NATIONAL BANK OF UKRAINE

FINANCIAL STABILITY REPORT

December 2016

Contents

Introduction

The National Bank of Ukraine (NBU) publishes its second Financial Stability Report (FSR). The FSR traditionally offers analysis of threats and risks that might adversely affect the stability of the Ukrainian financial system.

The main focus is on the risks arising within the banking system – credit risk, foreign currency (FX) risk, capital adequacy risk, liquidity risk, profitability risk, and legal risk. On page 6, the risk map for the banking sector shows their change over this year and expectations for the next six months.

Herewith, the NBU also recommends to authorities and banks measures on risk mitigation and on increasing the financial system's resilience.

In addition to an overarching risk analysis by key sectors of the economy, the FSR includes thematic exhibits presenting the results of recent research on financial stability. This issue in particular contains research on the Financial Stress Index and on reform of the deposit guarantee system.

The special interest of the NBU for the stability of the financial system is conditioned by the regulator's main function. According to the Law of Ukraine *On the National Bank of Ukraine*, the regulator shall, within its mandate, promote the financial stability, including stability of the banking system, if this does not compromise achieving and sustaining price stability in the country.

Financial stability is closely linked to the priority objective of the NBU on ensuring price stability. The financial system plays a key role in the transfer of monetary impulses to the real economy, thus making a significant contribution to sustainable economic growth.

The primary addressees of the FSR are financial market participants and anyone interested in financial stability issues. Dissemination of information and findings of this FSR will foster a better understanding by economic agents of current risks and the magnitude of their potential impact on financial stability and provide for better control of the regulator over systemic risks.

The FSR was presented at a meeting of the NBU Financial Stability Committee on 2 December 2016. The members of the Committee approved the publication of the FSR.

Key Findings

Systemic risks to the Ukrainian financial sector have been diminishing over 2016. The situation in the banking sector stabilized thanks to recovery of the funding base, recognition of the real quality of assets, and compliance with recapitalization programs by almost all large banks. The NBU managed to overcome the bulk of the legacy problems hindering the development of the banking system. Banks have sufficient capital and liquidity to restart lending to the economy.

The key risk to financial stability in the short run is failure to implement recapitalization programs, which were based on results of diagnostic study, at certain large banks. Should this risk materialize, the Government and the NBU would exert immediate strict coordinated actions. Resolving the problem of capital deficits at large banks is necessary for securing long-term stability in the financial sector.

The macroeconomic environment, both external and domestic, was favorable for the financial sector during the last half of the year. GDP started to recover; inflation is low, under control, and within the target range set by the NBU. In the fiscal sector, the public finance deficit diminished, mostly due to a lower quasi-fiscal component.

The major medium-term risks remain potential escalation of Russian aggression in the East of Ukraine, slow structural reforms, anemic recovery of economies of the major trading partners, and setbacks in the cooperation with international financial institutions (IFIs), primarily with the International Monetary Fund (IMF).

On-going cooperation with IFIs is critical for financial stability. Attempts to replace financing from official sources with funding from private capital markets through issue of Eurobonds in 2017 would signal a lower interest in reforms on behalf of the government. As experience shows, termination of cooperation with IFIs inevitably results in lengthy delays in economic transformations. Full implementation of the IMF program should be the major task for all authorities. Holdbacks in tranche disbursements will inevitably lead to a drop in the NBU’s international reserves and undermine the confidence of corporations and households in the sustainability of the FX market and price stability.

In 2016, the NBU completed a diagnostic study of the top-60 banks and assigned recapitalization schedules for those that needed them. The diagnostics of lending to related parties is close to completion. Therefore, the NBU will accomplish the most extensive and detailed asset quality review of banks in Ukraine’s history in the near future. It lays the foundation for development of a well-capitalized and liquid sector efficient in financial intermediation.

Banking sector funding was stable thanks to the return of households’ deposits and inflows of corporate funds. Corporates increase their account balances due to economic recovery and revenue growth. The deposits of households increased at a moderate pace due to a lower propensity to save during and after the crisis. The NBU expects deposits to grow marginally faster in 2017 compared to 2016.

The recovery of lending is the key task for the banking sector in 2017. Thanks to the economic recovery, many enterprises increased their sales and improved their profitability. We expect most of the companies to normalize their leverage in the course of the next year and to raise new loans. The most attractive industries for lending are those focused on the domestic market as well as SMEs with moderate leverage. The competition for high-quality borrowers is set to remain intensive, in terms of both price and qualitative terms. The cost of credit will decline: in the absence of substantial risks to price stability, the NBU will lower its key rate through 2017.

The NBU expects the banking sector in general to start making profits again in 2017 after three years of losses. Operational incomes are going to increase due to cheaper funding and a wider scope of financial services offered by banks. Provisioning should decline as most banks have fully provisioned against bad debts.

The key change in regulation next year will be transition to new rules of credit risk assessment in line with NBU Regulation No. 351. The new approach provides for risk assessment based on losses expected over the next 12 months; it also eliminates a number of loopholes and gaps in the current regulation that allowed banks to avoid full recognition of credit risks adequate to asset quality. According to NBU estimations, the outputs of credit risk assessment based on new rules will be close to those obtained in the course of diagnostics. New regulations will facilitate the timely preparation of banks for full implementation of a new financial reporting standard (IFRS 9 on financial instruments) starting from 2018.

The main task for all authorities in 2017 is the creditor rights protection. This is essential for restarting lending. Further delays in making necessary legal amendments and judicial reforms would cause material losses for the economy through underinvestment, underutilized output capacities, and under-received personal incomes and budget revenues. Reforms at State-owned banks should be reinvigorated: there was little progress in their implementation since the publication of the Development Strategy for State-owned Banks early this year.

In the first half of 2017, the NBU intends to a publish macroprudential strategy and roadmap for approximation of banking regulation to Basel Committee recommendations and European Union (EU) Directives. There will also be a launch of a new emergency liquidity assistance (ELA) facility for banks to replace the existing facility of stabilization loans. On top of that, the NBU intends to complete the development of the liquidity coverage ratio (LCR) requirement according to Basel III recommendations and to implement it in 2018.

Map of banking sector risks

Credit risk started to slide down. Reported NPLs remain at their highest historic level, while the minor increase was caused by the late recognition of problems. In 2016, recovery of corporate sector and household solvency started to show, and thus credit risk assessment moderately improved.

Capital adequacy risk remains high due to the significant losses of banks caused by worsening asset quality. However, the risk partially decreased due to the replenishment of authorized capital by several large banks during the past six months.

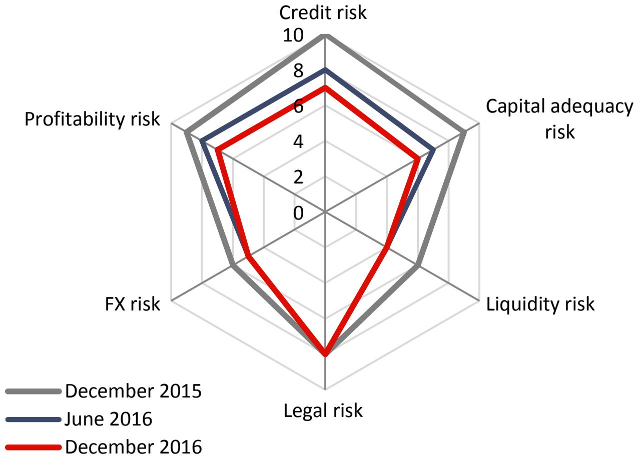
Liquidity risk did not go down because distribution of high-quality liquid assets has remained uneven among banks. There are still banks in the system, where even a minor deposit outflow may provoke serious liquidity problems.

Legal risk remains unchanged since most of draft laws required for reforming the financial sector have not been adopted by the Ukrainian parliament. Litigation settlement of disputes between borrowers and creditors remains unfavorable for the latter.

FX risk remains continuously moderate since some banks still need a lengthy amount of time to adjust their open FX positions. However, the negative effects of sharp hryvnia depreciation for borrowers' leverage and quality of credit servicing have mostly materialized.

Profitability risk gradually subsides due to significantly lower provisioning. The banking sector is expected to make profits again in 2017.

Map for the banking sector risks*



** Risk range from 0 to 10 where 10 is the highest risk weight.*
The estimate reflects the expectations for the next six months.

Source: NBU staff estimates

Notes:

Credit risk reflects expected changes in the NPL share in banks' credit portfolios and the need of extra provisions for such loans.
Capital adequacy risk – estimation of banks' capability to comply with regulator's requirements on capital adequacy.
Liquidity risk – capability of banks to meet on time and in full their liabilities to depositors and creditors.
FX risk – risk of impact of trends on FX market upon financial result.
Profitability risk – ability of banks to generate net profit.
Legal risk – ability of banks to use legal instruments to efficiently protect their rights.

External conditions and risks

External conditions and risks

Over the last six months, the external environment was mainly favorable for the economy. In the near term, geopolitical trends and possible adverse commodity market trends are key sources of external risk. There is still a risk of escalation of Russian aggression while threats of Russian trade bans have almost fully materialized. After the US elections, uncertainty dominates the markets. This resulted in stronger dollar appreciation, capital outflow from emerging countries, and depreciation of their currencies. For a long-term outlook, international developments are shaping the trend for economic and political isolationism. The latter, if it gains further weight upon the EU elections, can become a source of economic risks. There is a chance that energy prices will grow faster than metal and food prices, which could pose a risk for the balance of payments of Ukraine in the medium-term.

Risk of escalation of the military aggression remains critical

Although the Russian military aggression in the east of Ukraine is less intense now, the risk of renewed conflict escalation does not decrease. The October arrangements on the cease-fire and disengagement of troops made during the Normandy format talks saw only fragmented implementation. Principal differences between the views of Ukraine and Russia on the content of the 'road map' call into question its timely development and implementation. In the meantime, new Russian troops and equipment have been arriving to Crimea and to occupied areas in Luhansk and Donetsk regions. The pressure from Russia distracts substantial State resources to contain it and presents a permanent source of risk for the State and the Ukrainian economy. Meanwhile, the risk of Russian trade and economic constraints has mostly materialized. Since the outbreak of military confrontation, direct export of Ukrainian goods to Russia plunged by more than three quarters.

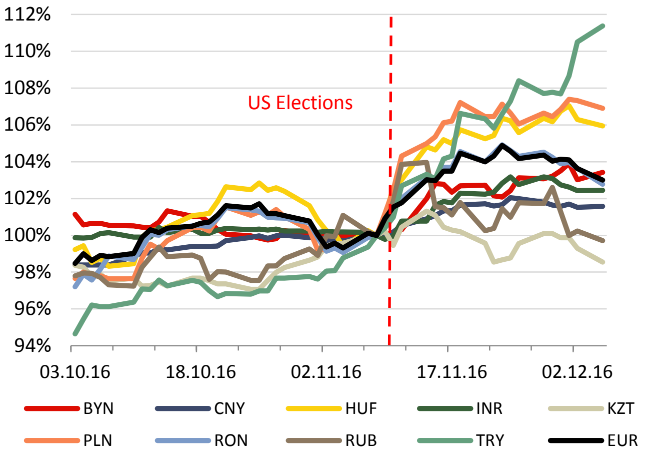
Geopolitical risks intensify due to a wave of populism and isolationism in advanced countries

The United Kingdom voted to exit/withdraw from the EU (Brexit). Such a referendum outcome came completely unexpected. Therefore, the Brexit risk was not mentioned in the previous FSR. Global financial markets did not price it in, so the news caused a sharp rise in volatility. Global markets have overcome the short-term shock for now. However, there is no agreed mechanism for the UK's withdrawal from the EU. All this gives rise to uncertainty and makes it impossible to assess the long-term risk for Ukraine following Brexit.

In Q4, the top event for Ukraine and the entire world was Donald Trump's presidential victory in the US. Over the next few months, the foreign policy priorities of the new presidential administration will become clearer. Possible initiatives regarding the changeover of American policy to protectionism and a reduction of political and economic support to key partners might pose additional risks for developing nations. This also applies to Ukraine, which might suffer diminished external political support to resolve the conflict in Donbas and reduced US financial assistance in the future. On the other hand, there are many supporters of Ukraine among the members of the US Republican Party, which made Donald Trump their presidential nominee. Some of them will become members of the new administration or the US Congress.

Brexit, Trump's victory, and results of the constitutional referendum in Italy were important milestones in the global trend of economic and political isolationism. If elections in several European countries in 2017 have similar outcomes, the global political threats might turn into economic risks over time. Thus, the external risk for Ukraine will rise dramatically. Probable long-term effects for emerging markets will include worsening of the international terms of trade provoked by a wave of protectionism in developed countries and capital outflow to safe havens because of the rising uncertainty in global capital markets and decreased risk appetite of global investors. In the first days after the US election, the first signs of this change on the markets and in investor sentiments were marked. The specific risk for Ukraine is losing positions in the Donbas conflict. The risk emerges due to a possible rise to power in advanced countries of those who of advocate of lifting sanctions from Russia.

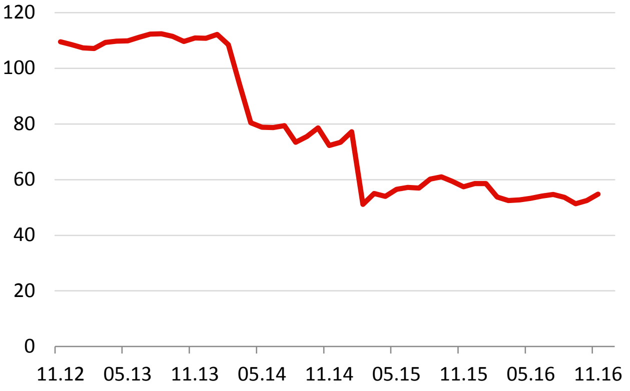
FX index * 08.11.2016 = 100%



** KZT – Kazakhstani tenge, RON – Romanian leu, HUF – Hungarian forint, INR – Indian rupee, TRY – Turkish lira, BYN – Belarusian ruble, PLN – Polish zloty, CNY – Chinese yuan renminbi, RUB – Russian ruble, EUR – euro.*

Source: Thomson Reuters

Nominal effective exchange rate (NEER), 2010 = 100



Source: NBU

The growth rates of the world's leading economies are moderate; commodity prices are volatile

In Q3, yoy, economic growth in the US accelerated up to 1.5%, yet for the year overall, it will be lower than was expected in spring. Meanwhile, October inflation accelerated to 1.6%. Combined with the low unemployment level, this indicator gave grounds for the Fed to raise its key rate, which occurred in December. A few more rate hikes are projected for the next year. Materialization of these forecasts might be one of the drivers of a new phase of US dollar appreciation.

The EU economy has been growing at the rate of 1.8%[1] for three quarters in a row. Contrary to prior expectations, the UK economy did not slow down because of Brexit: in Q3, the economy growth rate surged up to 2.3%. The long-term negative effect from a British exit from the EU could still occur once the Brexit mechanism becomes clear. Sharp depreciation of euro, which started in November and accelerated after the US presidential elections, might produce a negative impact on the hryvnia since EU member-states make the largest share in external trade of Ukraine.

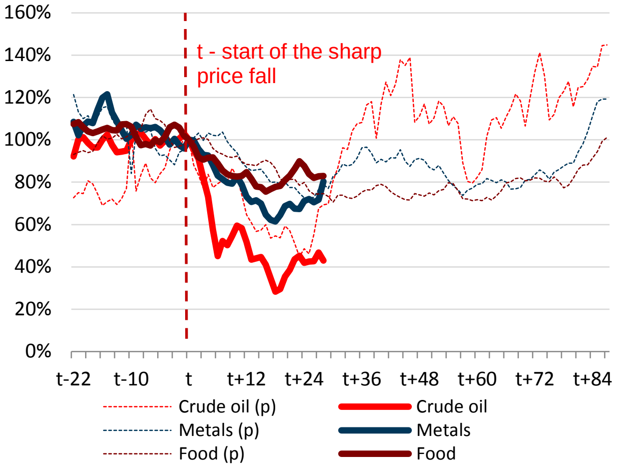
The Chinese economy slows down while its structure changes. China intends to increase domestic consumption and meet domestic needs with domestic resources. This can bring down its external demand and create risk for the countries whose exports are largely bound to China. Sharp Renminbi depreciation has renewed and the majority of experts expect this trend to continue. This will give rise to a risk for balances of payments and FX rates for the trading partners of China, including Ukraine.

In our region, rates of economic growth of the Czech Republic, Hungary, Turkey, and Poland decelerated according to IMF estimates by 2.1, 0.9, 0.7, and 0.5 pp compared to 2015, down to 2.5%, 2%, 3.3%, and 3.1%, respectively. This limits their demand for Ukrainian exports.

Global commodity prices are very volatile. There is no consensus in forecasts of commodity prices moves in the short term. Oil prices rose more than many experts expected early this year. The IMF and the World Bank project further oil price rises. The agreement of the OPEC states to limit oil production increases the risk of higher energy prices. The experience of past global crises, in particular of 1998–1999, shows that fuel prices tend recover earlier and faster than those for other commodities do. The lag can be a year or even longer. This poses risks for Ukraine's balance of payments and the hryvnia exchange rate.

[1] By Q3 2015, for 28 EU member states.

