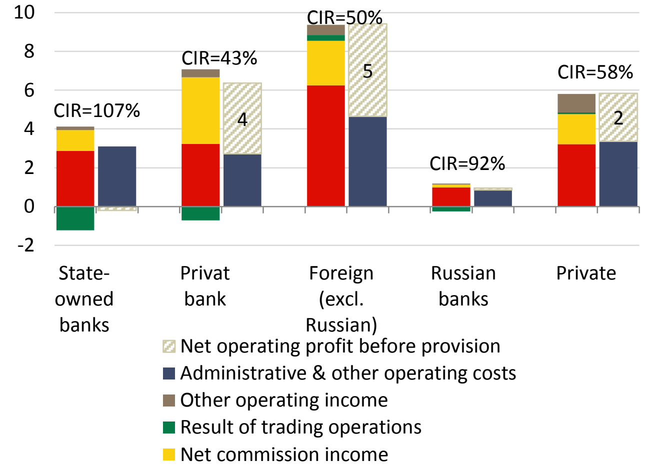
Change in administrative and other operating expenses by bank groups*, Q1 2018, yoy



** At banks solvent as of reporting date.*

Source: NBU

Components of operating income and expenses by bank groups, Q1 2018, UAH billion



Source: NBU

The difference in the banks' operating performance widened

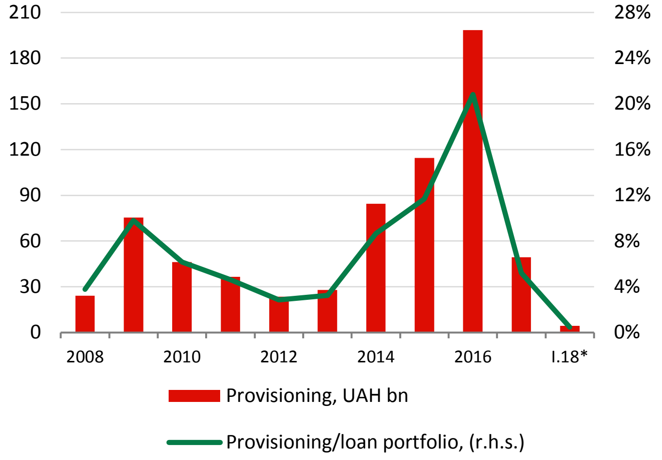
The sector's net operating profit before provisioning dropped by 13.3% yoy, to UAH 10.8 billion. In Q1 2018, the average operating performance was worse than last year: the cost-to-income ratio (CIR) was 57.9% vs 49.0% one year ago. Out of 82 financial institutions, 19 incurred a net operating loss before provisioning (compared to 14 in Q1 2017), including one state-owned bank. On the other hand, banks with CIRs of less than 50% accounted for 54% of the sector's net assets.

Provisioning is declining

Provisions for the expected impairment of the loan portfolio totaled UAH 1.1 billion in Q1. The ratio of provisioning to the gross loan portfolio was as low as 0.5%. This was due to the release of provisions for restructured loans by several banks, as the borrowers resumed the servicing of their debts. If macroeconomic expectations remain unchanged, the level of provisioning charges in the sector in 2018 will probably be the lowest for the past decade.

In Q1, 14 banks made losses (versus 18 in 2017). Three of them made a small operating profit but suffered an overall loss due to provisioning.

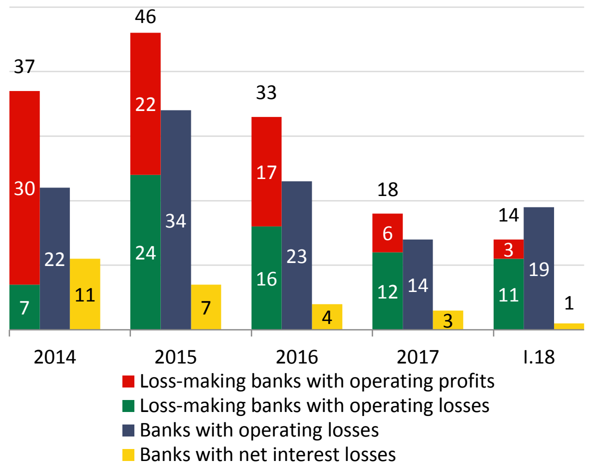
Provisioning



The provisioning level is annualized.

Source: NBU

Distribution of loss-making banks*



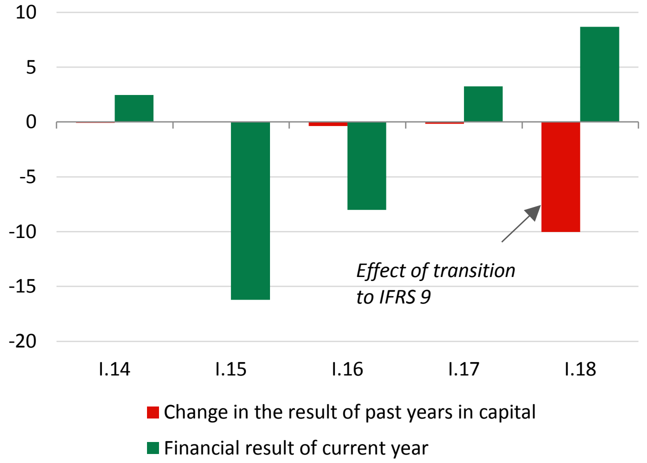
** At banks that were solvent as of the end of each period; operationally profitable banks are those that reported a pre-provision operating profit.*

Source: NBU

The transition to IFRS 9 did not have a significant impact on the banks' capital

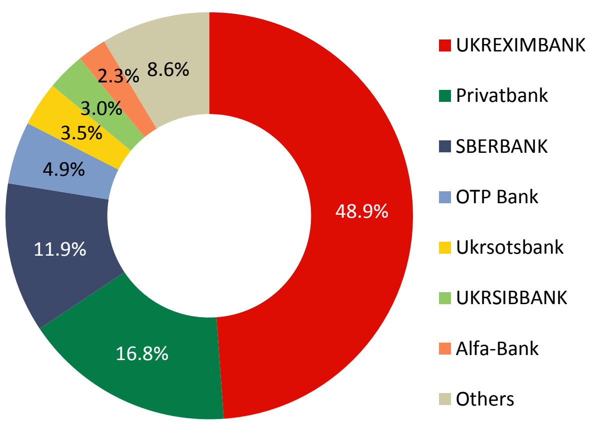
The negative effect of the introduction of IFRS 9 on the banking sector amounted to UAH 10 billion. That is how much the banks' accumulated losses from previous years have increased since the start of this year. These losses were driven by provisioning for expected loan losses that are assessed at stages 1 and 2 according to IFRS rules, and increasing provisions for impaired loans (stage 3). Q1 net earnings almost completely offset this effect. Several banks will finalize their transition to IFRS 9 in Q2, so assessments of the impact of the new standard on financial statements are preliminary, and may undergo significant revision.

Impact of the transition to IFRS 9 on profit/loss of previous years



Source: NBU

Decline in the previous years' net profit/loss of the sector driven by the transition to IFRS 9, by banks

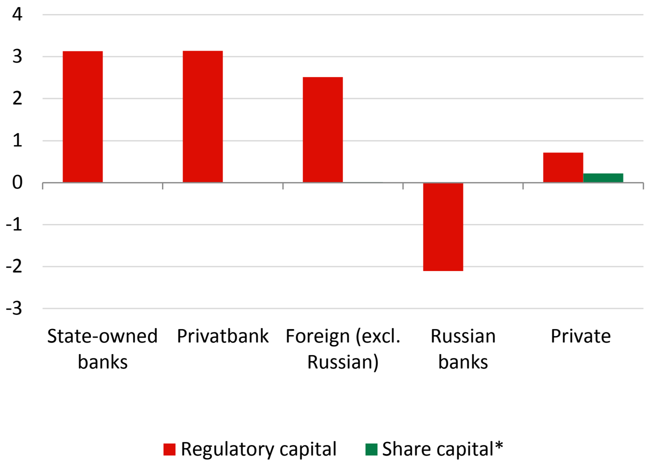


Source: NBU

The banks' capital adequacy is sufficiently high

In Q1, the sector's regulatory capital grew by UAH 7.6 billion, or 6.2%, on account of net earnings. Contributions to the share capital equaled UAH 0.2 billion. The sector's total capital adequacy exceeded the minimum requirements. As of the end of March, 63 banks out of 82 had a capital adequacy ratio of above 15%.

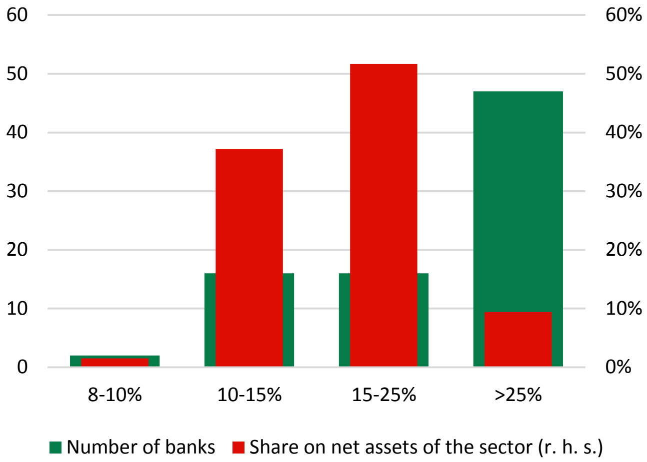
Changes in capital by bank groups in Q1 2018, UAH billion



** Registered and unregistered authorized capital.*

Source: NBU

Banks by the level of capital adequacy (N2) as of 1 April 2018



Source: NBU

CHANGES IN THE REGULATORY ENVIRONMENT

There were several important changes in the regulatory environment in Q1 2018. The Verkhovna Rada adopted the law on establishing and maintaining the NBU Credit Register. The first steps were made to reform the corporate governance at banks through increasing the role of independent members of supervisory boards.