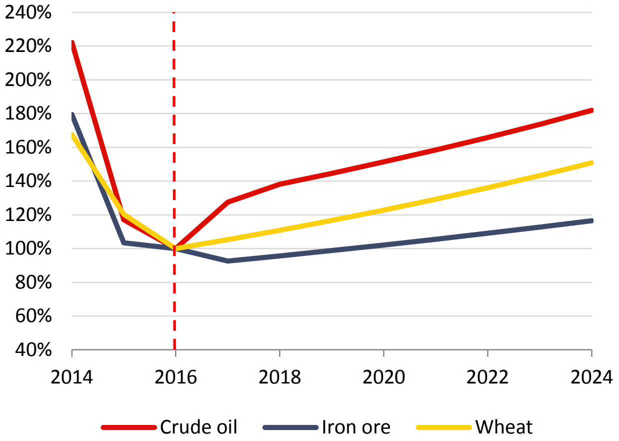
Commodity Price Indices*, 01.1995=100%



** IMF estimates: Crude Oil – average 3 main types; metals – Iron ore, uranium, non-ferrous metals; food – grain, meat, vegetable oils, sugar, sea-food, bananas, oranges; (p) – previous crisis of the 1990s where t – January 1997; solid lines show the change of indices during the current crisis, t – July 2014.*

Source: IMF

Commodity prices, projections*, indices, 2016=100%



** Crude oil, average spot prices; winter wheat HRW (US)*

Source: The World Bank

Domestic conditions and risks

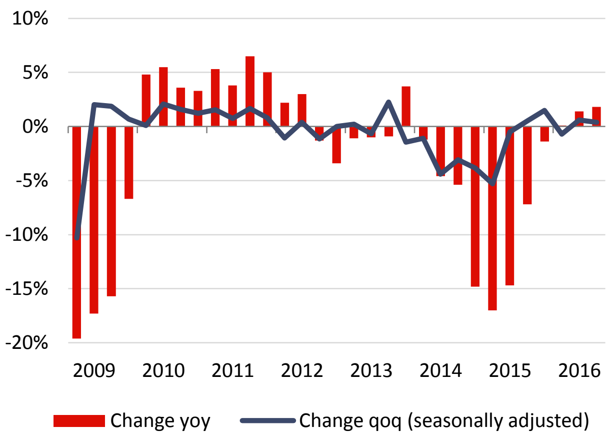
Macroeconomic conditions and risks

The economy continues recovering after a long recession. Inflation stays close to the target level set by the NBU. However, the emergence of new inflation risks made the NBU Board keep its key rate unchanged at the meeting on 8 December 2016. Recovery of domestic demand leads to a gradual increase in the current account deficit. Thus, there is a need for stable external financing. This need is expected to remain over the next few years. Under such circumstances, there is no alternative to cooperation with the IMF and other international donors. Termination of such cooperation will pose high medium-term risks to financial stability.

Economy slowly recovers

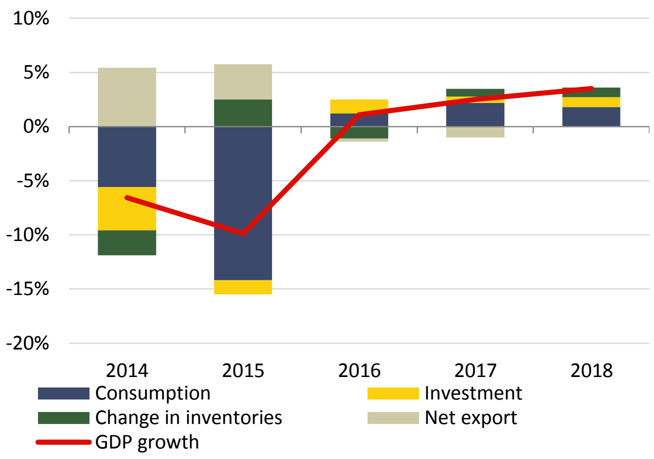
This year, the economy started to recover. In Q3, real GDP increased by 1.8% yoy. The annual growth rate is projected at 1.1%, primarily driven by expanding domestic consumption and investment demand. However, the growth rate is not sufficiently high. A number of factors, both domestic and external, hinder the recovery's acceleration. Among the key domestic risks are slow paces of structural reforms and uncertainty caused by the military hostilities in the east of Ukraine. The key external risks are, inter alia, low growth rates of major trading partners of Ukraine. The NBU expects economic growth to accelerate next year on the back of increasing consumption and investment, while the contribution from the net exports will remain negative.

Real quarterly GDP growth



Source: SSSU

Contribution of demand components to real GDP change



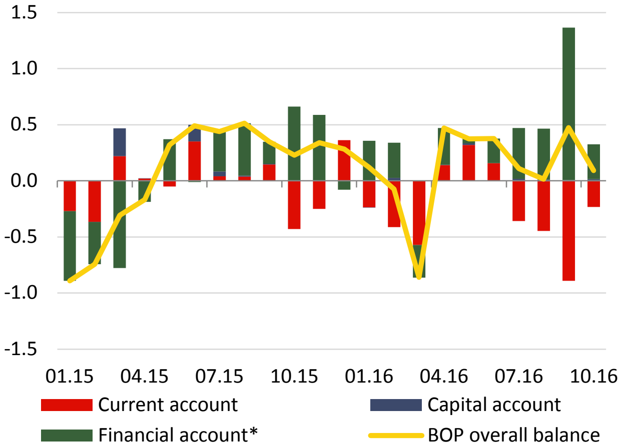
Source: NBU

External economic balances generate a number of risks

Negative balance of trade in goods will become the key contributor to the current account deficit. The latter is expected to rise from an estimated USD 2.5 billion this year to USD 2.9 billion next year according to NBU projections. This year, the gap was covered by financial account inflows, primarily backed by the return of funds to the banking sector and official external borrowings. Increased foreign direct investment had no significant impact on the financial account's balance since it is predominantly not accompanied by FX inflows, but rather by a proportional decrease in external liabilities. Over the past two years, a large-scale conversion of banks' debt to parent companies into equity took place in order to meet the requirements based on the diagnostic study's outcomes. Next year, the volume of these transactions will significantly decline. Potential privatization might support FDI, but in the first 10 months of 2016, FDI inflows amounted to 0.5% of the plan. Therefore, previous experience does not leave grounds for expectations of substantial receipts over the next year.

Given that the current account deficit will increase next year, the need for high financial account inflows will remain. Additionally, the government and the NBU will have to allocate approximately USD 4.5 billion to service and to repay FX debt (including FX-denominated domestic government bonds).

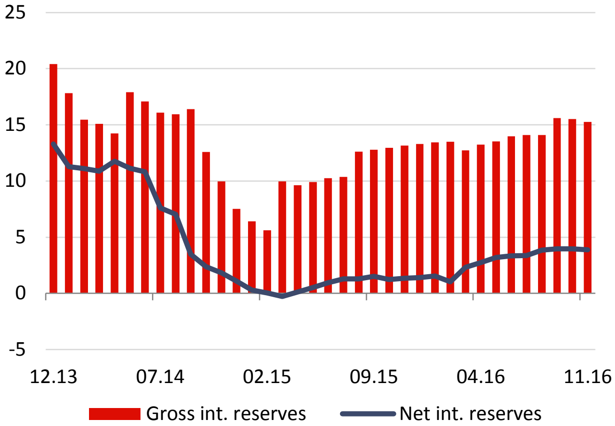
BoP components, USD billion



* Positive value– capital inflow.

Source: NBU

International reserves of the NBU, USD billion



Source: NBU

It will be difficult to secure FX funding for public needs without cooperation with IFIs

In September, the IMF disbursed to Ukraine the third tranche of USD 1 billion under the EFF program. This was a positive signal for foreign partners and helped Ukraine to receive funding from other international donors. In particular, at the end of September, the Ministry of Finance placed USD 1 billion of five-year Eurobonds, guaranteed by the US government. Thanks to external financing, international reserves have grown by 16% over the past 12 months. This became a soothing factor for the FX market and facilitated the stability of the financial sector as a whole. That also gave the Fitch agency grounds to raise Ukraine's long-term rating from CCC to B-. Further rating upgrades depend on the acceleration of economic recovery, slowdown of inflation, and subsiding FX risks.

Therefore, continued cooperation with international donors, primarily with the IMF, is a key factor for preserving financial stability. This will secure short-term financing of the current account deficit and restore access to the international private capital markets in the future. Specifically, under the EFF framework only, Ukraine may receive about USD 9.7 billion from the IMF over the next two years. Financing available from other donors will also be significant if the IMF program is implemented completely.

Significant risks will arise in case of termination of cooperation with the IMF. First, it will be difficult to raise funds on foreign debt markets. Second, even if Ukraine manages to find the financial resources, the requested interest rate on it would be much higher than the interest on IFI financing. Thus, debt servicing will significantly rise and increase the burden on budget. Any initiatives on switching from official financing to private capital markets next year are premature. In such case, we will be running a significant risk of losing the memorandum of cooperation between the IMF and Ukraine as an anchor for Ukrainian reforms.

Fiscal sector and related risks

Since the beginning of 2015, the government has achieved remarkable progress in fiscal consolidation. Although this year the budget deficit will increase, it will remain within acceptable margins. The focus will be on security and defense expenditures, pensions, housing subsidies, and debt servicing. The significance of these allocations over the coming years will limit the resources available for other public needs. Imperfect fiscal decentralization leads to uneven delivery of local budgets, giving rise to risks that require extra vigilance. NBU profit to be transferred to the State budget has yet to become the subject of purely technical discussions. So far, the draft State budget is based on governmental estimates of NBU profit, but not NBU estimates.

The deficit of the general government sector is under control

Over the past two years, Ukraine ensured a remarkable fiscal consolidation. The general budget deficit squeezed from 4.5% of GDP in 2014 to 1.6% in 2015. This underpinned macroeconomic stabilization and lower risks, including those related to public debt as well as FX and financial markets. Due to significant inflation and FX depreciation effects, the last year's deficit appeared much lower than planned, in both absolute terms and relative to nominal GDP. In 2016, inflation slowed down significantly and came close to expected rates. The State budget's performance is close to the plan, and, according to NBU estimates, the deficit for full year will not significantly differ from the target of 3.7% of GDP. The government plans to gradually reduce the fiscal deficit down to 2.3% of GDP in 2019. This target is quite ambitious and requires stringent discipline. Generally, the envisaged direction and pace of movement give assurance that the fiscal policy will not pose new risks to financial stability.

Implicit public sector deficit is substantially lower

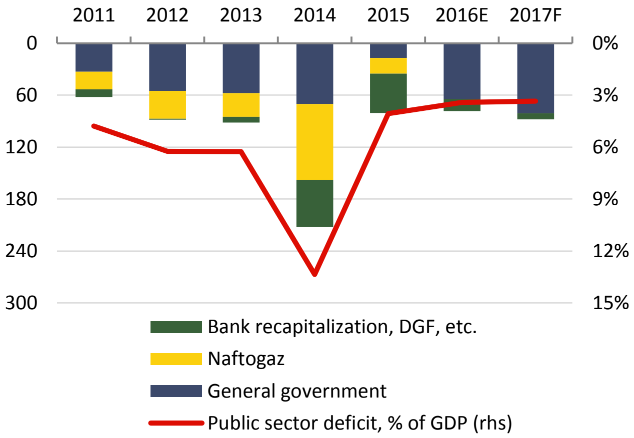
The quasi-fiscal deficit declined from 8.9% of GDP in 2014 down to 0.6% in 2016 due to lower costs of supporting Naftogaz, recapitalization of banks, and DGF funding. Since 2008, it did not fall below 2% of GDP, and in the periods of crisis, it spiked sharply. That led to a significant expansion of public debt and, consequently, multiplied public finance risks. Furthermore, the NBU often had to buy domestic government bonds to finance the quasi-fiscal deficit. This limited the independence of the NBU and its ability to make effective monetary policy that brought about significant risks for the financial and FX markets.

Increases in tariffs close to economically justified levels coupled with changes in corporate governance allowed Naftogaz to overcome its persistent loss making. There are no further needs for State support that the company had previously received as a direct compensation for the gap in tariffs or as capital injections in the form of domestic government bonds. The mechanism of quarterly gas price adjustment according to changes on global markets (in case of changes in the world prices by more than 10%), which the government pledged to uphold, will finally eliminate the problem of a deficit at Naftogaz.

Next year, economic recovery from the crisis will allow completion of the recapitalization of State-owned banks and finalizing the cleanup of the banking sector. It is expected that over 2017, recapitalization of Ukreximbank and Oschadbank and support for the DGF will only require an amount equivalent to less than 1.0% of GDP. In the future, State-owned banks should start making profits while their credit policy should become balanced. This will allow for avoiding excessive provisioning and additional capital injections.

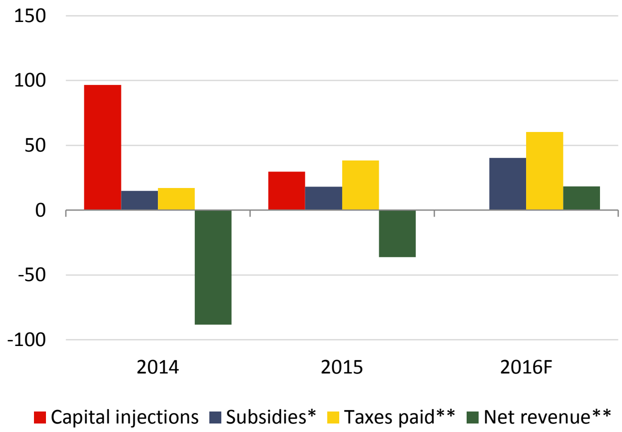
Given that Naftogaz became profitable and that the financial sector almost does not need budgetary support, quasi-fiscal costs will substantially decline and will no longer contribute significantly to the public sector deficit.

Components of the public sector deficit, UAH billion



Source: MOF, IMF, NBU staff estimates

Naftogaz and the State budget, UAH billion



* Budget expenditures to compensate for the difference in tariffs, benefits and subsidies.
** According to the consolidated statements of PJSC Ukrnafta'
Source: Naftogaz

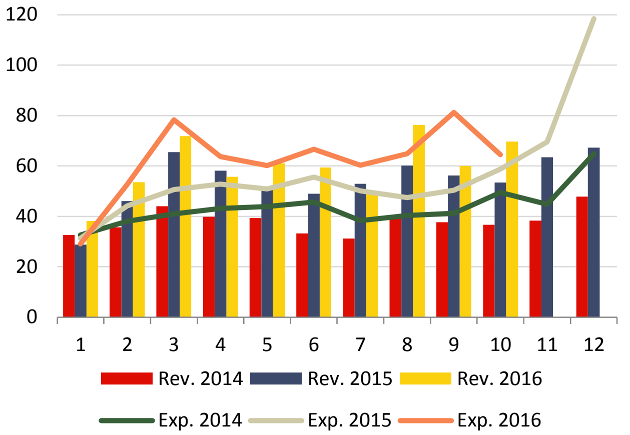
Significant structural changes in expenditures is a challenge for the government
Implementation of structural reforms, geopolitical and military risks, as well as initiatives to raise minimum wages and the de-shadowing of wages, inevitably lead to changes in priorities for budget expenditures. Key drivers of fundamental changes in the budget expenditures were:

- a fundamental political decision to maintain long-term financing of security and defense at the rate of at least 5% of GDP. This is a significant increase compared to less than 4% of GDP in 2013. The decision was driven by the need to restore and uphold national defense and revive the military-industrial complex;
- a sharp increase in expenditures on subsidies to compensate housing and utilities costs. The step aimed to compensate the increasing burden on households after the introduction of market utility tariffs. As of early November, 5.5 million households received subsidies. Budget appropriations for this in 2016 amount to UAH 40.3 billion. Next year, the number of recipients, according to preliminary government estimates, can rise up to 8.5 million households; appropriations of UAH 47.1 billion are provided in draft budget to cover the costs. Thus, the state budget for 2016 and 2017 allocates annually nearly 2% of GDP for subsidies, although these amounts did not exceed 0.5% of GDP in the past. This amount is considerable. However, the benefits for the public sector is twice as high in terms of the reduction of the quasi-fiscal deficit because of the introduction of market utilities tariffs. Thanks to the economic recovery, the incomes of Ukrainians will grow, therefore, the expenditures on subsidies should decrease;
- a sharp increase in allocations for financing of the Pension Fund of Ukraine's (PFU) deficit. In 2016, State budget appropriations for pension financing amount to around UAH 145.5 billion, that is 53% more than the previous year. The sharp increase in the PFU deficit was caused by a reduction in the single social contribution rate. Next year, according to government estimates, this support will decrease slightly down to UAH 141 billion, but it will remain significant in the medium-term. In one year after the rate reduction, the de-shadowing effect for wages was moderate and the tax base for the Single Social Contribution did not expand much. Obviously, the problem of a significant PFU deficit and related State budget subsidies cannot be resolved in the short term. Therefore, this component of expenditures will remain significant over the next few years.

All three drivers mentioned will predominantly shape the structure of expenditures over the coming years. A change of the priorities means less budget expenditures (relative to GDP) for other areas, e.g., education and health care. The Government must diligently select the priority areas where funding from the State budget will be most efficient. Only the acceleration of economic growth might soften State budget restraints in the medium term.

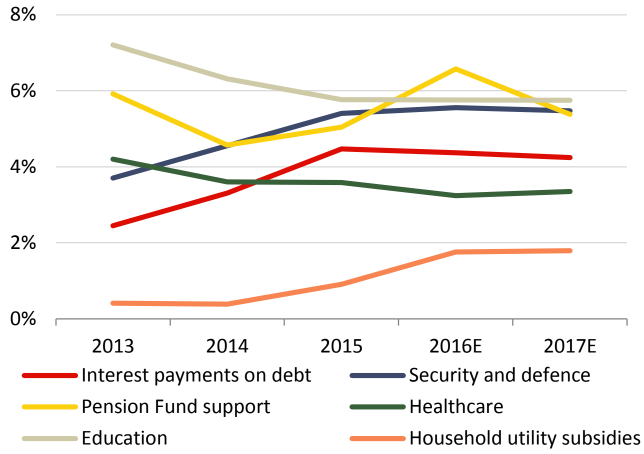
The government's initiative to increase the minimum wage up to UAH 3,200 starting from 1 January 2017 poses certain fiscal risks. However, positive effects might also be significant – partial de-shadowing of wages in the private sector and raising living standards, and, thus strengthening the solvency of the poorest households. In any case, a sudden review of minimum wages under the current terms resembles an experiment. Should it be successful, it might replicated in the future on a lesser scale.

Monthly indicators of the consolidated budget, UAH billion



Source: State Treasury

Key allocations from the consolidated budget, % GDP



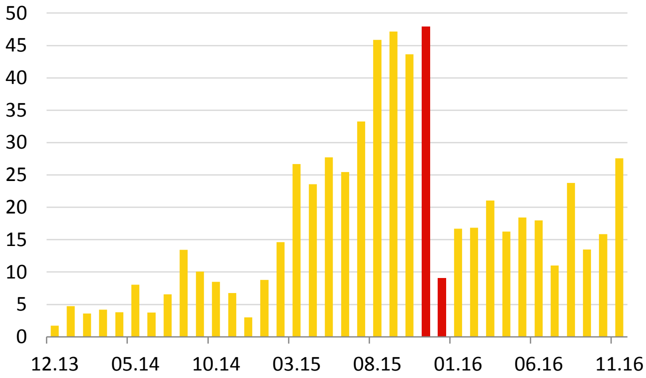
Source: SSSU, NBU staff estimates

Decentralization augments liquidity management risk

Thanks to decentralization, local authorities receive more financial resources. However, the development fund comprises a large portion of it. Allocations from this fund are harder to execute than from the general fund. Preparation of documents, approval of projects, and tenders consume a significant amount of time. In the meantime, the funds are deposited on the single treasury account (STA) or (increasingly more often) in bank accounts. In the very last weeks of the year, the recourse to the accumulated funds accelerates highly. This was the case in 2015, and the situation can be replicated this year. Sharp increase of money in circulation leads to the episodes of pressure on hryvnia exchange rate and temporary neutralization of the monetary policy instruments and, consequently, rising risks to financial stability. To overcome these deficiencies of decentralization, the mechanisms of project implementation by local authorities should be refined.

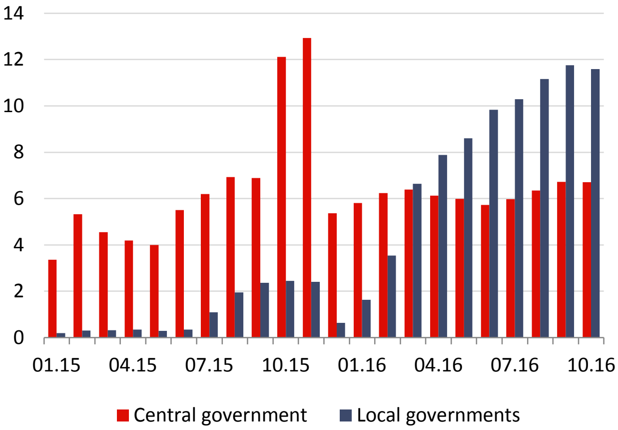
One of the key novelties of the decentralization reform is an opportunity for local communities to temporarily deposit unappropriated funds at commercial banks. Last year, communities did not take much advantage of this possibility. The local authorities mostly deposited funds on the STA while the government could use them at its discretion. This year, the situation is gradually changing. The unassigned funds are increasingly deposited at banks as deposit lines. Local authorities find it more profitable: they can receive significant interest receipts while the development projects are going through all the stages from preparation to funding. However, if the local authorities continue to spend most of the funds in the last month of the fiscal year, then, on top of the pressure on the hryvnia exchange rate, the liquidity risk of the banking sector will rise (if unspent balances return to the STA).

Balance on Single Treasury Account, UAH billion



Source: State Treasury

Balance of authorities at banks, UAH billion

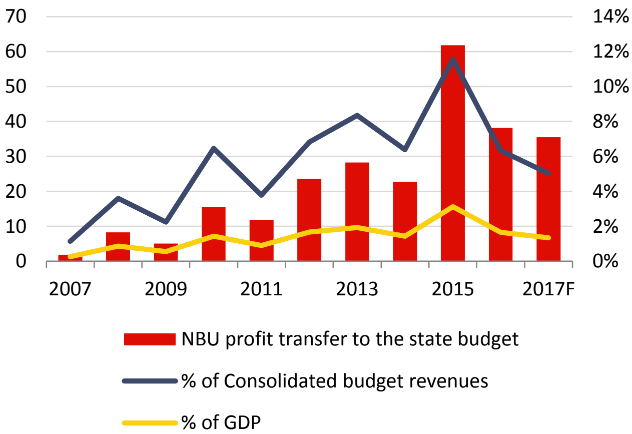


Source: NBU

Estimates of NBU revenues still remain disputed

In October, the new NBU Council started its work, which allowed approval of annual financial statements of the NBU for 2015. Thanks to this, during October–December, the NBU transferred the profit for the past year of UAH 38.2 billion to the State budget. Payments were carried out in three tranches (UAH 10 billion, UAH 14 billion, and UAH 14.2 billion) disbursed in October, November, and December, respectively. According to the November estimations, this year's profits of the NBU could reach around UAH 35.5 billion. These funds can go to the State budget in 2017. In the course of elaborating the draft budget for the next year, the government proceeded from its own estimate of the NBU profit in 2016 of UAH 45 billon. Such an approach violates the principles of independence of the central bank. Furthermore, the government must rely solely on the NBU estimates.

NBU profit transfer to the State budget, UAH billion



Source: MOF, NBU

Real sector and related risks

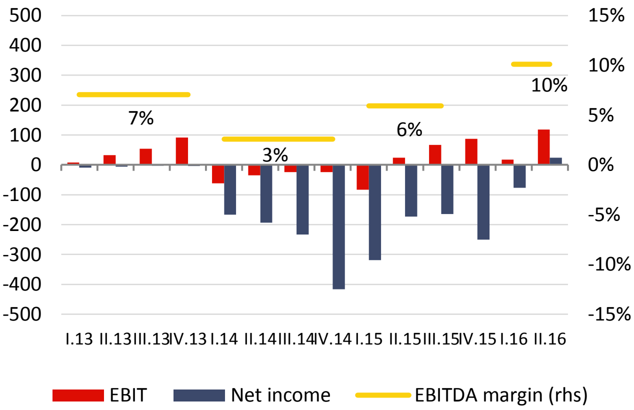
Profitability of the real sector continued increasing since the second quarter of the past year. Combined with limited new lending, it reduces the leverage of enterprises and raises their solvency. New NPLs have virtually not emerged, yet the share of NPLs increased as banks gradually recognized assets that actually became distressed earlier as NPLs. If macro-financial stability is maintained, lending will gradually recover already in 2017. Some industries are already attractive for new lending, primarily companies focused on the domestic market. An interesting niche for lending are SMEs, which have positive dynamics of financial indicators.

Real sector recovers solvency

The financial state of real sector has improved since Q2 2015. In Q1 2016, the EBITDA margin of Ukrainian enterprises was 10%. This is the highest value in the past four years. Operating profit of profitable enterprises in Q2 2016 increased by 3% up to UAH 170 billion, while losses of loss-making enterprises decreased by 63%, down to UAH 52 billion.

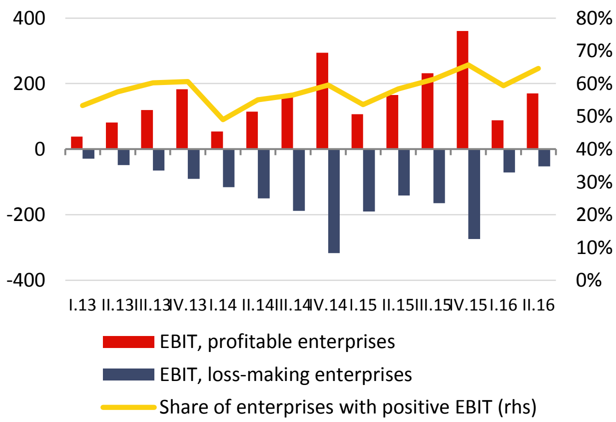
The main driver of high operating profit was the reduction of the Single Social Contribution. The funds that enterprises saved due to lower payroll accruals were primarily channeled to increase profit rather than wages. The economic recovery produced a positive impact on earnings due to macroeconomic stabilization, which included a stable FX rate. The absence of FX rate stability brought Ukrainian enterprises huge losses from exchange rate differences since the beginning of 2014. Achievement of stability allowed the real sector to make a net profit in Q2 for the first time in 2.5 years.

Financial results of NFCs, UAH billion



Source: SSSU, NBU

Operating results of profitable and loss-making NFCs, UAH billion



Source: SSSU, NBU

The share of operationally profitable enterprises reached 65% by the end of the first half of 2016, 7 pp more than in mid-2015. The gap between profitable and loss-making companies narrowed: operating profit of profitable enterprises in Q2 2016 rose to UAH 170 billion (+3% yoy), losses of unprofitable companies declined to UAH 52 billion (-63% yoy).

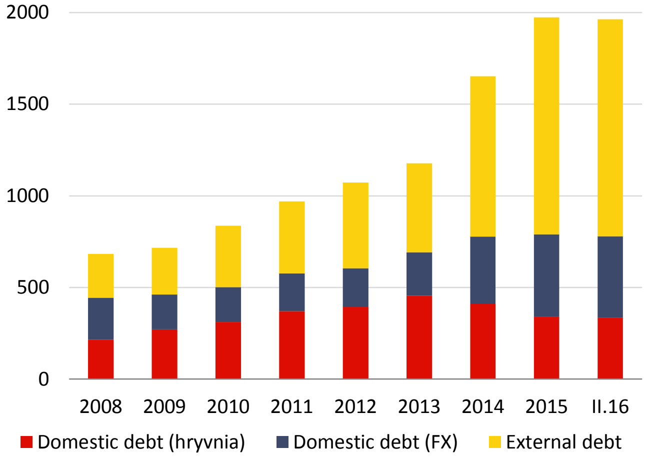
Enterprises' leverage have not changed substantially

In the first half of the year, there was virtually no increase of bank lending; access to external funding remained limited and recovery of NPLs during the restructuring period was restrained by weak solvency of borrowers. For H1 2016, the total debt of enterprises to banks decreased by 1% due to individual repayments.

Positive changes in the debt structure appeared. Specifically, the FX share in corporate borrowing decreased from 80% at the end of 2015 to 76% by the end of H1 2016. The main reason was associated with the restructuring of domestic debt – FX to UAH loan conversion. In Q3, lending somewhat recovered: UAH loans in three months increased by 9% to UAH 369 billion. There was no growth of FX borrowings.

In the first half of 2016, the real sector debt-to-GDP ratio decreased by 8 pp – to 100.3% (compared with 108.3% at the end of 2015). This result is still much higher than in other CEE countries.

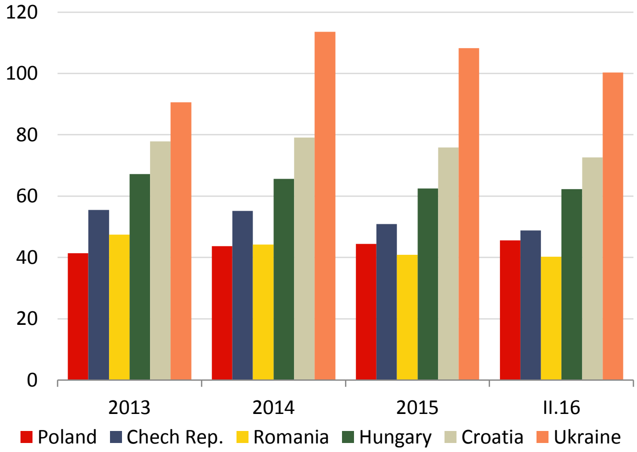
Debt of NFCs,* UAH billion



** Debt before banks and non-residents.*

Source: NBU

Debt of NFCs, % GDP

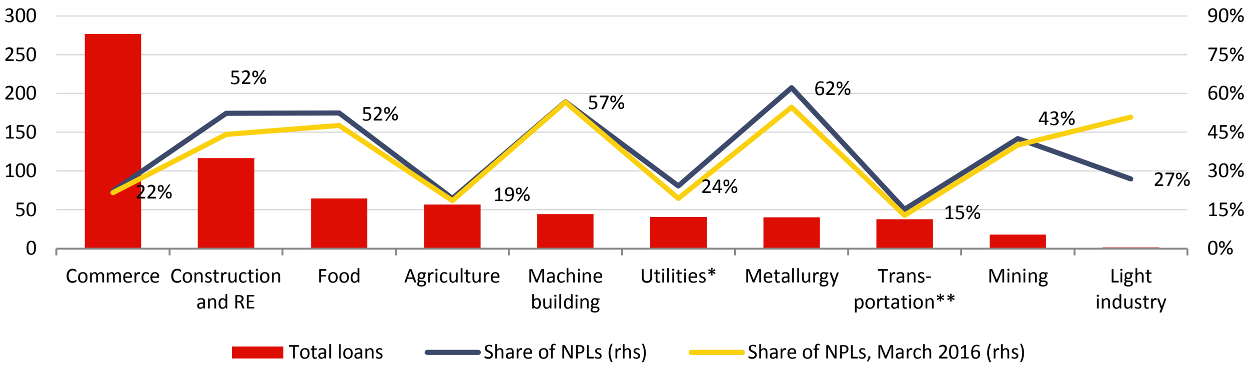


To ensure the comparability of data for Ukraine and the EU countries, debt of NFCs include loans and debt securities in line with the ECB methodology.
Source: ECB, NBU, SSSU, MFU

NPLs grew due to belated recognition
Over one year since September 2015, the share of corporate NPLs rose by 7 pp to 39%. Banks continue to recognize those problematic debts that borrowers stopped servicing earlier. This creates the prerequisites for the banks to clear NPLs from their balance sheets. The process will probably continue until H2 2017. Therefore, by that time, the share of NPLs might still rise.

The most significant increase in the share of distressed debt was reported in construction and metallurgy, i.e., the sectors retaining high leverage. However, in light industry the share of NPLs decreased. The least share of NPLs is recorded in agriculture and transportation – both low leverage sectors.

Bank loans to NFCs, September 2016, UAH billion



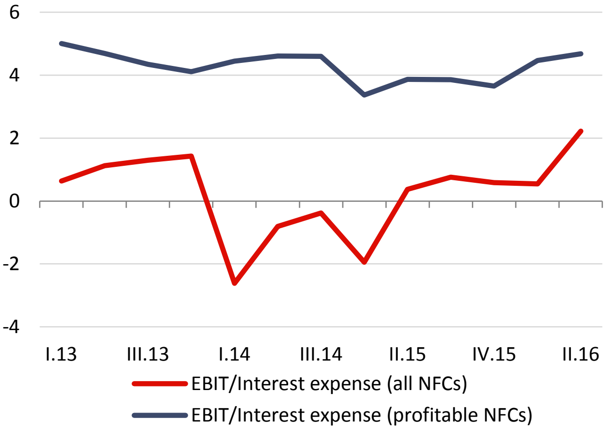
** Supply of electricity, natural gas, water, and waste management.*
*** Public transportation, warehousing, postal, and courier services.*
Source: NBU

Solvency of the real sector is restoring
An increase in enterprises' profitability raised their solvency. The interest coverage ratio (EBIT to interest expenses) rose from 0.6 at the end of Q3 2015 to 2.2 by mid-2016. This

result is higher than before the crisis in 2013. For profitable companies, this indicator exceeds 4. Therefore, operating cash flows for the dominant majority of non-financial corporations are sufficient to service loans in full. Due to this, risks of increasing the de facto NPLs are minimized. Banks will just recognize NPLs that became problematic earlier.

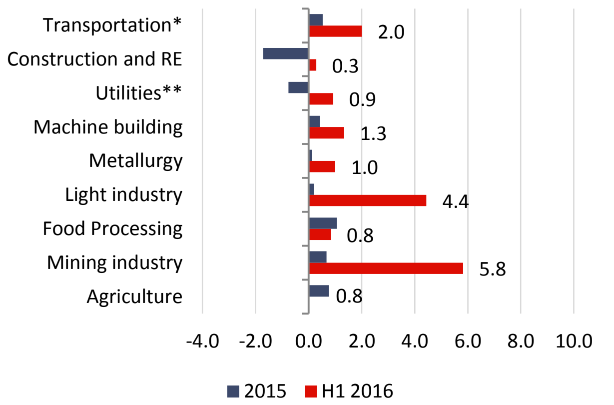
For light industry, mining industry, and transportation, the interest coverage ratio is substantially higher than one. Therefore, debt servicing does not put significant pressure on the finances of these industries. Instead, companies involved in construction and real estate, food processing businesses, as well as suppliers of electricity, natural gas, water, and waste management in general lack operating profit to cover interest.

Interest coverage ratio for NFCs



Source: NBU, SSSU

Interest coverage ratio for NFCs



** Transportation, warehousing, postal, and courier services.*
*** Supply of electricity, natural gas, water, and waste management.*
Data for H1 2016 on agriculture is missing.

Source: SSSU, NBU

In the first half of 2016, the EBITDA margin grew in all key sectors of the economy, except in the food processing industry, and the most in machine building, light industry, and construction. Profitability returned to positive values in construction: +12% compared to −16% at the end of 2015.

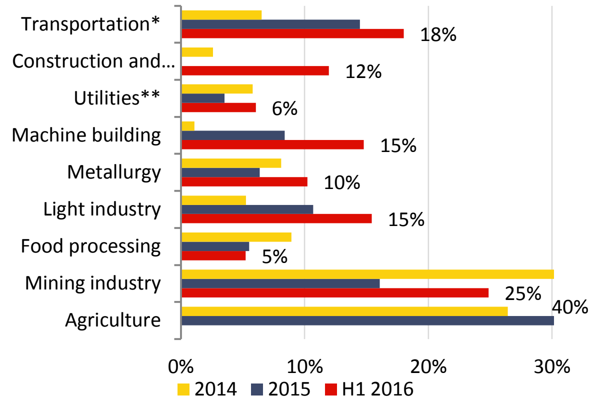
The improved effectiveness of operational performance has allowed companies in the majority of industries to reduce relative leverage. The debt-to-EBITDA ratio decreased in machine building, light, and mining industries. Nevertheless, despite the positive trend, overall, leverage for the real sector is quite high. Total debt-to-EBITDA (for the past 12 months) for a number of industries exceeds the ‘safe’ rate of 3, while in construction it remains negative.

The weakest debt metrics are recorded in the construction and real estate, metallurgy, and food processing industries. Weaker solvency in the food processing industry was mostly due to falling exports, primarily to Russia, and high competition with imports from Turkey, Poland, and Italy. Solvency remains weak in the energy sector and utilities. Higher electricity tariffs boosted profits of thermal power generation, but did not affect the profitability of distribution companies.