The centralized Credit Register was created

In February 2018, the parliament adopted the Law of Ukraine *On Amendments to Certain Laws of Ukraine on Establishing and Maintaining the Credit Register of the National Bank of Ukraine and Improving Credit Risk Management of Banks*. The Credit Register is an information system established and maintained by the NBU. It allows banks to obtain data about servicing of borrowers' loans at other banks. The law stipulates that information on credit exposures above 100 minimum wages must be submitted to the Credit Register. Banks access the register data in real time and free of charge. The NBU defined the organizational and legal framework for operating the Credit Register, in particular the procedures for banks and the Deposit Guarantee Fund to submit and remove information, for banks, individuals, and legal entities to obtain data from the Credit Register, and for keeping the register of requests.

The introduction of the Credit Register provides banks with new opportunities for assessing and continuous monitoring of credit risks. This reduces the likelihood of lending to bad borrowers. The NBU will use the Credit Register for regular recalibration of the PD and LGD ratios applied by the banks in assessment of credit risks. The Credit Register will promote effective monitoring of concentrations of credit risk in the system.

At first, the Credit Register will offer information for reference. Later, the NBU will oblige banks to consider the register information while calculating probabilities of default (PD). Banks will have to downgrade the borrower's class if the borrower is not current on his or her loans at other banks.

The guidelines for corporate governance at banks were approved

The Law of Ukraine *On Amendments to Certain Legal Acts of Ukraine on Facilitating Business and Attracting Investments by Issuers of Securities* came into force at the start of 2018. This was an important step in the corporate governance reform at banks. The law canceled the requirement to banks to incorporate only as public joint-stock companies. Banks may chose the type of their joint-stock company depending on their way of raising capital. At the same time, information disclosure requirements remained the same as for public joint-stock companies, and corporate governance requirements enhanced. In particular, the supervisory board's role in running the bank increased as a scope of issues was outlined that are in the board's exclusive competence and that cannot be delegated to other committees of the bank (except for issues escalated to a general shareholders' meeting upon the board's own decision). Furthermore, the minimum number of independent directors on a bank's board was increased (to at least one third of the total number of members and no less than three persons); and requirements concerning their independence were enhanced.

The law changes the NBU's approach to assessing the professional aptitude of bank managers: the strict formal requirements to education and experience were replaced with a comprehensive professional aptitude assessment based on the person's education, including additional professional training and previous experience – particularly managerial experience. The assessment will take into account the bank's business plan and strategy, as well as the manager's scope of responsibility according to his/her position.

Annual assessments of the banks' resilience was launched

The NBU launched a process of annual assessment of the resilience of financial institutions and the entire banking system. The assessment is to be held as of 1 January of every year starting from 2018. The assessment comprises three stages:

- auditors' check of the quality of the banks' assets and the eligibility of collateral against lending operations;
- extrapolation of the results of the stage one to the bank's portfolio and assessment of the bank's capital adequacy;

- top-down stress testing based on baseline and adverse macroeconomic scenarios over a three-year horizon.

All banks will have to undergo stages one and two of the assessment. The NBU defines the list of financial institutions that go through stage three based on each bank's impact on the stability of the banking system.

In 2018, stage three comprises 25 banks accounting combined for over 90% of the banking system in terms of assets. If the assessment reveals that a financial institution's capital adequacy ratios are below the NBU's requirements, this institution will be obliged to develop a recapitalization program or an action plan for maintaining or recovering its capital. The results of the assessments will be published on the NBU's website by the end of the respective year. This tool will help the regulator to detect not only current but also potential risks that banks may face.

Short-term liquidity requirements to Ukrainian banks have been harmonized with acquis communautaire and Basel Committee recommendations (Basel III)
In February 2018, the NBU adopted a new prudential requirement for banks – the Liquidity Coverage Ratio (LCR). The ratio is in line with international approaches to gauging liquidity and is familiar to international investors. Worldwide, in the EU in particular, the minimum LCR is set at 100%. In order to determine the time banks need to comply with this value the NBU will make test calculations over six months, starting from June 2018. Starting from December, the LCR requirement will become mandatory, and will be calculated on a daily basis. Liquidity requirements N4, N5, and N6 will apply in parallel with the LCR for a while. Most banks should not have any problems in complying with this requirement, considering the existing excess liquidity in the banking sector and the high yields on government securities, which are high-quality liquid assets.

The NBU expanded the scope of bank information subject to disclosure
The NBU has obliged banks to publish the readings of their economic (prudential) indicators and regulatory capital components on their websites no later than the 10th day of every month. The financial institutions must also publish the data on retail and corporate loans broken down by borrower class, and the trial balance for the reporting month. The increase in the scope of publicly available data on the banks' financial standing will enhance their transparency in the interest of investors, creditors, depositors, and other customers. For users' convenience, the NBU will also publish consolidated information on banks on its website.

Approaches to credit risk assessment improved
The NBU fine-tuned the algorithm for calculating credit risk (prudential provisions) by:
- updating the parameters of the logistic model and the PD ranges that banks apply to assess the financial standing of corporate borrowers. The updates took into account the new financial data of legal entity-borrowers and current economic trends;
- requiring that the NBU to validate the financial institutions' rules for calculating PDs, so that they can set PDs below average of the range for each class of borrower. The banks will have to justify their approaches to calculating PD and prove the high quality of statistics they use to calculate PD;
- changing the rules for taking into account collateral while calculating credit risk (prudential provisions). In particular, the value of collateral for non-performing loans can be included in the calculation in full only for the first two years that a loan is in default. After that, it will be gradually amortized and, after the loan is in default for four years, the collateral value will be disregarded at all. Moreover, the retrospective calculation of asset default duration has been canceled (asset default calculation starts from the beginning of 2017, that is, from the moment Regulation No. 351 took effect);
- setting requirements to collateral appraisers who may assess collateral for the purposes of calculating credit risk.

The procedure for L/C operations was updated
Starting from April 2018, the banks handle transactions with hryvnia and foreign currency letters of credit (L/C) in compliance with the UCP 600 international rules. The new L/C procedure reduces the number of formal instructions for handling these transactions, and allows banks and their clients to use electronic documents at any stage of the transaction.

RECOMMENDATIONS

Financial stability requires cooperation between all financial market participants – the NBU, banks, non-bank financial institutions, and market regulators – as well as the active support from the state authorities. The NBU puts forward its recommendations to the state authorities and banks, and announces its goals and intentions for the near future. Most of the recommendations from the previous issues of the Financial Stability Report remain relevant.

Recommendations for the state authorities

Expedite the approval of bills that are necessary for enhancing the effectiveness of the banking sector and the financial market as a whole:

the bill *On currency* (No. 8152). This bill contains a conceptually new approach to foreign exchange regulation and supervision. It will speed up foreign exchange market liberalization and cancel the ineffective provisions of the current legislation. The adoption of the bill will create an environment that is more comprehendible and favorable for investors and ensure the free movement of capital, as Ukraine undertook to do under the EU-Ukraine Association Agreement

the bill *On lending recovery* (No. 6027-d). This bill seeks to enhance the protection of creditors' rights. In particular, it will improve out-of-court settlement instruments, reduce the evasion from loan liabilities when inheriting a borrower's property, and make alienation of mortgaged property impossible without the consent of the lender. The adoption of the bill will allow banks to loosen their requirements on potential borrowers, which will lower the cost of credit

the bill *On improved functioning of the financial sector* (No. 8331). This bill will introduce independent professional supervisory boards at state-owned banks, and make radical changes to the principles and mechanisms of their corporate governance. This should boost their competitiveness and effectiveness, and make them attractive for privatization by foreign investors. In addition, the bill eliminates legal loopholes in the organization of cash circulation, the DGF's mandate in terms of finalizing a bank's liquidation procedure, etc.

the bill *On consolidated regulation of the financial services market* (No. 2413a). This bill envisages a distribution of mandate of the National Commission for the State Regulation of Financial Services Markets between the NBU and the National Securities and Stock Market Commission. This will ensure effective supervision over both the banking sector and the non-bank financial services market, which will raise the quality of financial market regulation.

the bill *On bankruptcy* (the Bankruptcy Code of Ukraine, No. 8060). This bill will enhance the protection of creditors' rights, reinforce the execution of contracts and court rulings, improve procedures for selling borrowers' property at auctions, and regulate the mechanism for restoring the solvency of individuals who are in financial distress and in need of state aid

the bill *On protection of rights of financial services consumers* (No. 2456-d). This bill regulates the relations of individuals with banks and financial companies according to European practice, particularly in terms of fair advertising and the disclosure of information about financial services. The bill will also set rules for application of electronic documents and remote service channels, and promote the use of state-of-the-art technologies in financial services. Its adoption will strengthen the trust of financial services consumers in the banking system and create conditions for sound retail lending.

The NBU hopes that, apart from these documents, draft laws on the following issues will also soon be submitted for parliament consideration:
- on debt management. This bill is to introduce a new category of non-bank financial institutions, asset management companies, and sets out the legal framework for their operations
- on certain aspects of banking regulation. This bill will improve corporate governance in banks, in particular by enhancing the role of supervisory boards, and widening the scope of the NBU's mandate on consolidated banking supervision, and facilitate data refinement in identification of related parties.

Resume full-scale cooperation with the IMF

In 2018–2020, Ukraine will need to refinance a large portion of the government's external debt. This is impossible without resuming cooperation with the IMF and other official lenders. Parliament has fulfilled one of the IMF's two main requirements, having approved draft law No. 7440 *On the High Anti-Corruption Court*. Now Ukraine has to comply with the other requirement by bringing gas prices up to market levels. Delaying structural reforms creates high risks to financial stability and long-term economic growth in Ukraine.

Recommendations to banks

Intensify resolution of non-performing loans (NPLs)

Some banks are gradually solving the problem of NPLs by restructuring them, particularly in line with the Law *On Financial Restructuring*. However, there is no systematic progress in this as of today. Many bad debtors do not service their loans even when their financial standing improves. Banks should put additional effort into workout with financially sound but dishonest debtors. In addition, they should make more use of the mechanism of voluntary out-of-court financial restructuring, primarily collective restructuring actions (creditor committees, coordination committees). The NBU requires financial institutions to develop and actively implement NPL resolution plans. The NBU will prepare a regulation on impaired debt resolution by banks by the end of the year.