The most financially steady sectors traditionally are agriculture and mining, as well as light industry, which significantly increased exports in 2016 (+7% yoy in H1 2016, +9% yoy in the first three quarters of 2016), and the transportation sector (where profitability increased due to higher transportation tariffs).

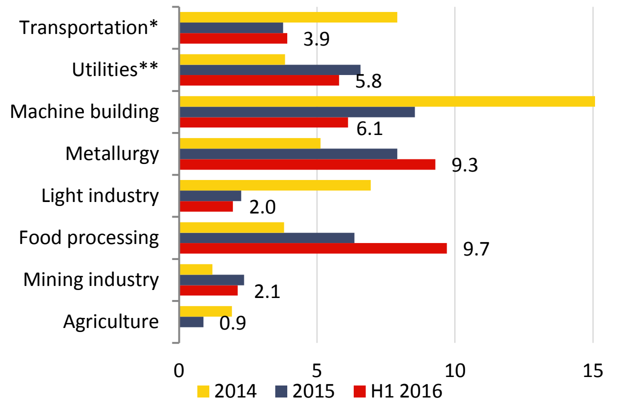
Increased profitability also fostered higher liquidity in certain sectors, in particular in the transportation sector, mining, and metallurgy. For the transportation sector, the net debt (less cash) to EBITDA ratio was 1.9 by the end of H2 2016, the total debt/EBITDA ratio was 3.9; cash of companies in the industry covers more than half of their current debt.

EBITDA margins by industries



** Transportation, warehousing, postal, and courier activities.*
*** Supply of electricity, natural gas, water, and waste management.*
Data for H1 2016 on agriculture is missing.
Negative values are not reflected.
Source: SSSU, NBU

Leverage (debt-to-EBITDA for 12 months) by industries



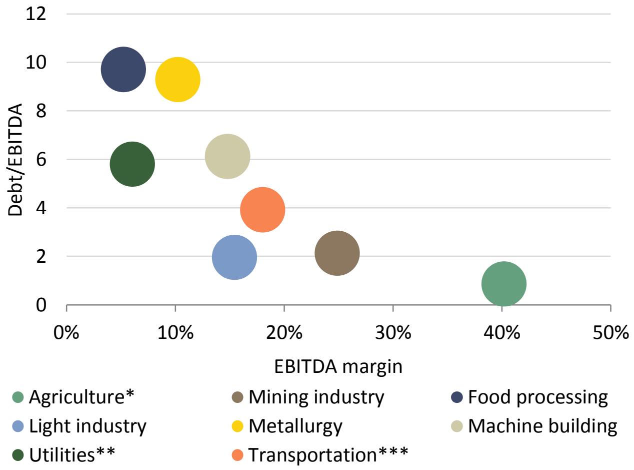
** Transportation, warehousing, postal, and courier services.*
*** Supply of electricity, natural gas, water, and waste management.*
Data for H1 2016 on agriculture is missing.
Negative values are not reflected.
Source: SSSU, NBU

Companies in light industry and transportation are attractive for new bank lending
Agriculture is currently the only sector that has no problems with banks. High profitability and low leverage in terms of previous debts make this sector attractive for lending. Today, agribusiness mainly takes short-term loans to finance working capital.

Financial and debt metrics prove attractiveness for new bank lending to light industry and transportation. These sectors have moderate leverage, comparatively high EBITDA margins, and better credit history than most other sectors. The share of NPLs by the end of H1 2016 was 15% and 27%, respectively. The mining industry is also in the 'safe zone' for lending but high share of NPLs accumulated over the past years (43%) is a restrictive factor for banks.

Companies in almost all sectors now need short-term liquidity. The mining, transportation, light, and machine building industries look the most attractive for short-term lending for working capital due to their comparatively high profitability.

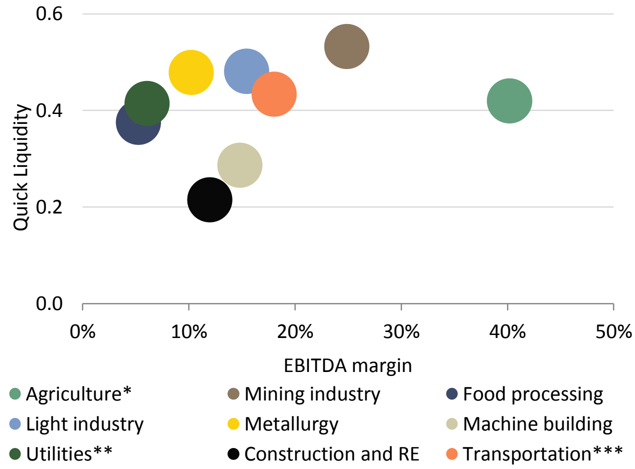
Leverage and EBITDA margin, H1 2016



** For agriculture, data for 2015 is shown.*
*** Supply of electricity, natural gas, water, and waste management.*
**** Transportation, storage, postal, and courier activities.*
Negative values are not reflected (construction).

Source: SSSU; NBU staff estimates

Quick liquidity and EBITDA margin, H1 2016



** For agriculture, data for 2015 is shown.*
*** Supply of electricity, natural gas, water, and waste management.*
**** Public transportation, storage, postal, and courier activities.*
Quick liquidity is the ratio of receivables for commodities and cash to current liabilities and provisions.
Source: SSSU; NBU staff estimates

The highest risks are concentrated in metallurgy, food processing, and construction
Metallurgy remains a high-risk industry: leverage is prohibitively high for raising significant funds for modernization while an increase in soaring coal an iron ore prices limit their resources through low profitability. Large enterprises in the industry are located not far from the zone of military hostilities. It gives rise to operational risk: the companies regularly encounter problems both with the supply of raw materials and demand as international traders tend to reduce purchases of Ukrainian products primarily during seasonal fluctuations.

The food processing industry is in the risk zone. Leverage and the share of NPLs remains high. Profitability of companies in the sector declined due to shrinking exports to Russia, the industry's products face strong competition with imports, and promotion of Ukrainian products in European markets is slow and costly due to difficulties in compliance with sanitary norms.

Supply of electricity, natural gas, and utility services also faces noticeable risks. Profitability of the companies in this sector is low while the leverage is significant. Increases in electricity tariffs boosted thermal power generation incomes, but did not affect the profitability of distribution companies. A major challenge for providers of utility services is low payment discipline of the population that will probably remain so for a while.

Risks in machine building declined contrary to expectations as increases in production of military equipment (computers, electronics, and optics) and decreases in staff costs allowed balancing out the loss of the Russian market. Therefore, the industry was generally profitable, but remarkable leverage and bad credit history will limit its attractiveness for creditors and investors.

Risks in agriculture and mining industries are minimal. Prices for metal ores recovered after a fall at the end of last year and remain high despite pessimistic forecasts. A lower tax rate on the production of natural gas (from 70% down to 50% for the State-owned company Ukrgasvydobuvannya, and from 55% down to 28% for private companies) from the beginning of 2016 fostered the growth of yields in the industry. Further reductions in rent rates in the oil and gas sector are possible.

Growth potential is in domestic demand-oriented sectors in 2017
The main real sector risks (i.e., shrinking exports to Russia, lower global commodity prices, high dependence on expensive imports, and decreased consumer solvency) have materialized over the past two years.

Further increases in the real sector's profitability should be expected in 2017 under the conditions of macroeconomic and exchange rate stability. However, the growth rate will be lower than in H1 2016: the positive effect from the decrease of the Single Social Contribution on corporate profits is exhausted. The main source of improvement in financial performance indicators will be a revival of business activity.

Economic growth will ensure higher income of households and consumer expenditures that will facilitate increases in domestic demand. Industries that operate to meet domestic demand will probably show the highest growth rates next year. This is especially true for those that are less dependent on imports like light industry, transportation, construction and, to a lesser extent, the mining and food processing industries.

For metallurgy, next year's forecasts are moderately positive due to expected (but insignificant) price increases and reconstruction of the railway line to Mariupol. However, domestic demand is weak while competitiveness in external markets falls due to underinvestment into the sector over the past years. Prospects for machine building are still unclear: the Russian market is virtually lost, new export opportunities are obscured by the monopolistic positions of diversified machine building corporations, the existence of trade restrictions, and the weak competitiveness of Ukrainian products.

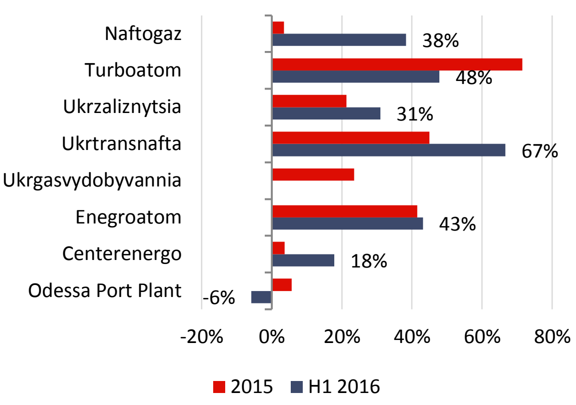
Box: State-owned enterprises – State support is no longer required

Over the past two years, State-owned enterprises, especially the largest of them, sharply increased profits and improved their financial condition. This enables them to service and repay debt timely. In the medium term, this could open prospects for raising external funding. There is no need for State support. Risks of new quasi-fiscal deficit emerging due to the necessity to finance SOEs are minimal. State-owned banks are advised to stop lending to State-owned enterprises and bring their credit policies in line with the principles and provisions of the Development Strategy of State-owned Banks.[2]

Until recently SOEs were regularly making losses. However, in the past year they started to make profits and continued to strengthen their financial position during this year. In 2015, SOEs reported an average weighted EBITDA margin of 13%, accounting for 36% of total EBITDA in the real sector. Major reasons are increases in tariffs for services to state monopolies and the first results of corporate governance reforms that goes on in the public sector.

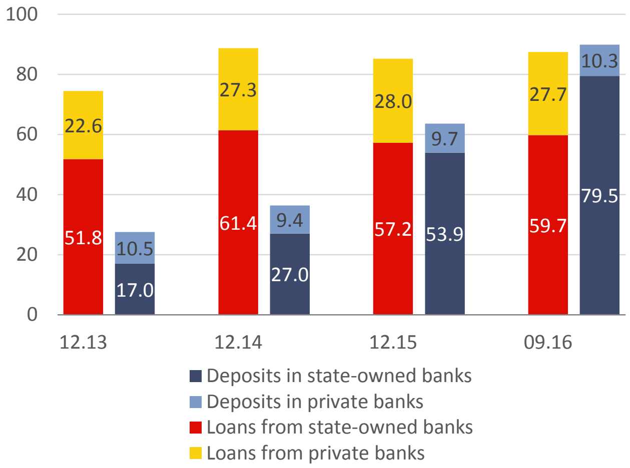
The liquidity of state companies is sharply improving: funds available on accounts increased by 41% in the first 9 months of 2016 to UAH 90 billion. By the end of September, total deposits of SOEs exceeded their loans to banks. However, the improving financial conditions have not currently effected the total debt of the majority of State corporations. Some of them have not yet completed debt restructuring and only partially service their debts, explaining this with underfunding. Moreover, some State monopolies redistribute their credit liabilities between State-owned banks, thus compensating the payments to one bank with new borrowings at another.

EBITDA margin of the largest SOEs



Source: SCSSM, corporate financial reports

Loans and deposits of SOEs, UAH billion



Source: MEDT, NBU, NBU staff estimates

Three monopolies (i.e., Naftogaz, Ukrzaliznytsia, and Energoatom) account for 74% of total debt of State-owned companies to Ukrainian banks, which is UAH 87 billion. Two of them in the beginning of the crisis could not properly service their liabilities to both foreign and domestic creditors, primarily, to the State-owned banks. Current financial indicators of the three largest State-owned enterprises allow for proper servicing of debt now and to fully repay them in the future.

Financial indicators of largest State-owned enterprises[3]

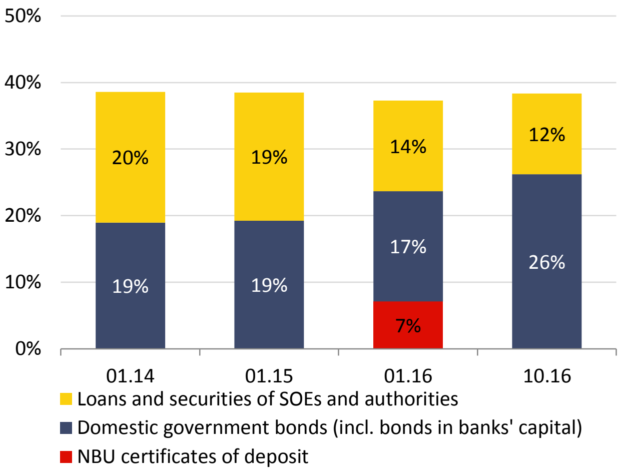
	Naftogaz		Ukrzaliznytsia		Energoatom	
	2015	H1 2016	2015	H1 2016	2015	H1 2016
EBITDA margin, %	3%	38%	21%	31%	42%	43%
Net debt/EBITDA	13.1	0.7	3.1	1.7	0.7	0.7
Operating profit/Interest	0.5	8.0	1.4	0.2	4.4	4.3

[2] Principles of strategic reforming the state banking sector.
[3] Source: SCSSM, corporate financial reports.

State-owned banks need to reduce lending to State-owned companies
Authorities and State-owned enterprises hold a high share in assets and liabilities of SOBs. Excessive lending by SOBs to SOEs over many years made the financial institutions hostages to this process: instead of searching for new, attractive private borrowers, they continue lending to State-owned corporations. This poses risks both for the banks because of high concentration of loans and for the banking system as a whole. The borrowed funds distributed to less successful borrowers work less efficiently; moreover, the funds are not always repaid on time because of regular difficulties at SOEs with servicing and repaying debt. Having an opportunity to get loans 'on demand' from State-owned banks, the SOEs' management loses motivation to increase their efficiency to maximize profits.

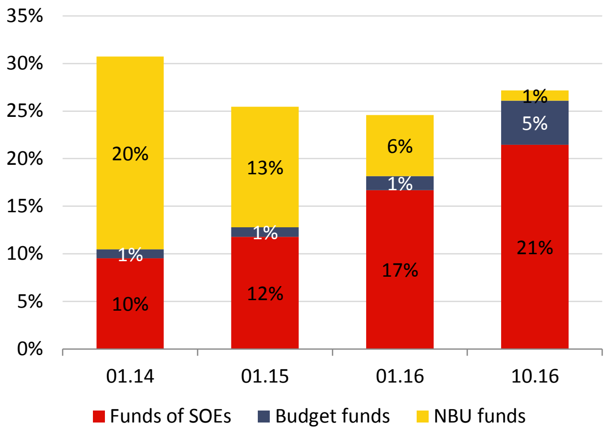
Early this year, the Cabinet of Ministers approved the Development Strategy for State-owned Banks. It provides that each of the three largest State-owned financial institutions will have its own specialization and will lend to SOEs strictly in line with the prudential requirements of the NBU, including compliance with concentration requirements. State-owned banks should begin a gradual transition from the support of State-owned enterprises to lending to businesses and households within the identified target segments.

Government share in total assets of SOBs



Source: NBU

Government share in total liabilities of SOBs



Source: NBU

Real estate market and related risks

Demand for residential property remains limited. The effect of temporary factors that supported it are exhausting, primarily in Kyiv. Housing lending intensified but the volumes are too small to influence the market or pose a risk. Changes in volumes of supply relate to shifts in its structure by regions, qualities of housing offered for sale, and terms of financing for its purchase. In Kyiv, the residential property prices in USD equivalent are still falling but at a slower pace. The number of transactions is low but starts to recover. Commercial real estate today is unattractive for investment.

Demand for residential property remains limited

Real incomes of households increased marginally in Q2 2016 after a substantial lengthy decline provoked by the crisis. This is one of the first signs of rising purchasing power. Nevertheless, the rise is too small to significantly increase the demand for residential property. Therefore, the latter is driven by factors that under normal circumstances would be secondary. First, risk of losing deposits at an insolvent bank forced depositors to withdraw cash and purchase dwellings. The impact of this factor gradually abates as the cleanup of the banking sector comes to an end, and steady inflows of deposits signals continuous recovery of confidence in banks. Second, the sharp hryvnia depreciation allowed those who accumulated FX savings before the crisis to find attractive price offers in the housing market and take advantage of them. The influence of these factors also fades away due to stabilization in the FX market and savings depletion. Third, demand from internally displaced persons from occupied territories is almost completely realized.

A stable source of demand for real estate are those who receive FX income, including remittances from migrant workers. Significant tariff increases for utility services will restrain the demand for housing as an investment.

Mortgage lending intensified, but the scale is still limited

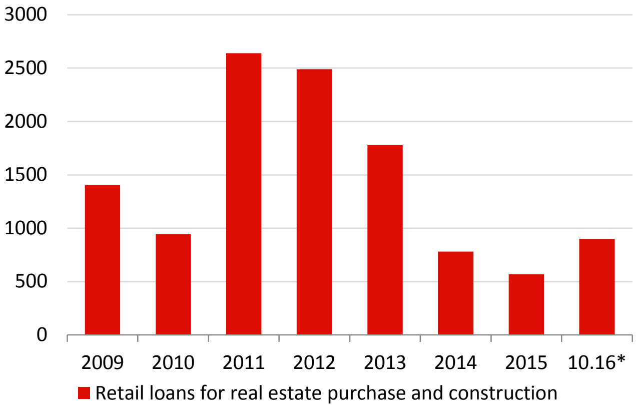
This year, mortgage lending to households intensified. A 'lending survey' conducted among banks in Q3 shows that demand for mortgages gradually grows alongside with the number of approved loan applications. Deposit corporations lend for housing purchases both in the primary and secondary markets. However, according to the brokers' estimation, the share of loan-financed housing does not yet exceed 5%. Terms of new mortgages are quite stringent generally. This determines their acceptable quality as declared by banks.

A major problem discouraging banks from pursuing mortgage lending is a portfolio of FX loans extended prior the 2008 crisis. The share of NPLs (IV and V quality categories) for solvent banks increased from 76% up to 80% over the first 10 months of 2016. The main reasons behind this include reassessment of credit portfolio quality by a number of banks and a sharp drop in the number of restructurings alongside with deterioration of loan servicing. The Law of Ukraine *On a Moratorium for Foreclosure of Property Owned by Citizens of Ukraine Provided as Collateral for FX Loans* and failure to adopt the draft law on restructuring of such loans block the resolution of the problem (see. page 38 of the first FSR).

Apart from buyers of housing, banks lend to residential property developers. This goes for both the capital city and regions. Large companies take loans with maturities of up to three years. Smaller developers receive short-term loans from banks to maintain the pace of construction if they fail to sell built apartments quickly. However, overall lending to real estate developers is still modest. The main sources of funding are the accumulated funds of the real estate developers and revenues from housing sales.

Under slowing inflation and falling interest rates, further increases of hryvnia mortgage lending and financing of real estate developers might be expected. However, in the short run, the rates of the increase will be moderate in view of a lack of high-quality borrowers and unresolved problems with FX debt. Given that, the scale of such lending is currently limited, the increase will not pose risk and will produce no significant impact on housing prices for a while. In the long term, to control the risk to financial stability arising from the housing market, the NBU intends to monitor prices closely and to launch a systematic calculation of LTV ratio for mortgages.

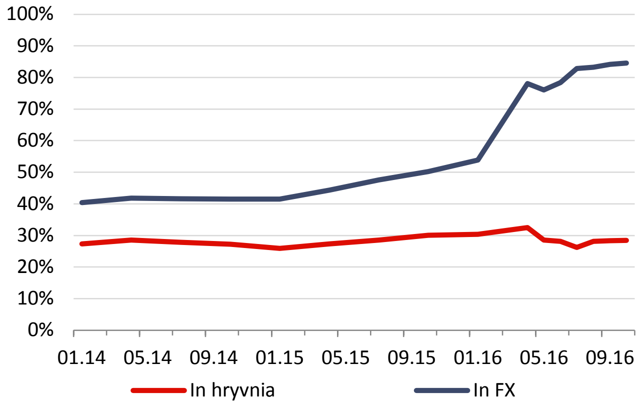
New mortgages, UAH million



** January–October 2016*

Source: NBU

Share of NPLs



Source: NBU

New housing supply increases in the regions, average area of apartments declines

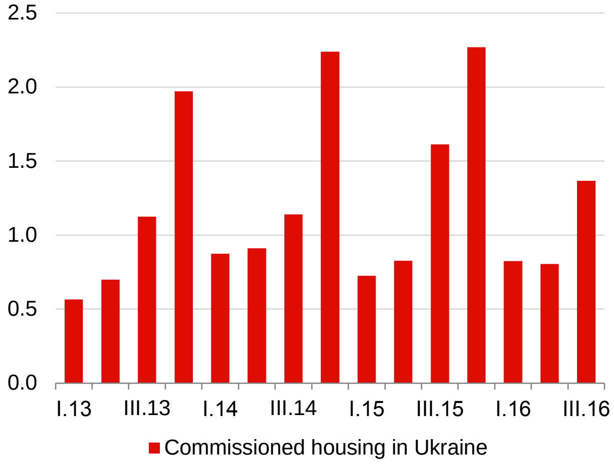
In H1 2016, the volume of commissioned housing in Ukraine in apartment blocks remained at the rate of the previous year. In Q3, it was less than the abnormally high records of 2015 and higher than that of 2013–2014. Apart from Kyiv and the Kyiv region, the constant leaders in terms of commissioned housing remain the Lviv, Odessa, and Ivano-Frankivsk regions. However, by growth rate in housing supply, the top-runners are the Volyn, Dnipropetrovsk, Zaporizhia, and Kharkiv regions. For all of them, the growth rate exceeded 20%. This indicates a shift in the geographic pattern of the Ukrainian housing property market. In 2014–2015, Lviv recorded the highest growth rates of new housing supply among all the regional centers.

In H1 2016, Ukraine issued 685 permits for the construction of apartment blocks, which is 54% more than in the same period last year. This indicator exceeded minimum levels and signaled a possible revival of housing investment in the future.

During Q3 2016, the average area of apartments in apartment blocks in Kyiv decreased by 3.8%. However, the number of the newly built apartments increased by 6.0%. Despite the stagnation in housing commissioning over the recent years, the capital of Ukraine remains attractive for housing investment. According to data from UTG Company, 46 residential complexes with over 12,000 apartments are to be commissioned in H2 2016, compared to about 19,000 apartments commissioned annually in 2013–2015. Meanwhile, according to brokers' data, new apartments in over 230 new buildings were offered in Kyiv at the end of November.

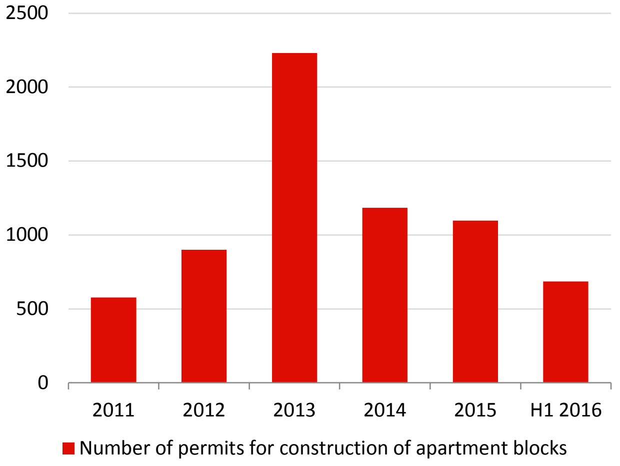
Intensive competition under limited demand forced real estate developers to change the structure of supply. The average area of new apartments fell from 76.2 sq. m in 2013 to 65.8 sq. m for the first 9 months of 2016. This was caused by both a growing share of one-bedroom apartments (from 43% in 2013 up to 52% in January–September 2016) and, to a lesser extent, by the smaller total area of newly built apartments regardless of the number of rooms in them. This trend applies to both Kyiv and the regions. Real estate developers offer installment programs for housing purchase for projects under construction, allowing customers to pay for the cost of housing in several installments over the period before the commissioning. Moreover, such offers are increasingly extended to housing at already commissioned homes. The term of installments ranges from several months to five years. According to the estimates of market participants, half of agreements are financed this way. Cooperation between construction companies and banks stimulates mortgage lending through incentives, such as reduced mortgage rates (18% per annum) in case of a down payment exceeding 50%.

Housing supply in Ukraine, million sq. m.



Source: SSSU

Number of building permits issued in Ukraine, units

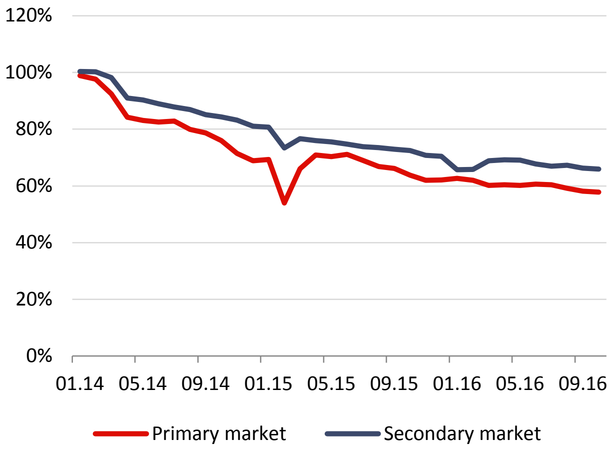


Source: SSSU

Housing prices and number of purchase agreements remains low

At the beginning of November, average prices in USD on both the primary and secondary housing markets of Kyiv declined by 9% yoy. Prices of residential property in the capitol city continues to fall because the market is oversupplied. The average price in the primary real estate market in Odessa increased by 1.0% per year, while in Lviv it decreased by 0.8% (according to Lun.ua, in terms of rate of cash FX market).

Housing prices in Kyiv, December 2013 = 100%



Cost of residential property in Ukraine is still measured in USD, directly on the secondary market, On the primary market, home prices in UAH are indexed in the event of significant USD rate moves, and agreements sometimes directly provide for a dollar peg.

Source: real estate agencies, NBU

Home price-to-rent ratio, December 2013 = 100%

Source: real estate agencies, NBU

According to the Ministry of Justice of Ukraine, the number of purchase transactions for apartments and residential housing grew by 7% in Ukraine and by 21% in Kyiv over the past year. In H1 2016, the number of transactions in Kyiv increased further by at least 15%. However, several onerous construction scandals caused a shift of buyers' focus from the primary market to the secondary market. There are now over 40 illegal newly constructed buildings in Kyiv. At some of them, apartments are still on sale.

The average rental fee per square meter in Kyiv fell by 11% yoy in October. The price-to-rent ratio remained relatively stable. It is 20–25% higher than before the crisis. This indicates that residential property prices can slide further down in Kyiv or (in a less likely scenario) that revival of business activity in the capital will raise rent fees.

Low housing prices in general in Ukraine, no price declines in some cities, and slower price decreases in Kyiv, as well as an increasing number of transactions and structural shifts in the housing supply suggest that the worst phase of the market downturn has already passed. In the short run, the market will be relatively stable and will not pose significant risks to financial stability.

Commercial real estate remains unattractive for banks today

In the commercial real estate market, investment activity is low. Unlike residential construction companies, commercial real estate developers do not raise new loans since they have high debts and suffered significant losses. In the segment of retail commercial real estate, commissioning of long-term construction projects is constantly postponed. In 2016, only large shopping malls in Kyiv and Lviv opened out of numerous announcements.

In H1 2016, the vacancy/occupancy ratio dropped slightly in Kyiv while rent rates grew. However, a significant increase in new retail space next year is unlikely since the gross leasable area of announced or frozen sites exceeds 500,000 sq. m, making up 50% of the facilities in operation.

The low quality of loans to companies engaged in construction of retail, office, and hotel properties is a significant problem for banks. Even lower vacancy rates of shopping malls and hotels, turnover growth in retail trade, and higher business activity generally do not lead to any improvements in loan servicing.

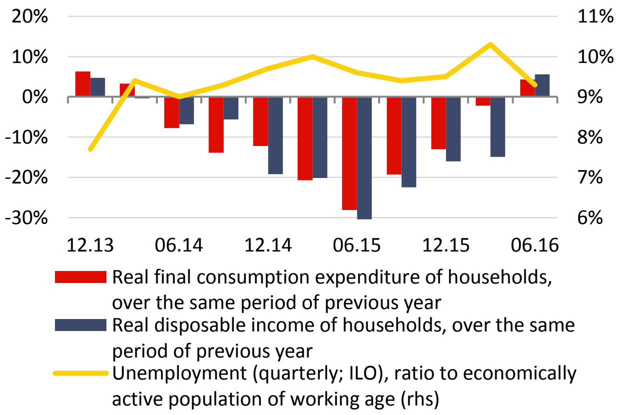
Households and related risks

Real household net disposable income began to grow for the first time in the past two years. We expect this trend to continue as a result of a slowdown of inflation and increased wages. However, because of pent-up demand and lower involuntary thrifts, household expenditures grew faster than incomes. Therefore, households' savings were declining since the beginning of the year. Mostly the better-off households with a positive balance of income and expenses were behind the inflow of deposits to banks. Short-term deposits remain the main type of savings. Risks of the household sector to the banking sector decline. The debt burden on households is low, incomes are on the rise, and lending recovery is slower than in the corporate sector.

Real household net disposable income began to grow

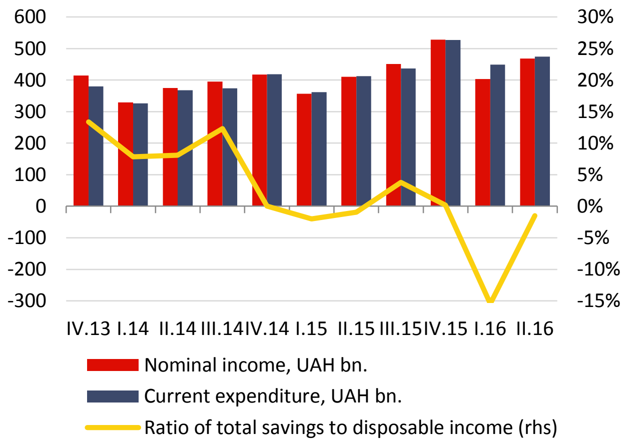
Real disposable income of households grew in Q2 2016 for the first time in the past ten quarters. The growth rate was 5.6% per annum. The main reasons behind it were a significant slowdown of inflation and a nominal income increase by 14.3%. The wage increase of 22.8% provided for nearly two-thirds of total growth. This resulted from the minimum wage increase (from September 2015 and May 2016) and significant wage increases for military personnel. The Single Social Contribution rate was reduced at the beginning of 2016 to establish grounds for increases of wages and incomes of households. However, it had a different outcome: enterprises increased profits, partially dragging over the resources from the State and the households. A third of the increase of nominal incomes was due to transfers that households received, primarily, benefits and subsidies for utility services. Nominal income also benefited from the growth of social aid, due to the subsistence minimum increase, and bigger remittances from abroad[4] in USD equivalent, but their effect was limited.

Real disposable income, consumer expenditures and level of unemployment



Source: SSSU

Households' revenues, expenses, and propensity to save



Source: SSSU, NBU

In Q3 2016, compared to the corresponding period of 2015, nominal wages increased on average by 23.2% while real wages grew by 15%. Given positive dynamics and the significant weight of wages in incomes of households, nominal and real incomes are expected to rise further in 2017.

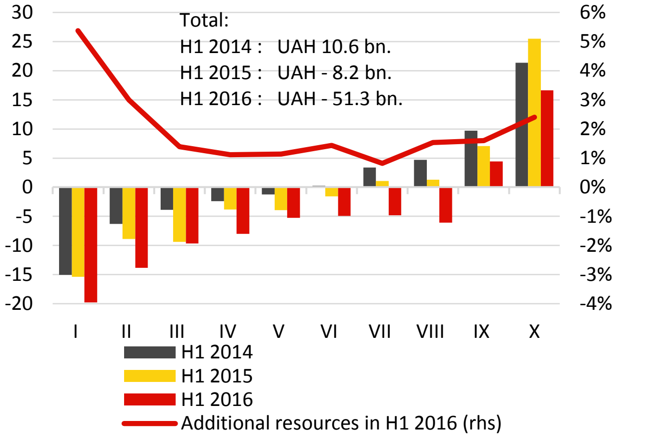
The faster growth of expenditures causes continuing depletion of savings

In Q2, nominal current household expenditures rose by 14.8%, i.e., 0.5 pp faster than nominal income. This was the result of realization of pent-up demand and a decrease in

[4] Due to depreciation of the hryvnia, remittances grew in Q2 2016 in UAH terms by 23.9% compared to the corresponding period of 2015, despite a modest (6%) increase in USD terms from USD 431 million to USD 457 million.

involuntary thrifts on the part of some households. In Q2, the decline in total savings[5] of households continued (by UAH 5.3 billion). Since the beginning of the year, this decline was driven primarily by a significant decrease in financial resources of households.

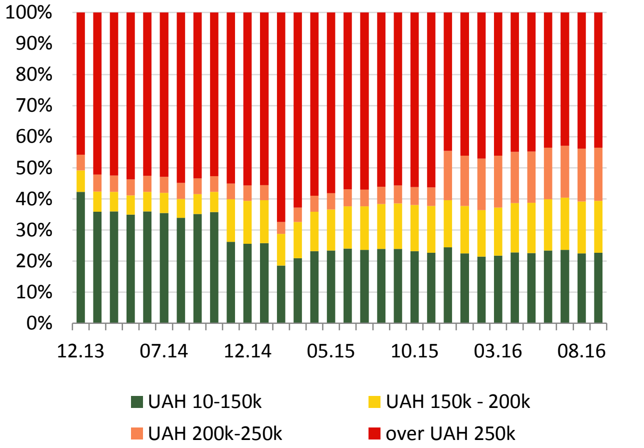
Growth of households' savings by decile groups, UAH billion*



** Difference between nominal incomes and current expenses of households, distributed by decile groups in the relevant structures of household surveys.*

Source: SSSU, NBU staff estimates

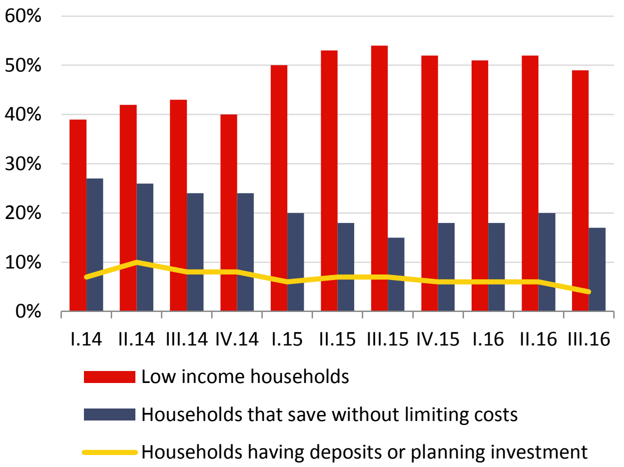
Structure of deposits by size at solvent banks as of 1 October 2016



Source: DGF, NBU staff estimates

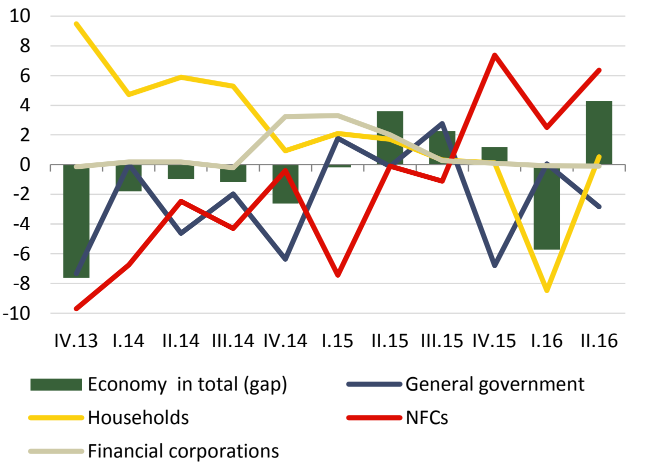
In 2016, the proportion of households that had to either borrow or spend their savings to finance current consumption increased significantly. The increase in the share of large deposits (over UAH 150,000) from 57% in the end of 2013 up to 77% in the end of Q3 2016 is an indirect indication of this trend (i.e., smaller deposits were withdrawn).