Adequately assess borrower credit risk

In April, the NBU carried out a survey of how banks measure expected losses (read more in "Box: Results of the Second Survey of Banks on Expected Losses from the Transition to IFRS 9"). It showed persistently significant variation in financial institutions' assessments of the probability of default (PD) and loss given default (LGD), which are expected loss (EL) parameters in accordance with IFRS 9. This difference is especially marked for consumer loans and mortgages. Some banks lack data to measure EL statistically so they employ expert judgement. Some financial institutions have still not finalized their approaches to determining EL parameters. The NBU expects that the banks will upgrade their models in future and their expected loss parameters will become more coherent.

Revise business models at banks that are persistently loss-making

There still are financial institutions that post operating losses, and some of them have done so for several years. This indicates that their business models are not effective. These banks should recover their profitability as soon as possible – first of all by cutting their operating costs, optimizing their retail networks, and limiting top managers' remuneration. According to the SREP-based approach to supervision, banks with unviable business models are subject to stricter supervision. The NBU will keep a close eye on how these banks implement their business restructuring programs.

Improve the management of non-core assets obtained during the crisis or sell them

Banks received a great deal of pledged property as they recovered collateral on NPLs. At some of them, the amount of investment properties on their balance sheets exceeds one third of their net assets. In most cases, this real estate yields no income but generates sizeable management and maintenance expenses. Therefore, the banks should cleanse their balance sheets of non-core assets through selling non-performing real estate or leasing it on arm's-length terms.

The NBU's plans and intentions

Introduce a new capital contingent convertible instrument

The NBU plans to implement a new capital instrument – a type of subordinated debt that will be a part of core capital. The conditions of its issue will envisage that, if the core capital adequacy ratio falls below a certain level, this instrument is to be fully written off or converted into ordinary shares of the bank. It will be classified as additional tier 1 capital according to Basel III and acquis of the EU, and will fit the specifics of Ukrainian legislation. The introduction of this core capital component will give the banks more room to increase their capital and will be the first step towards bringing their regulatory capital structure into line with Basel III and EU acquis communautaire.

Introduce a risk management system at banks

In order to bring risk management standards at Ukrainian banks closer to best international practice, the NBU has adopted the Regulation *On Organizing Risk Management Systems in Banks and Banking Groups of Ukraine*. The regulation changes the principles of risk management in banking, and establishes mandatory minimum requirements for organizing a comprehensive, adequate, and effective risk management system that complies with Basel recommendations. The NBU expects that, by the end of this year, the banks will have made certain preparations – in particular, established risk management committees of boards and compliance units, ensured they have sufficient staffing, and defined the powers and responsibilities of persons engaged in risk management. The NBU will provide methodological support and monitor the phased implementation of the regulation.

Launch review of banks’ internal credit risk assessment rules

The NBU will soon check and validate the banks’ internal methodologies for determining the borrower probability of default (PD), which is used to calculate credit risk (prudential provisioning). In order to obtain the NBU’s validation, a bank must ensure that the methodology is drawn up correctly and its PD calculation is based on the bank’s own experience and internal transaction statistics for at least the last five years. Banks whose methodology was validated by the NBU will have the right to set PD values below the medium range established for each financial class. This should prompt financial institutions to develop their own effective methodologies. Overall, the planned changes should improve the quality of credit risk assessment. Banks that are unable to ensure proper quality will have to meet stricter provisioning charges.

Publish results of the annual assessment of banks' resilience

The NBU will disclose findings of the annual resilience assessment of banks and the banking system by 31 December of the reporting year. It will contain the results of the diagnostics, as well as information about banks’ actions to settle their capital issues from the time the diagnostics are completed. In particular, the central bank will publish capital adequacy assessments under baseline and adverse scenarios, the impact of all capital increase measures, and the impact of measures to lower credit risk.

Improve bank registration and licensing procedures

In H2 2018, the NBU plans to introduce completely new approaches to bank registration and licensing that is in line with EU acquis and the standards of the Basel Committee on Banking Supervision. It will adopt a new regulation on bank licensing, which will improve approaches to the NBU’s appraisal of the business reputations of financial institutions’ managers and qualifying shareholders. The NBU will have a right to declare the business reputations of these persons imperfect. The regulation will strengthen independence checks of independent bank directors, and will introduce tests to check their knowledge of corporate governance. It is planned that the NBU will conduct a comprehensive analysis of the financial standing of the banks’ potential qualifying shareholders and their groups of companies (focusing on the ultimate beneficial owner), applying professional judgment and a risk-oriented approach. There will also be major changes in the processes of bank licensing, registering banks’ standalone units, approving the acquisition/increase of qualifying holding in a bank, and so on.

SPECIAL FOCUS

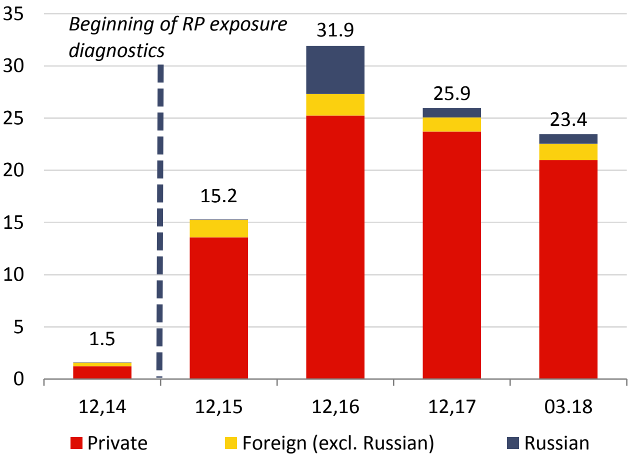
RELATED PARTY LENDING: NEVER AGAIN

Lending to related parties (RP) was common practice for Ukrainian banks for many years[15]. In the past, the legislation and the way it was applied did not allow RP lending to be properly identified and restricted, so it occurred on a large-scale and was covert. This generated significant risks, which were realized during the last crisis. As elsewhere globally, RP are non-operating companies or enterprises with weak financials. The last crisis quickly made RP debts non-performing, which became a powerful driver for instability in the financial sector and caused significant losses to the state, regular bank customers, and the economy as a whole. At present, the issue of RP lending is not crucial for the system. Banks that have such loans are winding them down under the strict NBU's oversight. However, the NBU continues to track and monitor banks' transactions with RP. NBU will tighten further the rules on working with RPs for financial institutions.

RP lending was a common and covert practice

Many banks were actively lending to related parties for a long time[16]. This was a common and widespread practice, which lasted for years. Ukrainian legislation and NBU regulations did not limit these operations in practice, as they provided only formal criteria for RP identification. Hence, loans that were in fact issued to RP were not duly reported as such by the banks. As a result, as of mid-2015, the total volume of RP loans declared by all banks was just UAH 1.5 billion.

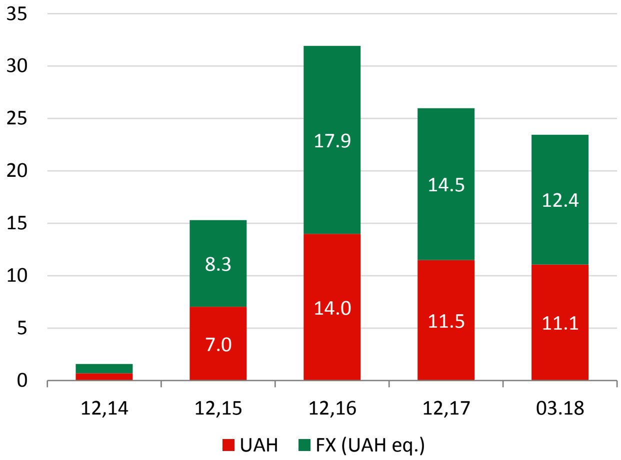
Gross RP loans issued by banks, UAH billion



Solvent banks as of 1 April 2018 (excluding state-owned banks and PrivatBank).

Source: NBU

Gross RP loans broken down by currency, UAH billion



Solvent banks as of 1 April 2018 (excluding state-owned banks and PrivatBank).

Source: NBU

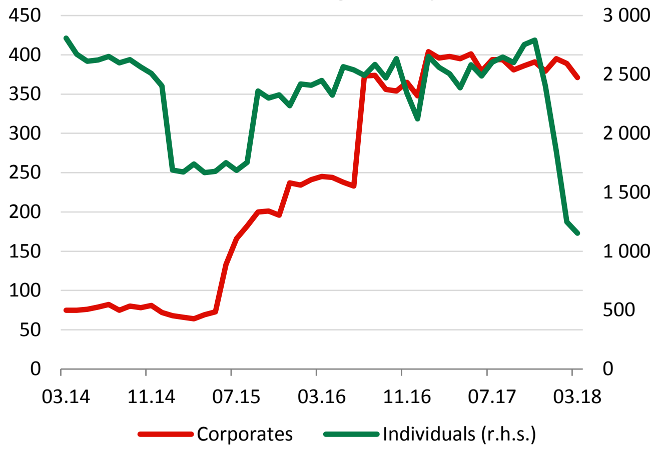
In times of economic growth, RP lending was not an obvious problem. Although such loans were usually made on non-market terms, RP serviced their debts and the banks formally complied with all norms and requirements. However, RP lending entailed huge hidden risks that manifested later. It limited financial resources for unrelated businesses that could have used them much more effectively by paying banks market interest rates and properly servicing their debt, and thereby making the economy more stable and dynamic. The loans were often allocated to inefficient, risky, and eventually unprofitable investments, which created high risks for banks and the economy as a whole.

The above risks fully materialized during the economic crisis of 2014–2016. The financial condition of the business groups that made up the banks' RP deteriorated, and their ability to properly service their debts decreased sharply. When the legislation and the NBU's regulations were amended in 2015, obliging financial institutions to issue loans to RP market terms and gradually wind them down, many bank owners and their related parties decided that it made more sense to let the banks fail than repay RP loans or refinance their businesses at other

[15]The analysis given herein excludes PrivatBank to present more representative trends.
[16]Related parties are individuals and businesses that are directly or indirectly related to the operations and management of a bank, in particular to the bank's shareholders or top-managers. A detailed list of RP attributes is given in Article 52 of the Law of Ukraine *On Banks and Banking* and Chapter 3 of NBU Resolution No. 315 *On Approval of the Regulation on Identifying a Bank's Related Parties*.

banks on much less advantageous terms. This led to large problems in the banking sector, including an excessive load on the Deposit Guarantee Fund (DGF), and caused losses to the budget and clients of financial institutions. If RP lending had not been on such a large-scale, the number of banks withdrawn from the market could be much less.