Households' ability to save



Source: GfK Ukraine

Growth of financial resources by sectors of economy*, %/GDP



** Calculation on data in the category of "Net lending (+)/net borrowing (-)" System of National Accounts by institutional sectors of economy.*

Source: SSSU, NBU staff estimates

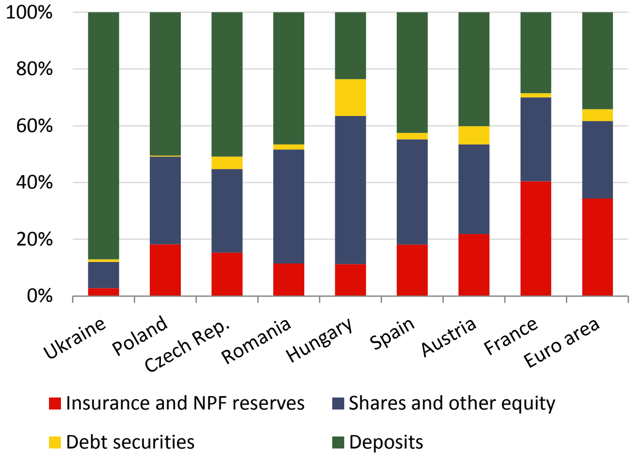
[5] According to international methodology SNA'2008, savings include financial assets – cash, deposits, securities, loans, insurance technical reserves (ICS, NPFS) and receivables; non-financial assets - fixed assets, tangible current assets, valuables, intangible assets.

Households' propensity to save remains low. According to the results of the survey by GfK Ukraine in Q3 2016, the share of households that receive income that is not sufficient to cover current consumption or only suffices to cover it constitutes 49%. The indicator decreased slightly compared with H1 2016, but remains significantly higher than before the crisis. Only 17% of households had an opportunity to save without limiting their consumption. This proves, on the whole, the unstable position of households as a creditor of the economy in 2016.

Non-cash savings are mostly short-term deposits

Limited savings of household, and the high probability that shortly they will have to use this money to offset personal income loss or to support family, determine the large share of bank deposits in financial investments. By the end of H1 2016, they amounted to 87%. The need to keep savings in a mobile, liquid form in order to have constant access to them and to be able to react timely to potential problems at the bank lead to shorter maturities of deposits. Compared to 2013, the share of new deposits with a maturity of six months and more in their total amount decreased by 17 pp, and in June 2016, it was 33%.

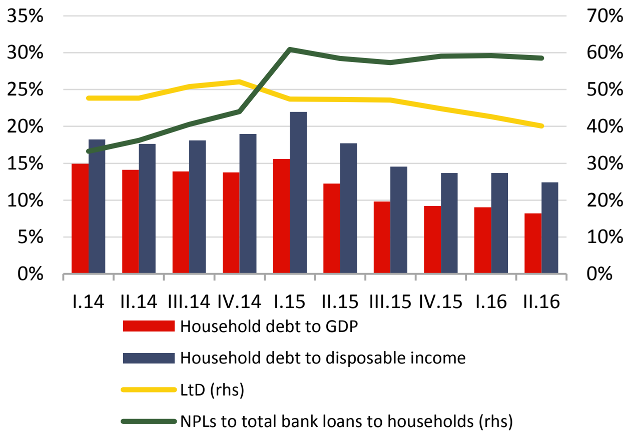
Comparative structure of financial assets* of households of Ukraine and EU countries as of 1 July 2016



** Cash excluding.*

Source: ECB, central authorities, NBU staff estimates

Debt of the household sector



Source: SSSU, NBU staff estimates

Meanwhile, households are not interested in investing in the stock market, insurance companies, or non-state pension funds (NPFs), as such investments are longer term and do not always protect the value of the investment. Investments of households in stocks of corporations decreased from 10.5% down to 8.6% of total financial investments over H1 2016 as a result of corporate bankruptcies and liquidation of banks. Such investments are mainly illiquid; their share in financial investments of households will continue to shrink. Total investment in NPFs is extremely low, i.e., 0.1% of GDP and disposable income.

Debt burden of households continues to diminish

In H1 2016, the financial liabilities of households, 98% of which are in the form of bank loans, decreased by 3.8% predominantly as a result of limited lending to households. The debt burden declined in absolute and relative terms. Ratios of debt-to-GDP and –to-disposable-income decreased for a fifth consecutive quarter. The level of NPLs (IV and V quality categories) stabilized. The LtD for households decreased as a result of completed restructurings, repaid mortgages, and initial recovery of the deposit base. Households remain net lenders to banks.

Banking sector conditions and risk

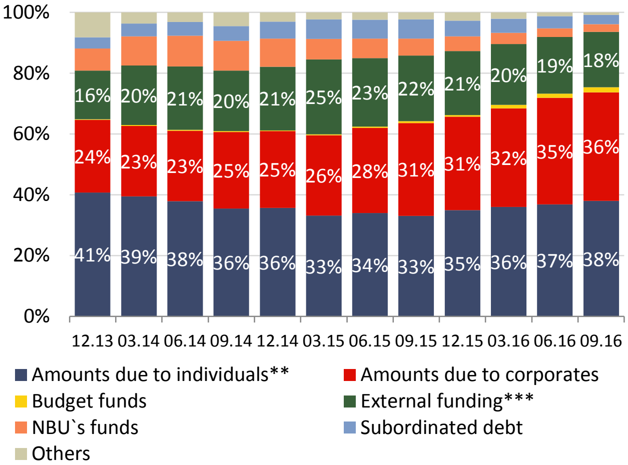
Funding

The share of domestic funds in total banks liabilities increases. The growth in corporate deposits, which almost caught up with retail deposits, is one of the major drivers of the process. Households mostly make short-term deposits at banks, although the maturity gradually grows. Banks continue converting external subordinated debt and interbank loans into equity, meeting their recapitalization requirements. External liabilities lose their weight in the funding of Ukrainian banks, and this trend will hold. Next year, the growth rate of the deposit base will accelerate slightly.

Cash inflows from households and businesses to banks continues

From the beginning of the year, corporate and retail deposits in hryvnia increased by 7.4% and deposits in FX by 7.2% in USD terms.[6] Corporate and retail deposits amount to 74% of total liabilities of banks. The structure of liabilities returned to the 2006 indicators when the expansion of Western banks to Ukraine began. That expansion resulted in inflows of foreign capital into our banking system.

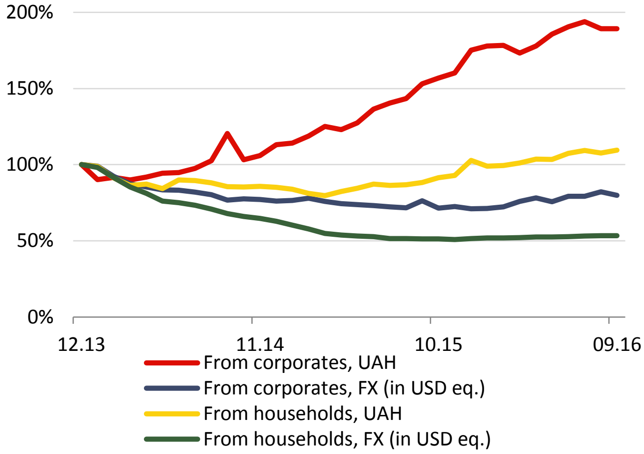
Structure of banks' liabilities*



** Interest accrued included*
*** Certificates of deposit included*
**** Interbank and IFI funding*

Source: NBU

Retail and corporate deposits 2013=100%*



** Data for solvent banks as of 1 October 2016, interest accrued, certificates of deposit included.*

Source: NBU

Share of corporate deposits in funding of banks grows

The major trend this year is a significant increase of corporate deposits in the liabilities of banks. Improvement of the financial conditions of State-owned enterprises and recovery of exporters' operations in H2 2016 raised corporate deposits in FX. Their rate of growth in the first three quarters was 12%, exceeding the 8% growth of hryvnia deposits. Meanwhile, households prefer hryvnia deposits.

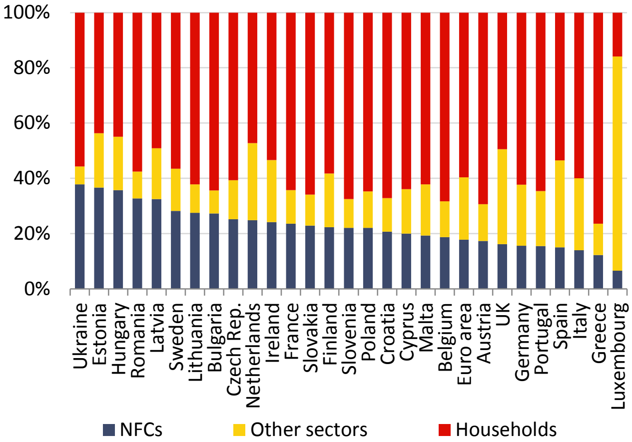
By the beginning of October, the share of deposits of non-financial corporations in total deposits at Ukrainian banks was the highest among European countries. Shares of corporates and individuals in the liabilities became nearly even.

Structure of deposits by maturities gradually shifts in favor of long-term deposits

Short-term deposits still dominate the structure of banks' liabilities. Demand deposits and time deposits with maturities of up to one year make up 68% of retail deposits. The average maturity of retail deposits gradually rises. The share of new deposits with maturities over 6 months increased from 23% in December 2015 to 29% in September 2016.

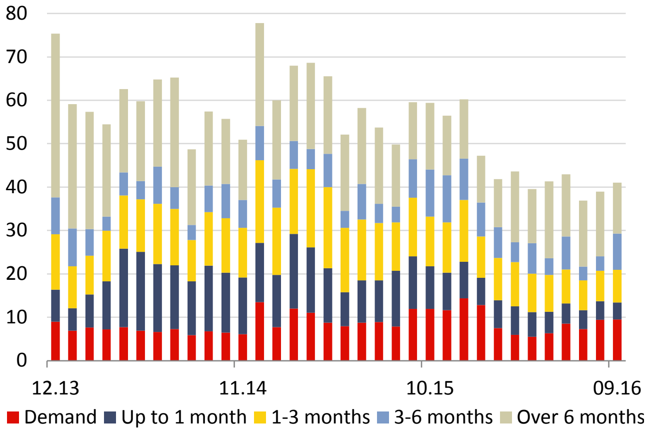
[6] For banks that were solvent as of 1 October 2016, certificates of deposits included.

Structure of deposits by sectors as of 1 October 2016



Source: ECB, NBU

New retail deposits, UAH billion



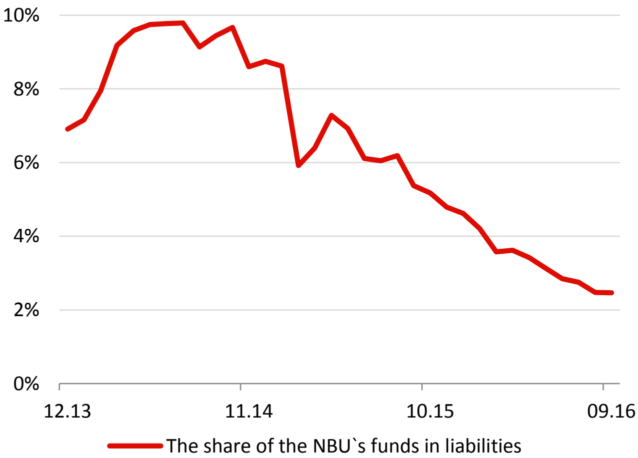
Source: NBU

External liabilities continue to decline

Raising new deposits enabled banks to almost completely repay outstanding debt to the NBU: by the end of Q3, the share of NBU funds in banking liabilities amounted to only 2.5%.

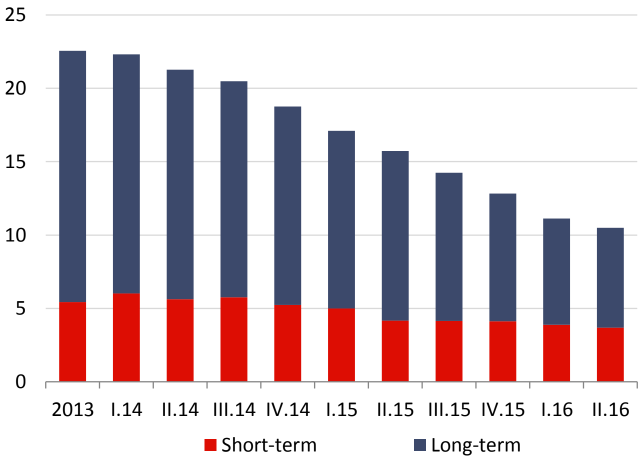
External financing ceases to be a significant factor in the funding of Ukrainian banks. The largest financial institutions that needed recapitalization in 2015–2016 often converted subordinated debt and interbank loans from their parent structures into equity. The gross external debt of banks decreased by USD 2.3 billion since early 2016 down to USD 10.5 billion. The share of subordinated debt in banks' liabilities decreased by half down to 3%.

Share of NBU funds in liabilities of banks



Source: NBU

Gross external debt of banks, USD billion



Source: NBU

Next year, the deposit base is expected to increase by 10%. If macroeconomic stability holds, the maturities of deposits will be extended. External funding will remain limited.

Lending trends

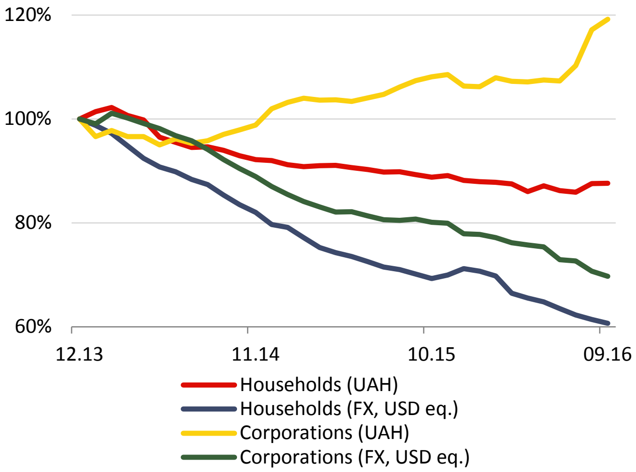
In 2016, lending was sluggish and uneven, despite the fact that banks had significant liquidity. Overall, the loan portfolio shrank. However, due to large-scale restructuring, corporate loans in hryvnia grew while FX loans progressively slumped. Banks systematically extended new loans only to agricultural companies. The portfolio of retail loans issued continues to decline. In the following year, the extent of lending recovery will primarily depend on the recovery of corporate solvency and on progress in enhancing the protection of creditors' rights.

Loan portfolio shrinks; interest rates under new loans fall

In January–September, the credit exposure of solvent[7] banks to corporates and households decreased by 2.6% at a fixed rate.[8] This is the result of slow economic recovery, excessive leverage of corporates, and high interest rates. The key trend of the current year is conversion from FX into hryvnia loans in the course of debt restructuring. Over the first three quarters of 2016, hryvnia loans grew by 10%, the hike in Q3 was especially pronounced. In the meantime, FX loans in USD terms decreased by 11%. Loan portfolios expanded only at State-owned banks – by 2.0% since the beginning of the year; other groups of banks reported declines.

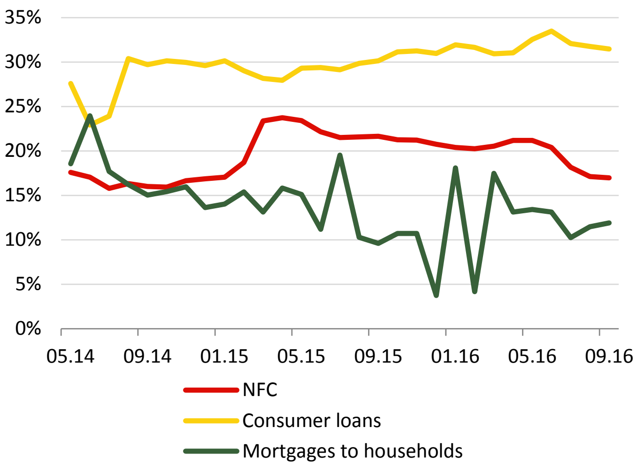
Cheaper financial resources helped to lower interest rates. Large-scale restructuring rates produced a huge effect on costs of corporate loans in hryvnia. In the process of restructuring, new rates in hryvnia were set closer to dollar rates rather than hryvnia rates.

Lending by solvent banks (2013 = 100%)



Source: NBU

Interest rates by categories of new loans in UAH, APR



Source: NBU

Agriculture is the only industry where banks have significantly expanded lending

The portfolio of loans increased sharply only in agriculture. Over the first nine months of 2016, overall loan growth across the industry at fixed UAH rates amounted to 16%. Readings of industry indicators give all the reasons to believe that this trend will maintain.

Lending to electricity supply increased significantly in nominal terms. However, its sole driver was unblocking the financial operations of NJSC Energoatom in June. That allowed the company to raise loans for the purchase of fuel.

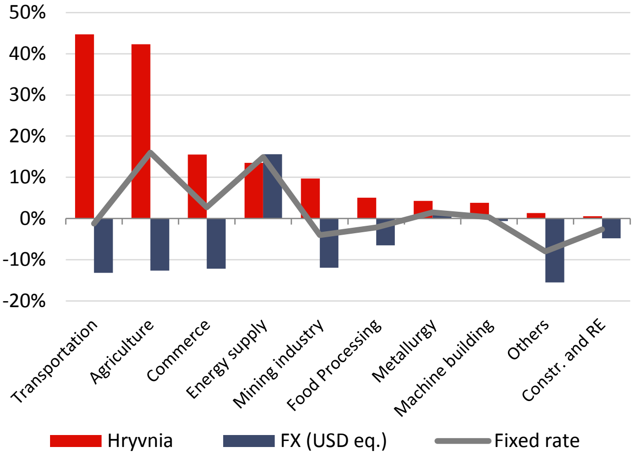
Consolidation of Ukrzaliznytsia that accompanied its debt restructuring became the basis for a high growth rate of hryvnia lending to transportation and a marked reduction in the FX component of the credit portfolio.

[7] In this part, analysis applies to banks that were solvent in early October 2016.
[8] Data is shown at the UAH rate fixed in early 2016 (UAH 24.00067 per USD 1).

Retail loan portfolio is still shrinking

Over January–September, consumer loans and mortgages to households at a fixed exchange rate decreased by 5% and 17%, respectively. High interest rates and the low solvency of households constrain retail lending. Due to this, the share of households in the loan portfolio declined from 21% in 2013 to 16.2% by the end of Q3. Banks extended almost all new loans for current needs.

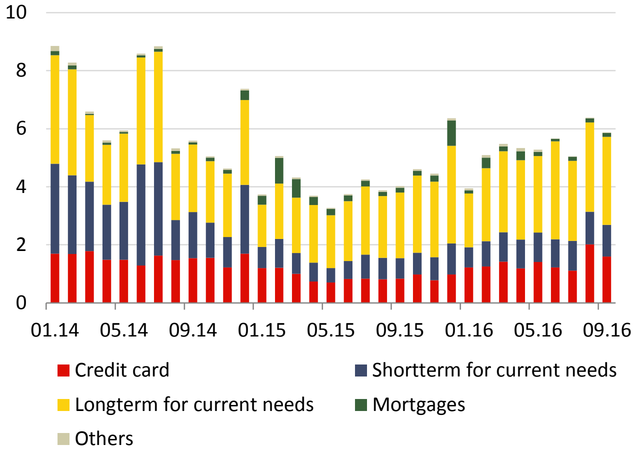
Change in credit exposure by sectors over the first 9 months of 2016



"Transportation" – "transportation, warehousing, postal, and courier services"; "Supply of electricity" – "Supply of electricity, natural gas, water, and waste management"; RE – "Real estate".
Data includes non-residents.

Source: NBU

New retail loans in hryvnia, UAH billion



Source: NBU

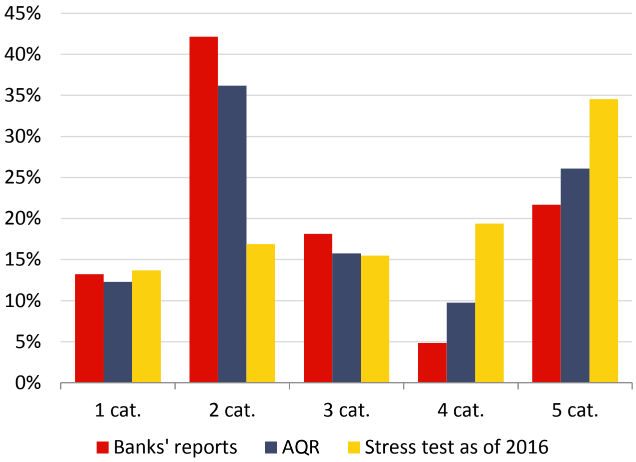
Credit risks

After the diagnostic study of the top-20 banks, results of which were published in the previous FSR, the NBU completed the diagnostics of the next top-40 banks in 2016. The combined share of assets of these banks is 9.5% of total banking assets. Over 2015–2016, banks with combined assets of over 98% of total sector assets went through diagnostic studies. The results of this year's diagnostic study discovered the same deficiencies as in the past year: inadequate bank reporting of the real quality of the loan portfolio and failure to recognize credit risks. From the beginning of 2017, the NBU introduces new regulations on credit risk assessment. Their aim is to eliminate loopholes in the current regulation and to encourage banks to report realistic information. Generally, the situation with the quality of loan portfolios stabilized, and we expect a gradual decline in the share of NPLs over 2017.

High credit risks of banks were confirmed

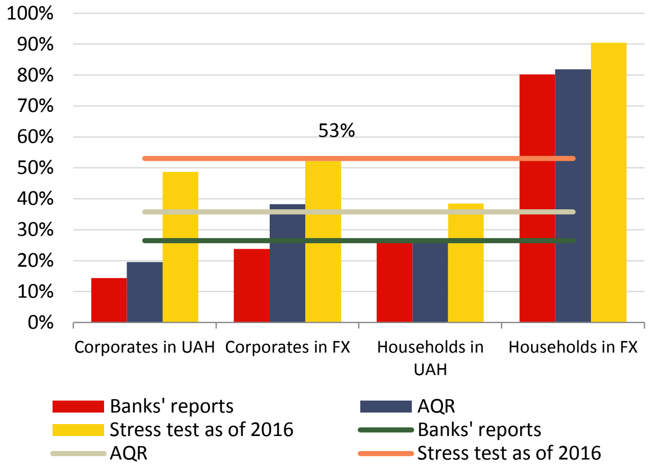
In 2016, the NBU carried out a diagnostic study of the asset quality and capital adequacy of 40 banks (from 21st to 60th by size of assets). 39 solvent banks still remain unexamined (less than 2% of the system's assets). The diagnostic study of the next top-40 banks, as well as for the top-20 banks in 2015 (Khreshchatyk bank and Fido bank were declared insolvent), revealed chronic problems of most Ukrainian banks, i.e., inadequate reporting of asset quality and a significant level of hidden credit risk.

Ranking of loans by quality at top-20 banks



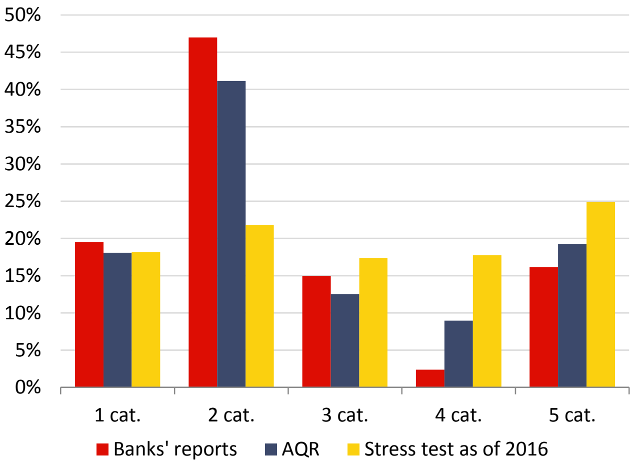
Source: NBU

Share of NPLs in portfolios of top-20 banks



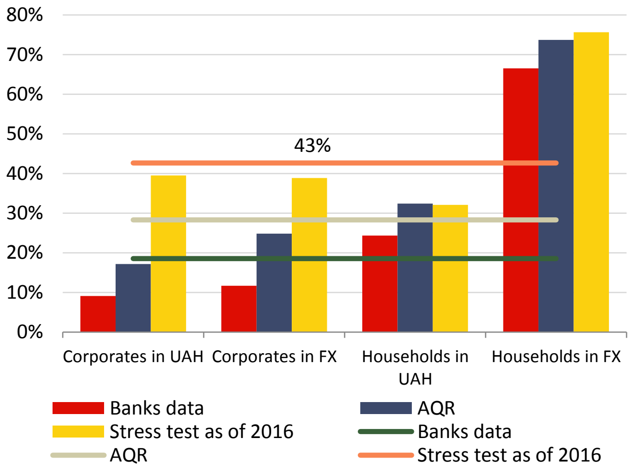
Source: NBU

Ranking of loans by quality at next top-40 banks



Source: NBU

Share of NPLs in portfolio of next top-40 banks



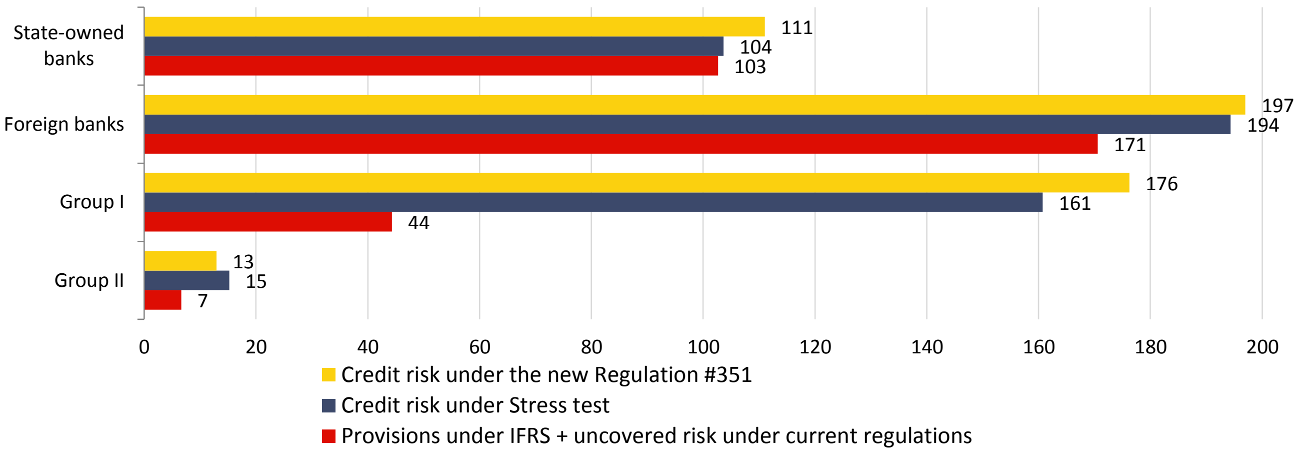
Source: NBU

Upon the results of the diagnostic study of the next top-40 banks, estimated NPLs increased from 19% as reported by banks up to 43%. The share of NPLs revealed in the next top-40 banks was still lower than that in the top-20 banks (53%). The most striking discrepancies were between reported NPLs and actual NPLs discovered in the course of diagnostics were in the corporate loan portfolio in hryvnia – the increase was 31 pp.

The credit risk assessment based on the new rules is close to results of the diagnostic study

Since the beginning 2017, new rules of credit risk assessment for banks are introduced. A new document is designed to eliminate a number of significant loopholes in the current regulations that allowed banks to significantly under-report the share of NPLs and credit risks related to assets. According to preliminary NBU staff estimates, the effect of the new regulation will be extremely close to the 2015–2016 diagnostics' findings for the top-60 banks. The credit risk assessments mentioned above will decrease slightly as the NBU intends to amend the final version of Resolution No. 351 following consultations with banks held upon the publication of the document. Therefore, introduction of the new regulations will not cause any need for additional capital at almost all the banks that have recapitalized based on the diagnostics findings. Small banks that have not yet passed a diagnostic study and do not have approved recapitalization programs will enjoy a transition period for recapitalization if the changeover to the new rules reveals the need for additional capital.

Credit risk assessed by groups of banks, UAH billion*



** Preliminary estimates, to be refined later.*

Source: NBU staff estimate as of 1 October 2016 for banks that passed diagnostic study

Credit portfolio quality starts to improve

According to NBU staff estimates, peak values of NPL shares in bank portfolios have passed. Macroeconomic stabilization and gradual recovery of revenues and profits of enterprises lay the grounds for a gradual recovery of the quality of banks' loan portfolios. However, a bigger part of NPLs will most likely not be recovered as performing loans. The level of their recovery in the future will be purely symbolic. Nevertheless, most of the banks that passed the diagnostic study had already provisioned for NPLs or raised sufficient capital to cover potential losses. Subsequently, these loans will be written-off from balance sheets. The Law of Ukraine *On Financial Restructuring*, which allows banks and borrowers to restructure their liabilities in brief terms, provides a moderate impetus to improve the quality of corporate loan portfolios.

Box: New rules of credit risk assessment

New Resolution No. 351 *On Credit Risk Assessment* will take effect from the beginning of 2017. It provides for a number of reforms.

- An approach to credit risk assessment based on a concept of expected losses over 12 months is introduced. The financial condition of borrowers will be the key criterion for expected loss assessment. Earlier, credit risk assessment was mainly based on the current state of debt servicing. That allowed some banks to lend to the insolvent and captive companies implicitly accumulating significant credit risks. Change in the approach will help to identify timely credit risks of the counterpart and will make banks reflect them through capital.
- 'Basel' – formula for calculating the credit risk was introduced:
  $\mathrm{CR} = \mathrm{PD} \cdot [\mathrm{EAD} - (\mathrm{ColVAdj} + \mathrm{RC})]$, where PD – probability of borrower's default, EAD – exposure at default, ColVAdj – collateral value adjusted for liquidity ratio, RC – replacement costs. This formula is an equivalent to the classic formula EL = PD · LGD · EAD. The previously employed formula: $\mathrm{CR} = \mathrm{PD} \cdot \mathrm{EAD} - \mathrm{ColVAdj}$, resulted in credit risk understatement since no provisions were made at all in cases where collateral value exceeded the exposure weighted for probability of default.
- The model for assessment of the financial standing of borrowers (legal entities) for calculation of credit risk on an individual basis was revised. The loans assessed on an individual basis account for about 99% of total corporate loan portfolios of legal entities. The model[9] took into account the borrowers' financial statements for 2012–2014, i.e., comprising both crisis and pre-crisis periods.
- A concept of 'event of default' was introduced and triggers of default were defined that require a bank to set the PD level for an exposure at 100%. The PD curve was redefined based on average PD values for the past five years.
- The list of borrowers' high-risk indicators was expanded. The presence of these indicators requires banks to lower a borrower's financial class, regardless of the credit risk assessment based on the scoring model.
- The list of eligible collateral was amended. For example, property rights for other property, future earnings included, are no longer accepted as eligible collateral.
- Banks are allowed to adjust the financial class of an individual borrower with regard to the financial condition of the group it belongs to. This should encourage banks to disclose more information on corporate groups, which comprise their individual corporate borrowers.
- Banks are authorized to employ their judgment in credit risk assessment. This will prevent non-recognition of credit risk by banks based on formal requirements.

[9] For more information on the methodology of econometric model design, please refer to the *Visnyk of NBU* (the NBU Journal) for December 2015, NBU Econometric Model for the Assessment of Banks' Credit Risk and Support Vector Machine Alternative.

Box: 'Kyiv approach': benefits of the Law *On Financial Restructuring*

NPLs are one of key obstacles to lending recovery in Ukraine. Globally, the traditional way of NPL resolution is voluntary out-of-court debt restructuring. In its course, the loan terms are changed in such a way that a viable borrower can restore his solvency. This allows prevention of the inevitable loss of time and money on litigation if debt is recovered under general rules. The Law *On Financial Restructuring* established a similar mechanism in Ukraine.

An instrument of voluntary out-of-court debt restructuring provides an opportunity for banks and borrowers to negotiate new loan terms that will enable the company to recover fully. A similar approach was widespread in Asian countries after the crisis of the 1990s. It combined the principles of the London Approach and INSOL.[10] As of 2003, Thailand restructured 48%, the Korean Republic – 95%, Indonesia – 56%, and Malaysia – 77% of corporate sector debt. In Turkey, after the currency crisis of 2001, the Istanbul Approach was implemented. In its framework, the focus was on debt recovery of large companies. Its outcome was the debt restructuring of 220 Turkish companies worth USD 5 billion as of August 2003. In South-Eastern European countries (Romania, Serbia, Slovenia, Croatia), similar mechanisms of voluntary restructuring were implemented in 2010–2015.

In Ukraine, a demand to restructure loans arose because of the crisis of 2008, and it became particularly acute over the past two years. The diagnostic study of the NBU revealed 53% of NPLs in banks' portfolio. The Law of Ukraine No. 1414-VIII *On Financial Restructuring* came into force on 19 October 2016 and established mechanisms to meet this demand. This Law is the product of consensus among financial market participants and experts of the World Bank, EBRD, and IMF, and it incorporated the best global practices. The law does not specify the parameters of restructuring plans, interest rates, or total debt subject to restructuring, leaving these matters entirely to the discretion of lenders and borrowers.

The Law contains such advantages and offers the following opportunities:

- Aids conscientious viable corporate borrowers who can become solvent in the future (but experience temporary difficulties with debt servicing) to restructure their commitments over several months. Borrowers in a critical financial situation can reduce the risk of bankruptcy and restore solvency.
- Binds all creditors that agreed on debt restructuring of a certain borrower to coordinate their actions. It eliminates competition among creditors to get their money back before the others, even if it provokes the borrower's bankruptcy. In the beginning of the restructuring procedure, a moratorium is imposed on the borrower's repayments to lenders.
- Defines that SOBs and the DGF (on behalf of banks under temporary administration or in the process of liquidation) are allowed to take part in the restructurings. The Law *On Financial Restructuring* de-facto provides an exception to Article 53 of the Law of Ukraine *On Banks and Banking Activity* that prohibits setting interest rates below the cost of banking services at this bank. This allows banks to adjust the loan terms in the process of restructuring so that the borrower could meet them during a crisis. The exception is especially important for SOBs and the DGF who otherwise could not make loan restructuring on realistic terms.

The Supervisory Board is a body that coordinates arrangements and processes of debt restructuring, and establishes the Secretariat and the Arbitration Committee. It is also in charge of supervision and methodological support for the restructuring process. The roles of these bodies in promoting this process are extremely important since the restructuring culture in Ukraine is absent and there is often a lack of trust and no disposition for compromise between borrowers and lenders. Therefore, without fully-fledged effort by these authorities free from political pressures and narrow corporate interests, financial restructuring will not be efficient.

[10] Principles of the Global Approach to Restructuring of the International Association of Professionals on Restructuring, Insolvency and Bankruptcies (INSOL).