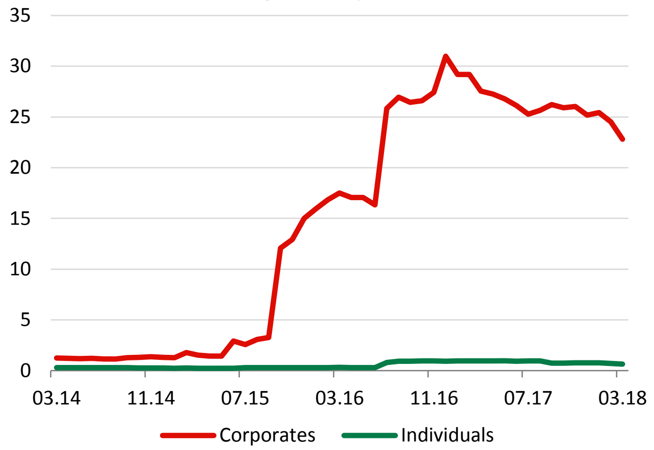
Number of RP borrowers recognized by banks*



** Solvent banks as of 1 April 2018 (excluding state-owned banks and PrivatBank). RPs with loan amounts above zero.*
The number of individuals related to banks fell at the start of 2018 due to legislative changes regarding the status of the heads of standalone bank units.

Source: NBU

Gross loans to RPs recognized by banks, UAH billion

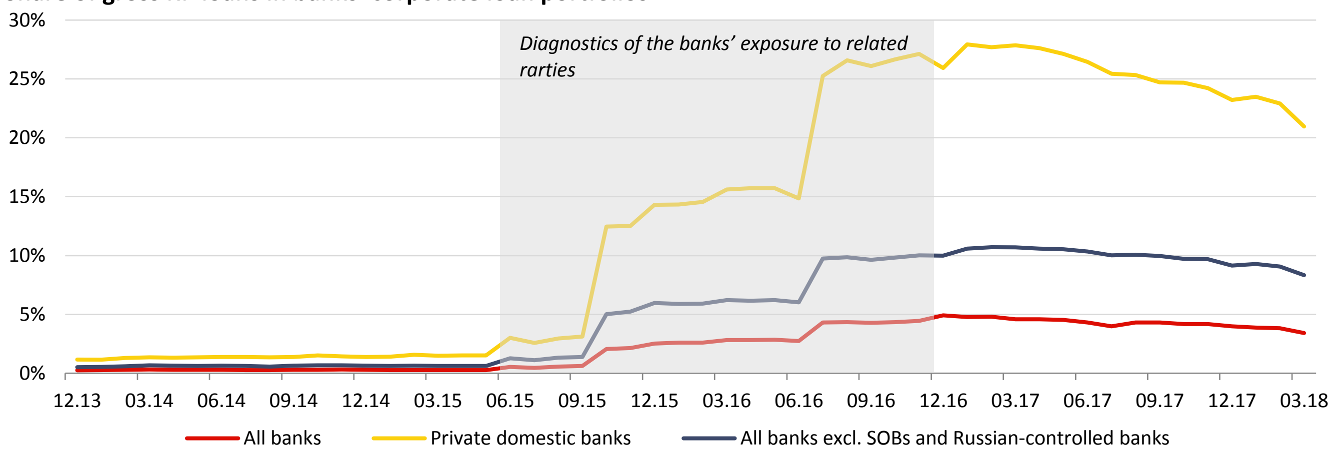


Solvent banks as of 1 April 2018 (excluding state-owned banks and PrivatBank).

Source: NBU

The diagnostics of RP lending showed that it was a big problem for private domestic banks
The NBU conducted a diagnostics of the banks' exposure to related parties in 2015–2016[18], after having made radical changes to the RP identification rules. The diagnostics revealed a number of important issues.

Share of gross RP loans in banks' corporate loan portfolios



Solvent banks as of 1 April 2018 (excluding PrivatBank).

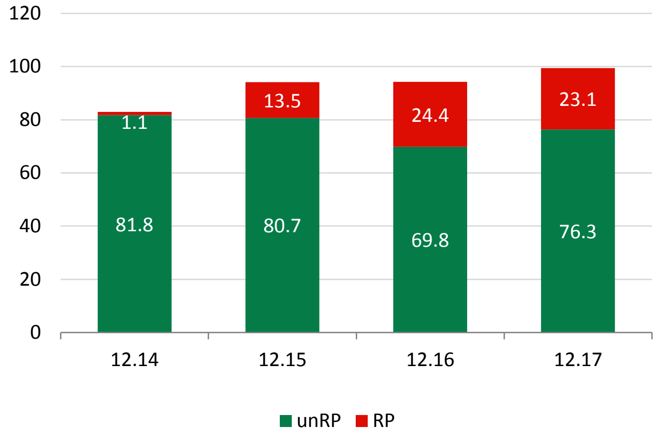
Source: NBU

The actual RP lending volumes were much higher than those reported by banks earlier. By the end of the diagnostics, such loans totaled UAH 31.9 billion, excluding those issued by banks that failed before the diagnostics were completed. The banks generally declared loans issued to related individuals correctly – that is loans to owners, managers, and employees – but they substantially understated the debts owed by businesses related to the banks' shareholders. The highest concentration of RP loans was found in private Ukrainian banks. The diagnostics showed that the share of RP debt exceeded 25% of the corporate loan portfolios of these banks. This figure was much lower at other banks. At foreign-owned banks, RP are normally the banks' managers and employees, and the volume of such loans is negligible. At the same time,

[18] Read more in Box: Diagnostics of the Banks' Exposure to Related Parties.

state-owned banks issued large volumes of loans to state-owned enterprises, although they do not classify these borrowers as RP. This is in line with international practice, the NBU's rules, and IFRS requirements.

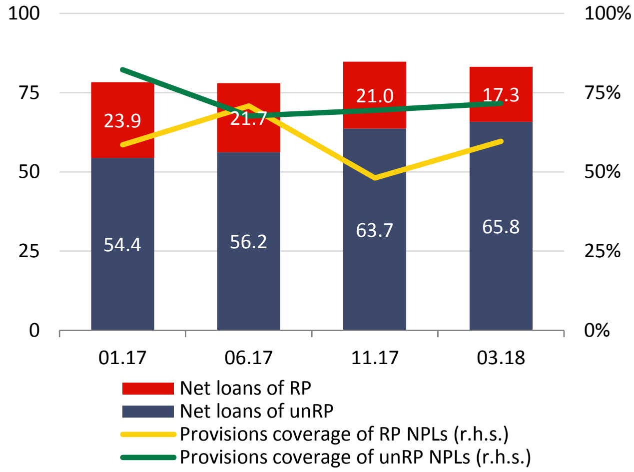
Gross loans issued by private Ukrainian banks, UAH billion



Solvent banks as of 1 April 2018.

Source: NBU

Net corporate loans and provisioning for non-performing loans at private Ukrainian banks

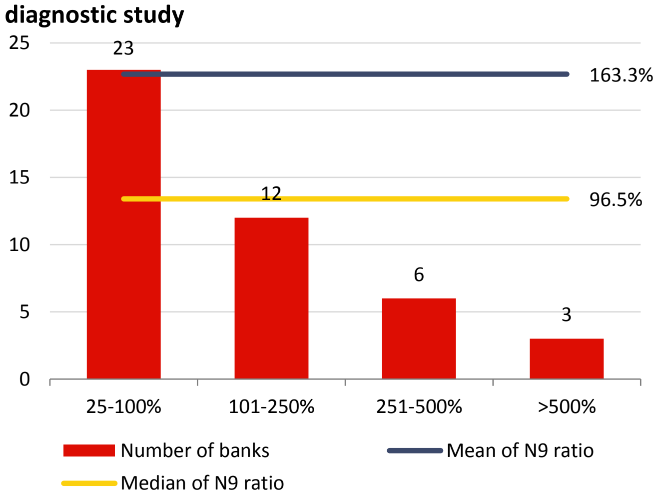


Solvent banks as of 1 April 2018.

Source: NBU

RP loans were regularly issued to non-operating companies with low sustainability
The diagnostics revealed that 44 banks exceeded the N9 requirement, that is the volume of their RP loans was more than 25% of their regulatory prudential capital. In some cases, this was a result of a sharp drop in their capital ratios during the crisis. However, in many banks, the reading of N9 was several times above the regulatory requirement.

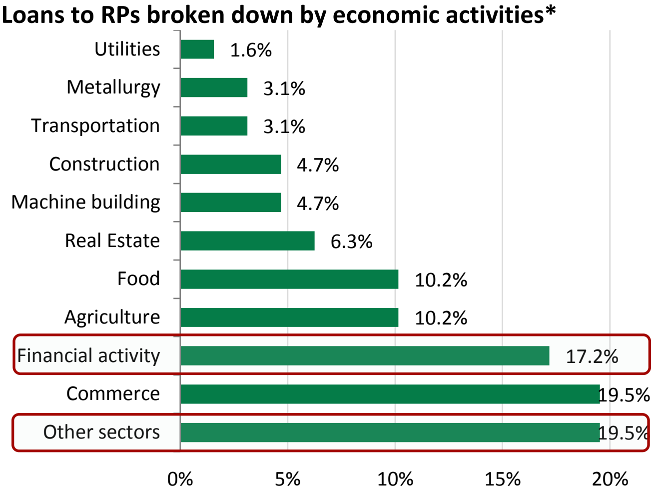
Banks that were in violation of N9 as of the end of the diagnostic study



Source: NBU

Typically, concentration of RP loans was high at Ukrainian banks belonging to financial-industrial groups (FIG) that provided loans to other group members. As a rule, the RPs that received the banks' loans were financially weak borrowers or non-operating "shell" companies established for taking the loans. This way, the FIG attempted to conceal the fact that these borrowers belonged to the group, and to complicate the collection of debt in the case the lending failed. Financial reports certify this: 37% of RP borrowers stated that they were in "financial operations" and "other" economic activities, while only 19% of regular borrowers carry out these types of activities.

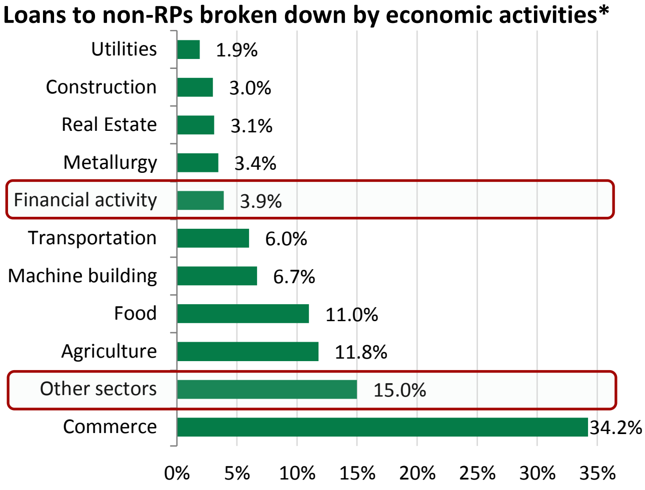
Loans to RPs broken down by economic activities*



** As of 1 March 2017.*

Source: SSSU, NBU estimates

Loans to non-RPs broken down by economic activities*

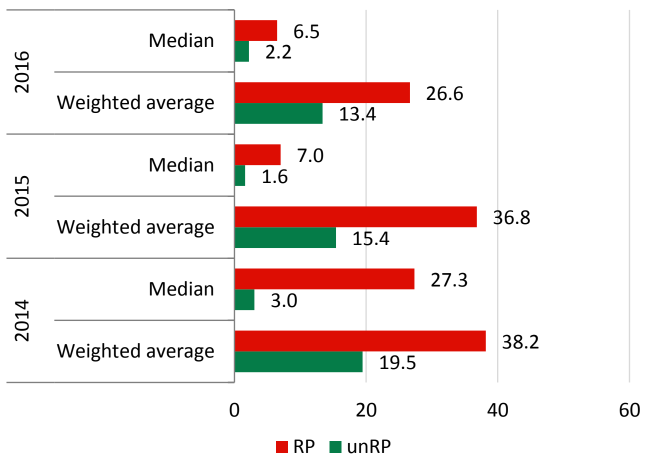


** As of 1 March 2017.*

Source: SSSU, NBU estimates

Legal entities related to banks generally have weaker financial performance than those unrelated that received loans on arm's length terms. The leverage (net debt to EBITDA ratio) of RP is more than twice as high as that of non-RP borrowers. Companies with negative EBITDA in 2016 accounted for 63% of RP loans[19].

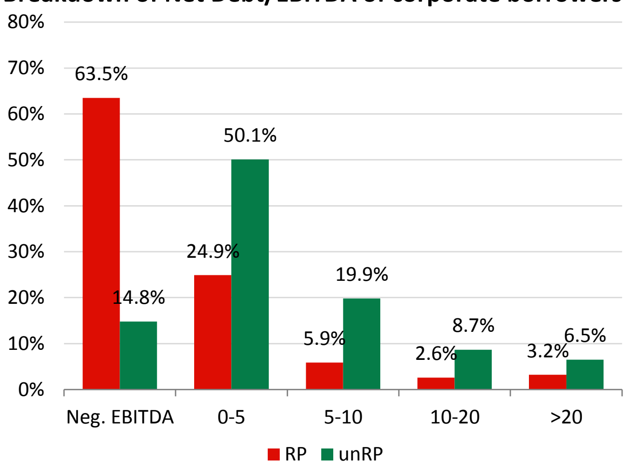
Net debt to EBITDA of corporate borrowers*



** Indicators were weighted by loan amounts as of 1 March 2017.*

Source: SSSU, NBU estimates

Breakdown of Net Debt/EBITDA of corporate borrowers*



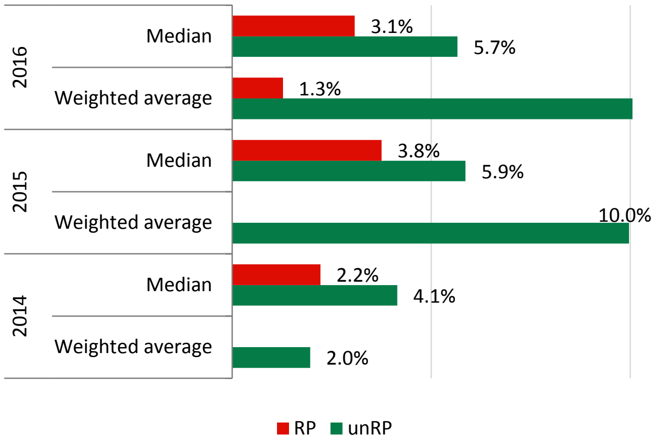
** Indicators were weighted by loan amounts as of 1 March 2017.*

Source: SSSU, NBU estimates

Overall, the profitability of banks' RP is lower than that of regular borrowers. In 2014–2015, the weighted average EBITDA of RP was negative. In addition, these companies have a larger share of non-operating elements on their balance sheets compared to unrelated borrowers. A deliberate overstatement of the total assets is also a sign of a lack of operational activities.

[19] The companies' financial reports for 2017 were not available at the time of this report's publication.

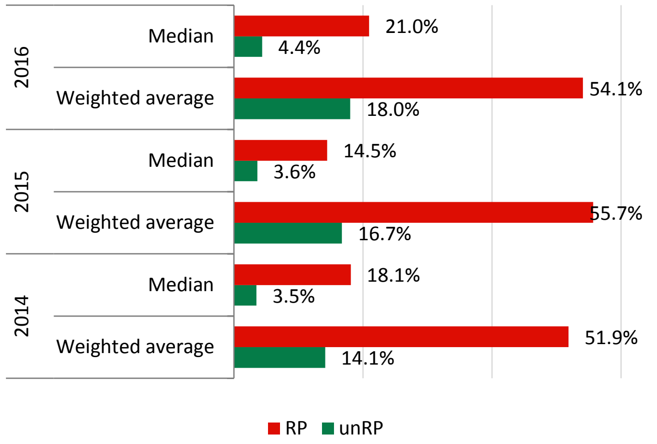
EBITDA margin of corporate borrowers*



** Indicators were weighted by loan amounts as of 1 March 2017.*

Source: SSSU, NBU estimates

Share of non-operating items on balance sheets of corporate borrowers*



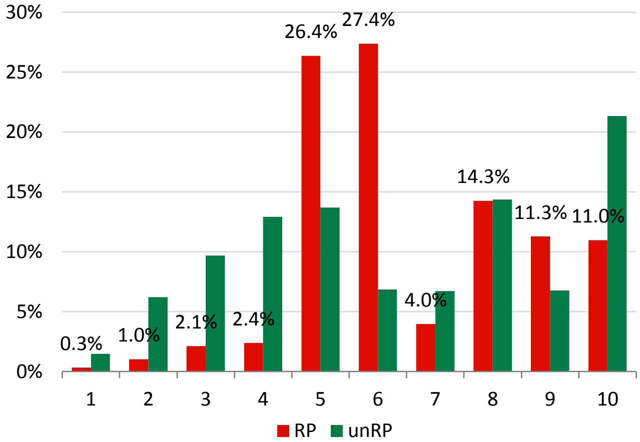
** Indicators were weighted by loan amounts as of 1 March 2017;*
the ratio of non-operating assets to the balance-sheet total. Non-operating assets include intangible assets, long-term, current and other financial investments, long-term accounts receivable, goodwill, and other current accounts receivable.

Source: SSSU, NBU estimates

In 2017, the banks were forced to recognize the actual quality of RP loans

Until recently, the weak financial standing of RP borrowers and the low quality of their loans was not properly reported. This was fully in compliance with the former rules for measuring credit risk, which were mainly based on past due events, rather than an assessment of a borrower's financial performance. As a result, as of the start of 2017, the share of non-performing corporate loans issued to RP by private Ukrainian banks was just 11%, which was almost two times less than that for other borrowers (21%).

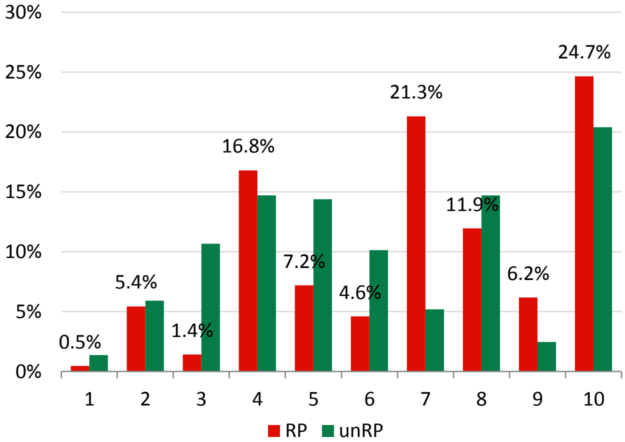
Corporate borrowers by credit risk class as of 1 February 2017



At private Ukrainian banks
Solvent banks as of 1 April 2018

Source: NBU

Corporate borrowers by credit risk class as of 1 January 2018



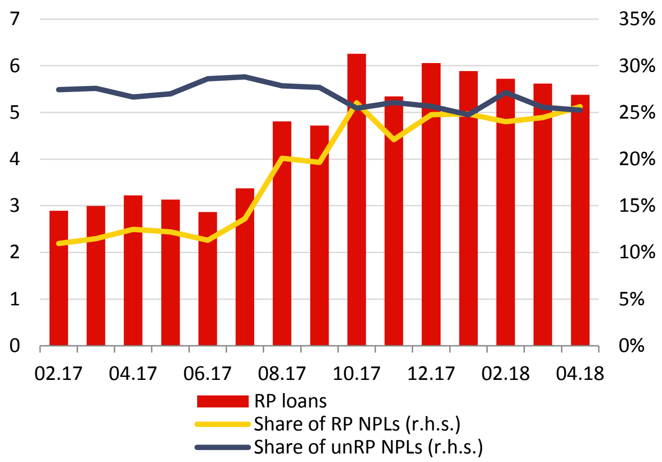
At private Ukrainian banks
Solvent banks as of 1 April 2018

Source: NBU

In 2016, the NBU changed its rules for measuring credit risk and checked how financial institutions calculated this risk for their largest borrowers in H2 2017. Credit risk verification showed that the banks tended to assess RPs' financial standings on the basis of mathematic calculations rather than on the principles of Resolution No. 351, which requires an assessment of the borrower's actual cash flows. Applying such assessments revealed that many RP were incapable of servicing their debts due to their poor financial position. This was the main reason behind the growth in the share of non-performing RP loans at private domestic banks, from 13% to 25%, which was above the figure for unrelated borrowers.

The proper credit risk reporting not only raised the NPL rate, but also imposed higher pressure on capital. To avoid this, the banks and their RP increased the collateral coverage of the loans. The large share of deposits in RP collateral was due to the fact that for N9 ratio calculation, the volume of RP debt is reduced by the amount of cash collateral.

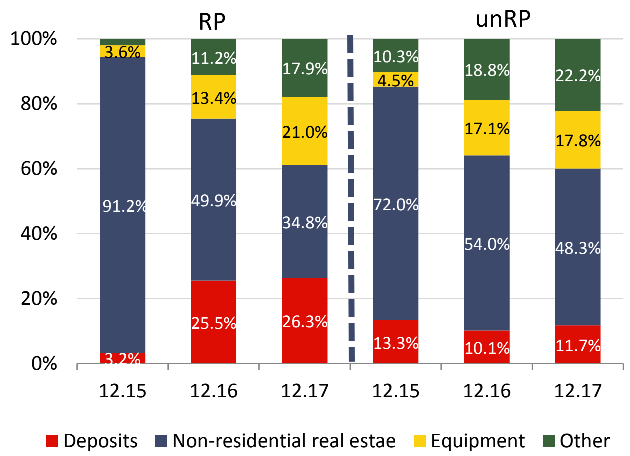
Gross non-performing RP loans (UAH billion) and shares of non-performing loans



Private Ukrainian banks
Solvent banks as of 1 April 2018

Source: NBU

Collateral structure of corporate loans



Private Ukrainian banks
Solvent banks as of 1 April 2018

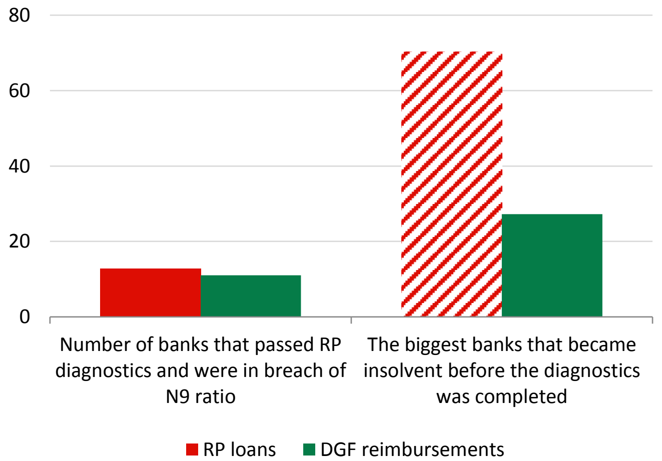
Source: NBU

Long-lived RP lending was a powerful source of financial instability

All RP lending risks materialized during the last crisis. Banks with large portfolios of RP loans went bankrupt, causing losses to their regular customers, the DGF, and the state budget. This was a powerful source of instability in the financial sector and put a significant pressure on government finances.

It is estimated, that the total amount of RP loans with banks that were closed during crisis is more than UAH 80 billion. This amount comprises debts recognized by banks that passed the diagnostics on RP transactions, and loans issued by financial institutions that had become insolvent before the diagnostics were complete. As of 1 March 2018, the direct expenses of the DGF on reimbursements to depositors of those banks exceeded UAH 38 billion. The rest of the losses were borne by regular depositors – primarily households and businesses. Most of these losses could have been avoided if the owners of RP companies had serviced their debts.

RP loans with insolvent banks and the DGF reimbursements, UAH billion



RP loans as of the date the banks were declared insolvent.
** Estimates. Calculated as the sum of loans due from borrowers with two or more RP attributes.*

Source: NBU, DGF

The NBU will continue its effort to reduce RP lending

The NBU followed Basel principles when preparing changes to the mechanisms for banks to use when working with RPs and diagnosing RP transactions. According to the Basel banking supervision principles[20], the regulator can control RP lending risks using three methods: direct limits on RP lending, 100% collateral coverage of RP loans, or decreasing capital by the total amount of RP loans. The NBU's current regulations are soft: the N9 ratio allows banks to have an RP portfolio (excluding guarantees of international financial institutions and cash collaterals) of an amount that does not exceed 25% of their regulatory capital.

Most of the banks that were in violation with the N9 ratio as diagnostics revealed, have brought the value of this ratio into compliance with requirements by winding down RP loans, or by increasing their regulatory capital. The remaining banks have developed action plans to wind down RP debts and had the plans validated by the NBU. The action plans must be implemented within 3–5 years – after that N9 values must comply with requirements.

At present, the problem of RP lending is not a systemic one. The banks are gradually implementing their approved plans. As a result, the total amount of RP loans in the system has declined by 26% over the five quarters since the diagnostics was completed. However, in the view of the huge losses caused to the economy and the banks by RP lending during the last crisis, the NBU will remain vigilant on banks' RP transactions. The NBU is checking all new borrowers for RP features. This year, the regulator will diagnose banks' RP liabilities. In future, the NBU will tighten requirements on RP loans, collateral, and the borrowers themselves. RP lending should become as inconvenient and unprofitable for banks as possible.

[20] Core Principles for Effective Banking Supervision, September 2012. https://www.bis.org/publ/bcbs230.pdf

BOX: DIAGNOSTICS OF THE BANKS' EXPOSURE TO RELATED PARTIES

In 2015–2016, the NBU conducted a diagnostic review of the banks' exposure to related parties (RP). A total of 99 banks were inspected, 18 in 2015 and 81 in 2016. The review revealed a high concentration of RP loans in the portfolios of banks with Ukrainian capital: 44 banks violated N9 ratio, which caps exposures to RP. 13 of these banks were closed in 2016–2017, while the others complied with the requirement or undertook to comply with it by the end of 2019. After the diagnostics, the NBU introduced constant monitoring of RP transactions, in line with the Concept for Transaction Monitoring and Identifying Potential Attributes of Relatedness, which the NBU adopted in 2016.

Monitoring RP transactions and winding them down is one of Ukraine's key commitments under the Memorandum of Cooperation with the IMF of 2015. In order to fulfill this commitment, the NBU established the Related Parties Monitoring Office (RPMO) and the Commission for the Identification of Bank Related Parties and Checking Bank Related Party Transactions. Moreover, NBU decided to hold comprehensive diagnostics of RP exposures, engaging the "Big Four" independent auditors.

Prior to holding the diagnostics, the NBU updated its methodology for identifying RP transactions by expanding the list of RP attributes. Apart from any formal legal ties between the borrower and the bank (e.g., a common shareholder in the case of legal entities), the NBU started to consider indirect attributes, particularly if there is a non-transparent ownership structure of a borrower, common collateral, non-market lending terms, and other such attributes[17].

In May 2015, the NBU approved Resolutions No. 314[18] and No. 315, which set forth:

- stages of the diagnostics, their timelines, and lists of subject entities and implmenters for each stage;
- terms of reference for auditors;
- the procedure for interactions between the banks, auditors, and the NBU;
- requirements for the plan to reduce the volume of exposure to RP;
- principles of RP identification and RP attributes[19].

The RP transactions diagnostics comprised three main stages.
First, audit companies checked whether all of the rules and procedures of a bank complied with the NBU's requirements, and whether the bank's borrowers had any attributes of relatedness. The borrower sample included legal entities with loans of over 3% of the bank's share capital and individuals whose outstanding loans exceeded 1% of the lender's share capital. This analysis informed audit reports that were submitted to the NBU.

At the second stage, the NBU used the audit reports and its own information to compile a final sample of borrowers that were potential RPs, and communicated it to the financial institutions. If the banks denied the conclusions made by the NBU and the auditors, they had 30 days to provide evidences that disproved these conclusions. After that, the Commission for the Identification of Bank Related Parties approved a final list of RPs and registered breaches of N9 ratio.

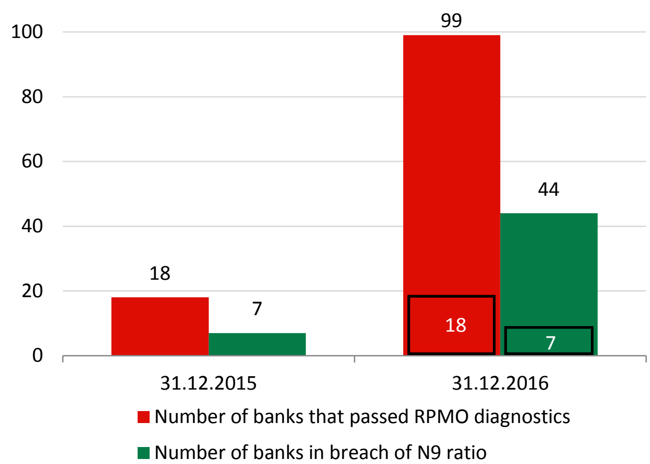
At the third stage, the banks prepared programs to reduce RP lending and bring it into compliance with N9 ratio, and the NBU validated them.

[17] NBU Board Resolution No. 315 *On Approval of the Regulation on a Bank's Related Party Identification* (updated) dated 12 May 2015.
[18] NBU Board Resolution No. 314 On Measures on Bringing Banks' Exposures to Related Parties in Compliance with Requirements dated 12 May 2015.
[19] Together with Article 52 of the Law of Ukraine *On Banks and Banking.*

Stages of banks' RP exposure diagnostics

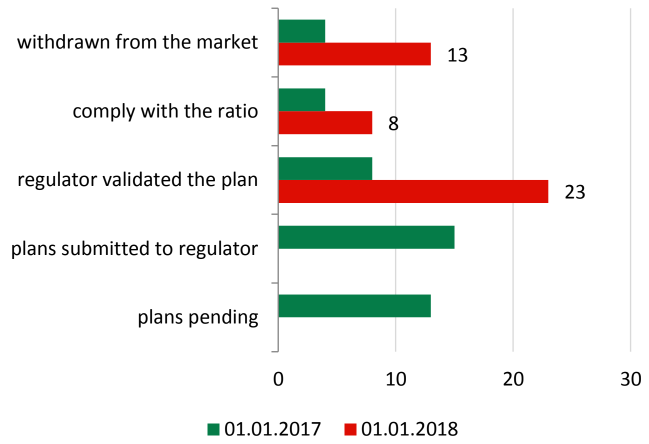
1. Approval of Resolution No. 314 (procedure and terms of reference for the diagnostics)
Approval of Resolution No. 315 (attributes that may indicate relatedness to a bank)
2. Audit inspection of banks' internal rules and exposures, with the aim of detecting potential RPs
Submitting the RP Transactions Report to the NBU
3. Analysis of the information by the NBU
Compiling a list of potential RPs based on the audit reports and expert judgement
Informing banks about the list of potential RPs
4. Confirmation or disproval of RP attributes by the banks (within 30 days of receiving the list of potential RPs)
Approval of the final RP list by the NBU
Registering breaches of N9 ratio
5. Submission by the banks of three-year plans for complying with N9 ratio
Validation of the plans by the NBU
Monitoring of the plans implementation (quarterly)

Results of RP exposure diagnostics



Source: NBU

Results of work with the 44 banks that violated the requirement



Source: NBU

A total of 99 banks were diagnosed in 2015–2016. 44 banks were in breach of N9 ratio. 8 banks managed to bring their N9 ratio into compliance ahead of schedule, 13 banks were closed in 2016–2017, 23 financial institutions agreed with the NBU their action plans that had detailed three-year schedules for reducing their RP exposures (the plans). The NBU verified the feasibility of the plans – whether borrowers could repay their loans using operational profits, or with financial support from their owners. The RPMO monitors the fulfillment of the plans on a quarterly basis. If there are any violations, the NBU has the right to apply corrective measures to the offending bank, and close the bank in the event of two or more such breaches.

The main principles of effective banking supervision set by the Basel Committee[20] require that regulators continuously monitor RP transactions, and establish whether these transactions were closed on a competitive basis. The NBU has been constantly monitoring the banks' RP exposures since 2017. This concerns both RPs detected during the diagnostics, and new RPs found by the regulator in the course of supervision.

The NBU's monitoring follows the procedure:

I. The NBU identifies a list of potential RPs, based on the reporting data that the banks submit to the central bank. The list may include new counterparties with RP attributes and large growth in outstanding loans or major contractual changes, as well as other borrowers.
II. NBU units analyze the borrowers on the list. If needed, the regulator requests additional information from the bank. The analysis findings underpin the compilation of a list of counterparties that are potentially related to the bank.
III. The NBU informs the bank about the list of suspected RPs and receives additional documents from the bank that can prove or disprove the relatedness that was discovered, and invites the banks' specialists to a discussion.
IV. Once the dialogue with the bank is finished, the RP Commission takes a final decision on whether the detected counterparties are indeed related to the bank, and informs the bank of its decision.

[20] Core Principles for Effective Banking Supervision, September 2012. https://www.bis.org/publ/bcbs230.pdf

The monitoring frequency depends the bank's risk profile, which is assessed on the basis of SREP. The NBU monitors banks with action plans every quarter, and for some banks every month. If needed, the regulator may hold an extraordinary on-site inspection of the bank.

In parallel, the NBU analyzes whether the banks' internal methodology and procedures for identifying RPs and controlling such transactions comply with the regulator's requirements, and recommends banks on improving these processes.

In 2018, the NBU will also hold diagnostics of related party deposits. This will make the list of banks' RPs more precise and improve the process of monitoring RP transactions.

GROWTH IN MORTGAGE LENDING WILL CONTINUE

Lending to buyers of residential real estate picked up substantially in 2017, and quite markedly in Q1 2018. The growth was driven by partner programs between banks and developers offering reduced interest rates. Their share in the total volume of new loans is growing. The new lending was offered only by a limited number of banks, therefore legal barriers should be lifted to enable large foreign-owned banks to return to the market. Banks should be more conservative in assessing the sufficiency of borrowers' incomes, as well as in their attitude to risks related to the excessive housing supply.

In order to obtain detailed information about the residential mortgage market, the NBU carried out a second survey of the banks operating on this market (the first survey was conducted a year ago; the sample of financial institutions was almost the same). The survey covered 24 banks that were offering residential mortgages loans and/or had the largest mortgage portfolios, including those formed before the 2008 crisis. These banks account for around 90% of the total amount of residential mortgage lending.

The survey concerned loans for real estate purchases, construction, and renovation. Respondents were asked to report the volume of new loans issued in 2016, 2017, and Q1 2018, broken down by:

- loan principal
- loan term
- borrower's age
- borrower's average monthly income
- LTV (loan-to-value, which is the ratio of the loan principal to the collateral market value, i.e., the real estate value as of the moment of loan origination) and DSTI (debt-service-to-income, which is the ratio of debt servicing expenses to the borrower's annual official income)
- region in which the loans were issued
- market (primary or secondary) in which the residential property was purchased
- lending terms and conditions (standard or partner program).

The survey also included questions about the number of defaults with breakdown by lending parameters, the number and amounts of converted FX loans, and defaults on these loans.

Lending volumes are rising

In 2017–2018, 15 of the 24 surveyed banks issued retail loans for the purchase, construction, and renovation of real estate. In 2017, these banks granted new mortgages worth a total of UAH 1.48 billion (up by 62% yoy). In Q1 2018, this amount increased by 3.9 times yoy to reach UAH 565 million. The number of agreements concluded almost tripled. That said, over 80% of the new loans were issued by just five banks. Some of the respondents grant residential mortgage loans either in exceptional cases to existing customers or only to their employees.

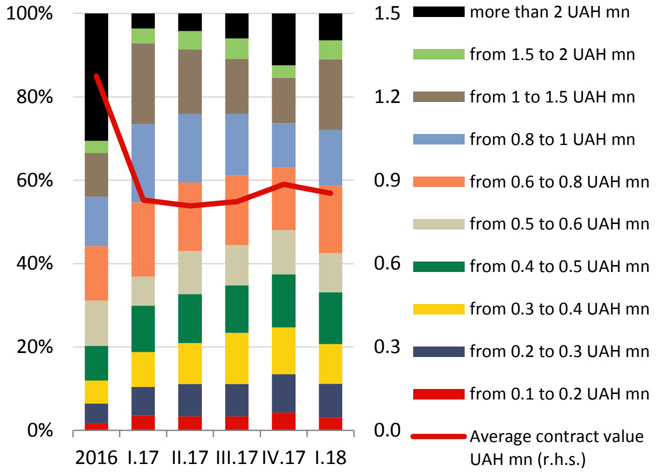
In 2017 and Q1 2018, more residential property purchases occurred on the secondary market in terms of the number of agreements and lending volumes. The volumes and number of loans issued under partner programs (when the developer pays, fully or partially, interest to the bank) are growing gradually, although loans with standard conditions still prevail.

The bulk of loans were issued in the city of Kyiv: 1,428 agreements, or 51% of the total in 2017, and 487 agreements, or 48% in Q1 2018. The eastern region (Kharkiv, Poltava, and Sumy oblasts) and the central region (Kyiv and Cherkasy oblasts) were in the top-three in terms of the number of loans. The average loan size was UAH 531,000 in 2017 and UAH 552,000 in Q1 2018. In Q1, there were 110 loans worth a total of UAH 17 million that were individually worth less than UAH 200,000, and 603 loans worth a total of UAH 188 million of a sum less than UAH 500,000.

Lending conditions improved year-on-year

The standard conditions offered by most banks envisage a fixed interest rate for the entire term of the loan agreement, or a fixed rate for the first year and a floating rate for the rest of the term (the floating rate being linked to UIRD deposit interest rate index). The fixed interest rate is usually 18–24% per annum. Developer partner programs offer reduced interest rates for the first 1–5 years. As a rule, the rates largely depend on the downpayment and start at 0.01% for the first year (not including origination fee). Most banks offer loans for a maximum term of 20 years, some issue 25–30-year loans. The average loan term weighted by loan amounts was 13.3 years as of the end of Q1 2018 and 13 years in 2017.

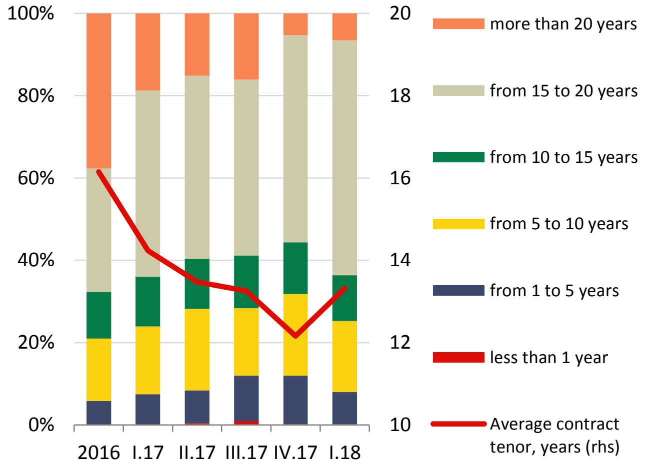
Loan distribution by principal*



** Weighted by the volume of loans issued.*

Source: banks' data

Loan distribution by term*

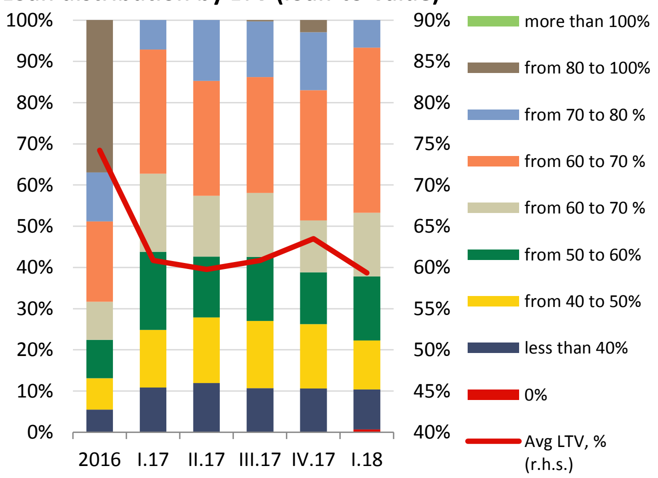


** Weighted by the volume of loans issued; term according to loan agreements.*

Source: banks' data

Lending standards and borrower requirements are not conservative enough.
Banks require borrowers to make downpayments of 20% of the price of the residential real estate. At the same time, the actual average weighted loan-to-value (LTV) ratio stood at 59% for the loans issued in Q1 (down by 2 pp yoy). Most of the loan agreements concluded in the period from 2017 to the end of Q1 2018 had an LTV of 40%–80% at issue. However, some banks issued loans with LTVs of over 80%. This is risky, taking into account the current housing market conditions and high interest rates.

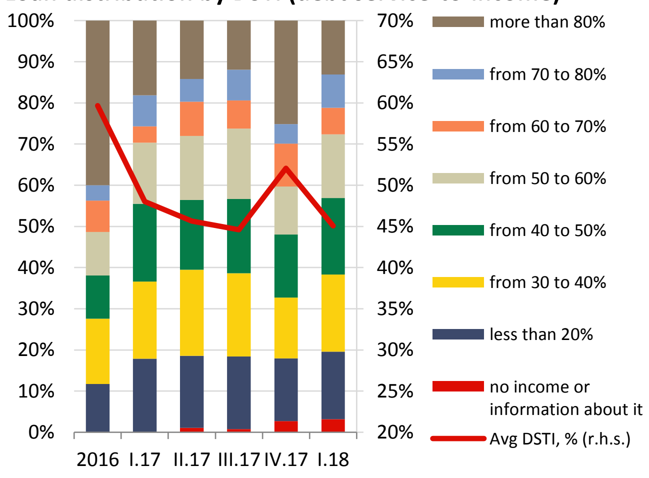
Loan distribution by LTV (loan-to-value)*



** Weighted by the volume of loans issued.*

Source: banks' data

Loan distribution by DSTI (debt service-to-income)*



** Weighted by the volume of loans issued.*

Source: banks' data

As of the end of Q1 2018, mortgage borrowers had a monthly weighted average official income of UAH 37,900. At the same time, most banks issued mortgages to individuals with official earnings of less than UAH 5,000 per month. Several respondents admitted having issued loans without any information about the official income of the borrowers. In Q1 2018, the weighted average debt service-to-income (DSTI) ratio was 45% (down by 3 pp yoy), whereas 18% of the total amount of issued loans were given to borrowers who will spend more than 70% of their income on debt servicing.

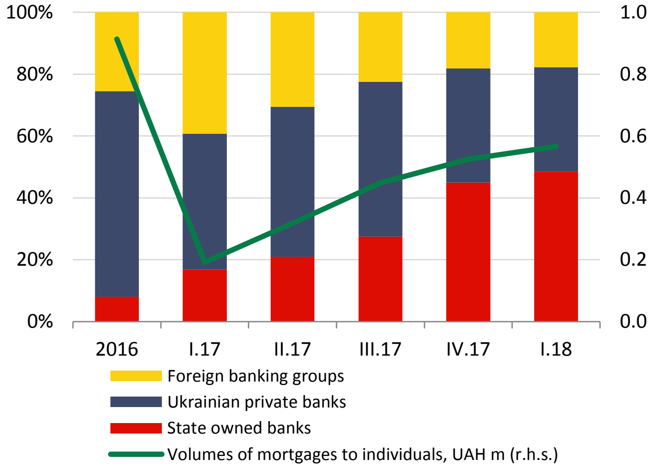
The average age of borrowers in the surveyed period was 37.

Loans issued before the crisis pushed up the NPL ratio to a very high level
Banks take regular actions to cleanse their balance sheets of the adverse consequences of the mortgage boom, by selling and writing off loans issued before 2008. This is leading to a considerable reduction in outstanding debt on foreign currency mortgages. However, the NPL ratio remains at a record high. In April, it grew by 1.8 pp yoy, to 94.2% for the foreign currency mortgage portfolio, but dropped by 0.8 pp yoy, to 36.9%, for the hryvnia portfolio.

As a result of the moratorium on collateral foreclosure for foreign currency mortgages, the volume of loan conversions into hryvnias is small and does not have any significant influence on the quality of debt servicing. According to the surveyed banks, they converted 2,526 loans worth a total of over UAH 1 billion in 2016, and 1,061 loans worth a total of UAH 619 million in 2017. Thereafter, 28% of the loans converted in 2016, and 19% of those converted in 2017 were declared to be in default.

The quality of the loans issued by the banks in 2016–2017 is not excellent either. Of these loans, 482 have been declared to be in default. Loans of over UAH 1 million and loans issued without proper assessment of borrower income (no official income, DSTI exceeds 70%) account for most of the defaults.

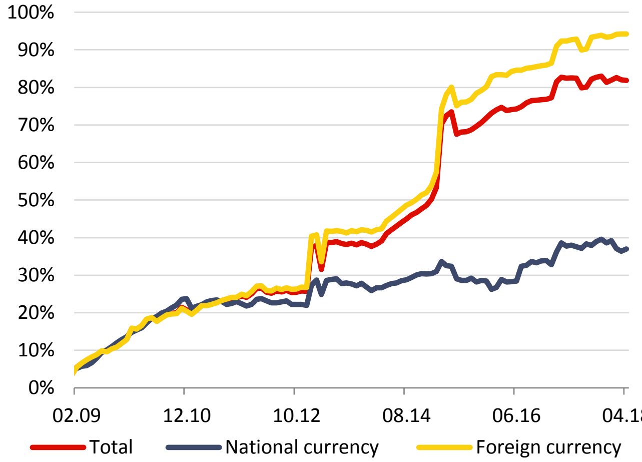
Loan distribution by bank groups*



** Weighted by the volume of loans issued.*

Source: banks' data

Share of NPLs in retail mortgage loans



Source: banks' data

The lack of creditworthy borrowers is the main barrier to lending
In general, the banks surveyed expect volumes of residential mortgage lending to continue growing. Thirteen banks forecast that average monthly volumes would increase by more than 10% within the next 12 months. Another five banks expected the growth to be lower than 10%. Six banks forecast unchanged or lower volumes of new lending.

For the second consecutive year, the surveyed banks saw the lack of solvent borrowers with official incomes as being the main barrier to reviving residential mortgage lending. This was reported by 11 banks. Other important barriers were the lack of long-term hryvnia funding (four surveyed banks) and the lack of proper legal regulation and non-transparency of the primary housing market (four banks).

Conclusions and recommendations
The results of the survey show that residential mortgage lending is continuing to grow. In 2017 and Q1 2018, the surveyed banks issued UAH 2 billion in loans to purchase, build, or renovate residential real estate. However, this amount is insignificant compared to the total growth in retail loans: in 2017 and Q1 2018, the volume of hryvnia retail loans increased by UAH 34 billion. The issuing of fewer than 3,000 loans per year will have no influence on the housing market, since more than 30,000 agreements are concluded annually on the secondary housing market in Kyiv alone.

The number of mortgage lenders remains limited. New lending is mostly coming from state-owned banks, while the majority of large foreign-owned banks that granted mortgages before the crisis have not yet resumed this line of business. The few new players that enter the market are small or medium Ukrainian banks that are cooperating with developers.

Lending standards are not conservative enough given the level of risks on the housing market. Banks should grant mortgages on the condition that LTV does not exceed 70% and be more prudent about assessing the sufficiency of borrower income – namely, they should approve loan applications with DSTI of over 70% only if they have solid evidence of the borrower's ability to service the loan.

Abbreviations and terms

ATM	Automated teller machine
ATO	Anti-terrorist operation / United Forces Operation
DGF	Deposit Guarantee Fund
EBITDA	Earnings before interest, taxes, depreciation and amortization
Energoatom	National Nuclear Energy-Generating Company "Energoatom"
EL	Expected losses
EM	emerging markets
EU	European Union
CIR	Cost-to-income ratio
CIS	Commonwealth of Independent States
C&SS	Cash and settlement operations
CLN	Credit-linked note
DSTI	Debt service to income ratio
Fed	US Federal Reserve System
FIG	Financial and industrial groups
FSI	Financial Stress Index
FVTPL	fair value through profit or loss
FX	Foreign currency/exchange
GDP	Gross Domestic Product
IFO	International Financial Organization
IFRS	International Financial Reporting Standards
ILO	International Labor Organization
IMF	International Monetary Fund
LCR	Liquidity coverage ratio
LGD	Loss given default
LTD	Loan-to-deposit ratio
LTV	Loan-to-value ratio
MoF	Ministry of Finance of Ukraine
N9	Cap on exposure to an insider set by the NBU (*Н9*)
Naftogaz	National Joint Stock Company Naftogaz of Ukraine
NATO	North Atlantic Treaty Organization
NGCA	Non-government controlled areas (of Donetsk and Luhansk regions)
NBU	National Bank of Ukraine
NFC	Non-financial corporation
NPE/NPL	Non-performing exposure / loan
NFSR	Net stable funding ratio
OPEC	Organization of the Petroleum Exporting Countries
PD	Probability of default
PrivatBank	Public Joint-Stock Company Commercial Bank 'PrivatBank'
PACE	Parliamentary Assembly of the Council of Europe
Parliament	Verkhovna Rada of Ukraine (Supreme Council)
PFU	Pension Fund of Ukraine
Regulation No 351	Regulation of the NBU of 30 June 2016 No 351 approving Regulation on credit risk calculation by Ukrainian banks
RP	Bank's related parties
RPMO	Related Parties Monitoring Office
ROE	Return on equity
SME	Small and medium-sized enterprises
SREP	Supervisory review and evaluation process
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
VAT	value-added tax
Ukreximbank	JSC The State Export-Import Bank of Ukraine (JSC Ukreximbank)
WTO	World Trade Organization
Ukrgas-vydobuvannya	JSC UkrGasVydobuvannya (gaz producer)
UIRD	Ukrainian Index of Retail Deposit Rates
Ukrzaliznytsia	JSC Ukrzaliznytsia (railways)
US	United States of America

k	thousand
m	million
bn	billion
UAH	Ukrainian hryvnia
USD	US dollar
pp	percentage points
M	month
Q	quarter
H1/H2	First/second half of a year
eq.	equivalent
eop	end of period
yoy	year-on-year
qoq	quarter-on-quarter
mom	month-on-month
sq. m.	square meters
r.h.s.	right hand scale
YTM	Yield to maturity