Legal risks

Over the past six months, legal risks did not change much and remain high. Implementation of reforms, even envisaged under the program of cooperation with the IMF, are postponed without any valid grounds. Disputable court decisions and the ineffective work of law enforcement agencies elevate risks to the banking system's stability. The only positive change was the adoption of the Law *On Financial Restructuring* that would simplify the restructuring of financial obligations and business activities of borrowers. To restore and develop the financial system, it is necessary to amend legislation to establish a mechanism for the restructuring of FX mortgages, remove the moratorium on mortgage foreclosures, and prevent abuses of bankruptcy procedure. It is essential to ensure the proper implementation of legislation by law enforcement agencies and courts, which is sometimes problematic now.

Positive developments in the protection of creditors' rights

From the beginning of the year, several steps to enhance the protection of creditors were made. The key change is the adoption of the Law of Ukraine *On Financial Restructuring*. It established a mechanism that enables banks and borrowers to restructure debt on terms that allow companies to normalize their financial leverage and revive full-fledged activity (see page 40). The law came into force in October, but it will only be efficient once the Supervisory Board and the Secretariat on financial restructuring properly execute their functions and remain independent of certain political forces or banks.

In October, two laws on executive enforcement came into effect that aim to ensure efficient foreclosures.

The Decree of the Cabinet of Ministers of Ukraine No. 687 of 5 October 2016 reduces the risks of illegal repossession of vehicles and protects banks from fraud with collateral.

Decisions the Supreme Court of Ukraine made in 2016 also enhanced the protection of creditor rights, especially related to mortgages. According to Law, a borrower's liquidation and termination of his obligations does not give grounds for recognizing the mortgage void, while the bank preserves the right to foreclose it. This is a positive practice.

No progress on the bulk of agenda items that have lingered for a long time

Nevertheless, the mentioned achievements are only part of what needs to be done for the effective legal protection of creditors. Many problems persist. They include the emergence of tax liabilities on behalf of a debtor if his debt is restructured or forgiven (excluding restructuring under the Law *On Financial Restructuring*). The Law does not bind all authorities to check private encumbrances for many types of collateral, including agricultural machinery, trucks, and other special vehicles. This poses significant risks of illegal alienation of such collateral, which in practice leads to higher banking costs of provisioning.

Another problem is that banks generally cannot collect outstanding debt of borrowers from warrantors. Due to shortcomings in the Civil Code, courts do not grant the respective claims. To resolve this issue, one of the banks appealed to the Constitutional Court for an official interpretation. Proceedings on this case started on 4 June 2015, but a decision is still pending.

Some draft laws stipulated by the IMF program have not yet been adopted

Among them:

- Draft Law No. 4004-d *On Restructuring the Obligations of Citizens of Ukraine Under FX Loans for Purchase of a Single Residence (Mortgages)* is supported by the NBU and the banking community. Its adoption would help to alleviate the debt burden of borrowers and facilitate restructuring of distressed loans. As of today, there is no progress in resolving this problem. This resulted in a sharp drop in the number of restructured housing mortgages in FX. While 1,666 contracts were restructured in 2015, only 453 contracts were restructured over the first eight months of this year. Debt servicing in cases of such loans also deteriorated. A previous similar draft Law (No. 4004) was repealed, but several alternative draft laws were registered instead. Draft Law No. 4004-D (one of the alternative drafts mentioned) expands the concept of 'single and social housing' and the list of debts for restructuring, as well as allows the DGF to participate in restructuring on behalf of a lender for banks under receivership or liquidation. Remaining alternative draft laws are populist.

- Draft Law No. 4529 *On Amendments to Certain Legislative Acts of Ukraine On Encouraging Lending in Ukraine*. Its adoption would have raised the efficiency of the warranty mechanism and resolve issues of debt collection in the course of inheritance, unauthorized construction, and alienation of property without the consent of collateral holders. On 15 November 2016, the Parliament considered the draft law but it did not receive enough votes.
- Draft Law No. 3132 *On Amendments to Certain Laws of Ukraine (On Increasing the Efficiency of Bankruptcy Proceedings)*. Legislation of Ukraine has some loopholes allowing for certain abuses of bankruptcy proceedings. These include the sale of property to those who colluded with the liquidator, underpricing the property for sale, etc. On 21 October 2016, draft Law No. 3132-D was registered in the parliament of Ukraine. This is a refined version of the draft law No. 3132. Nevertheless, recommendations of banks and international experts are not incorporated into the revised draft law. Thus, problems with the protection of secured lenders' rights remain.

Logic behind decisions of courts and law enforcement agencies often raises questions

Delays in judicial reforms pose significant risks for the functioning of the financial system. Some courts are still making decisions that seem to collide with legislation. This includes reinstituting insolvent banks into business or the abolition of NBU decisions declaring banks insolvent. Similar quasi-legitimate actions pose a threat to the stable and safe operation of the banking system and give negative signals on the absence of protection of creditors' and businesses' rights in the country. According to a survey by Dragon Capital and the European Business Association, distrust to the courts is the second key obstacle for investment in Ukraine

According to a survey by the Independent Association of Banks of Ukraine, there are regular occasions when reports on banking crimes are not registered in the Unified Registry of Pre-Trial Investigations within one day, as required by Ukrainian legislation. Investigators do not inform the applicant on the beginning of a pre-trial investigation or closing of a criminal proceeding. They also do not pay sufficient attention to facts of deliberate damage to collateralized property and illegal seizure of the property; no proper legal assessment is provided for actions that bring the borrower to bankruptcy. Even if individual cases are taken to court, all the possible deadlines for a criminal conviction usually expire.

Effective measures should be undertaken to bring down the legal risks

The measures include:

- Improvement of the bankruptcy procedure through approval of balanced amendments to the Law of Ukraine *On Restoring Borrower's Solvency or Declaring a Borrower Insolvent*.
- Eliminate loopholes in legislation that allow unscrupulous borrowers to default on their obligations.
- Establish a mechanism for restructuring and debt forgiveness for FX borrowers and abandon the moratorium on foreclosure.
- Speed up the reform of the judicial system.
- Ensure efficient work of the mechanism for financial restructuring. For this purpose, it is necessary to harmonize norms of the Laws of Ukraine *On Financial Restructuring* and *On State Assistance to Business Entities*, and the relevant by-laws.

Financial results and capitalization

Losses of banks in 2016 slumped despite a reduction of their operating profits. The main driver is the decrease in provisioning against distressed assets. In 2017, operating profits of banks are expected to increase moderately. Provisioning will decline since banks have largely recognized their NPLs. This should secure profitability of the banking sector.

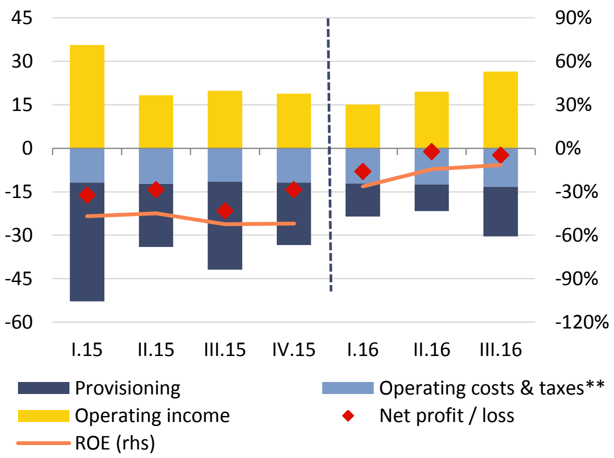
Low quality of assets is the key driver of banks' losses

Lower provisioning allowed banks to improve their financial performance and to make profits in May for the first time in many months. However, this has not become a steady trend yet. Incomes across the system are still very volatile since some large banks remain in the final stages of making provisions against distressed losses. Provisioning increased significantly in September, bringing the total losses for the first 9 months of 2016 to UAH 11.6 billion.

Similar volatilities are possible until the end of Q1 2017. First, the next top-20 banks that passed diagnostics are actively provisioning. Second, new rules for credit risk assessment will be effective starting next year. Therefore, some banks might have to make additional provisions. Recognition of additional credit risk does not obligate banks under IFRS to make additional provisions, but some banks strive to align provisions and the amount of recognized credit risk.

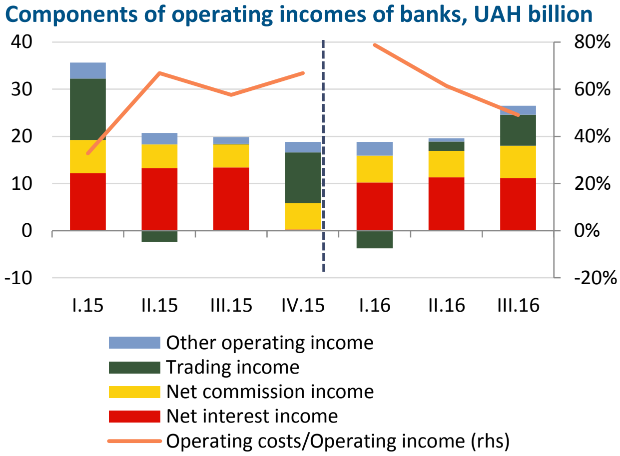
In Q1, operating incomes slipped to a minimum level and started to recover gradually in subsequent quarters. Operating efficiency was slightly worse than in the past year, but gradually improved. That gives grounds to expect much better financial results from banks next year.

Components of financial results* (UAH billion) and ROE



** Volumes for quarter.*
***Income tax included.*
Source: NBU

Components of operating incomes of banks, UAH billion



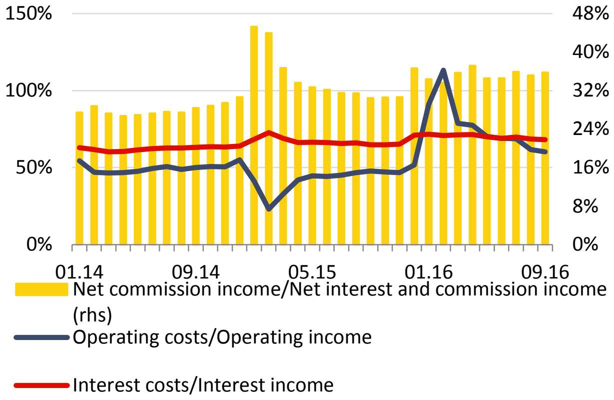
** No net interest income based upon Q4 2015 is a one-time effect due to banks' transition to IFRS*
Source: NBU

Efficiency of interest-bearing transactions decreased but probably not for long

Limited new lending, borrowers' financial difficulties, and high costs of deposits led to a gradual decrease in net interest income. Over the first 9 months of 2016, it dropped by 16% yoy. Interest margin and spread declined slightly, in particular as a result of the conversion of FX loans into UAH loans, which was mainly effected without changes in interest rate.

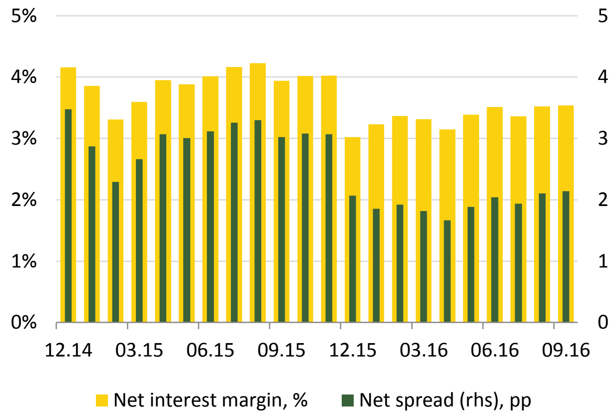
The cost of households' deposits gradually decreases. This will make funding cheaper and contribute to the growth of net interest income.

Efficiency indicators of banks



Source: NBU

Effectiveness of interest-bearing transactions

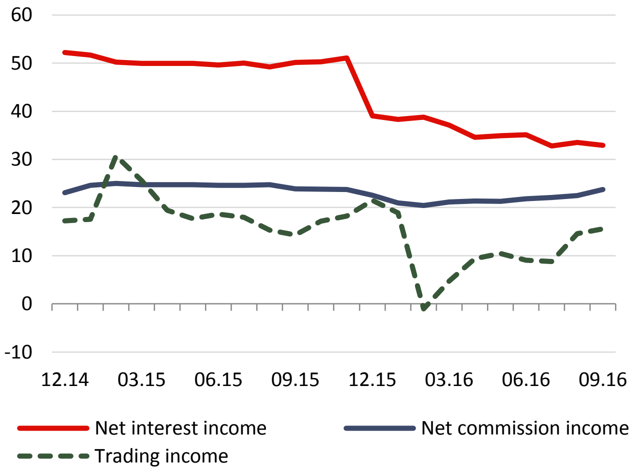


Source: NBU

Potential for growth of commission income is limited

Facing reduced interest income, banks attempted to compensate for losses with higher commission income. This was especially true for financial institutions with private Ukrainian capital. For the first 9 months of 2016, total net commission income increased by 7% compared to the same period last year. This was mainly due to income from cash and settlement services. However, the substitution of interest income with commission and trading income will not be lengthy. Due to a lower pace of inflation, the potential for increases in commissions is extremely limited.

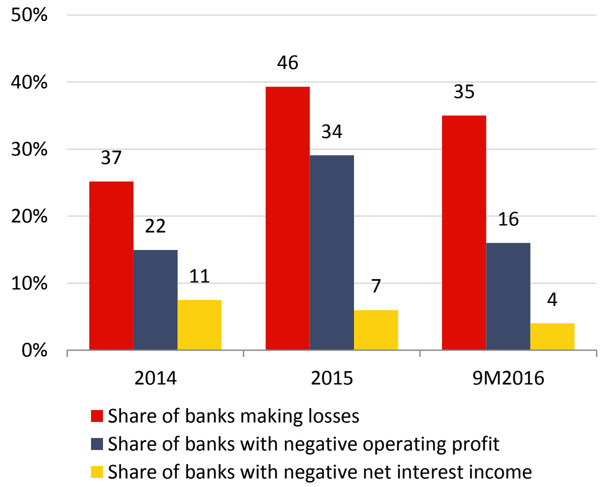
Individual components of operating income, UAH billion*



** 12-month sliding.*

Source: NBU

Structure of non-profitable banks*



** Solvent as of certain date, their quantity is specified in a graph.*

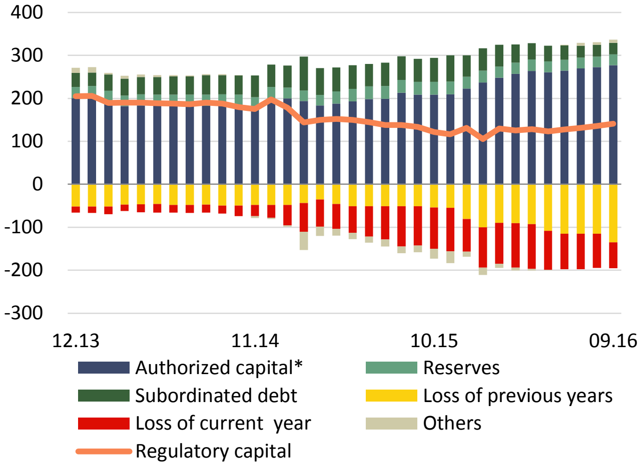
Source: NBU

Regulatory capital gradually recovers

For the first 9 months of 2016, 35 out of 100 solvent banks were declaring losses. In 2015, the proportion was 46 out of 117 banks. The number of banks that earned operating losses before provisioning halved. The number of banks that have reported negative net interest income decreased from 7 to 4 this year.

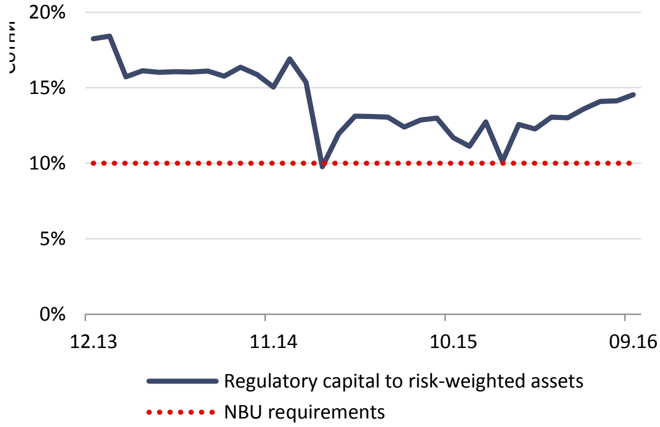
Over the year, banks where a capital gap had been discovered in the course of diagnostic studies were recapitalizing in line with programs approved by the NBU. Authorized capital has increased by almost a quarter since the beginning of the year, inter alia, as a result of subordinated debt conversion. The amount of the latter that is accounted for in regulatory capital decreased by 46% in the first 9 months of 2016, while its share halved from 38% down to 19%.

Components of regulatory capital, UAH billion



** Both registered and non-registered.*
Source: NBU

Capital adequacy (CAR) of solvent banks



Under capitalization programs, banks are allowed to have CAR below 10%.
Source: NBU

The capital adequacy ratio began to rise. At present, capital is distributed unevenly: both banks that need additional capital and banks with excessive capital operate on the market. Most probably, the capital adequacy ratio over the system will decline slightly in H1 2017 after the next top-40 banks bring their provisions in line with the findings of the diagnostic study and credit risk assessment into conformity with the requirements of the new regulation.

Next year the banking sector is expected to start making profits

Provisioning by the largest banks has almost been completed. Thus, a prevailing majority of the negative impacts of the current crisis has already been reflected in financial statements. The gradual growth of loan portfolios will increase net interest income. Some banks still have problems with operating efficiency, and their allocations to provisions might eventually exceed operating income. Nevertheless, the sector as a whole should become profitable in 2017.

Box: Pre-requisites for lending recovery

A lengthy economic crisis and the low quality of law enforcement and law-making institutions have almost completely blocked lending of banks in 2014–2015. A key medium-term priority of the NBU and commercial banks is to restart lending. However, it cannot restart as per the regulator's command. The NBU believes that a number of pre-requisites must be met for lending to intensify.

Normalization of leverage in the corporate sector. Hryvnia depreciation entailed deterioration of the financial condition of many companies and a significant rise of leverage. In 2014–2015, in the majority of industries, the net debt/EBITDA ratio exceeded an acceptable level of 2.5–3.0. Thanks to the economic recovery, financial performance indicators improved. In the agriculture, transportation, mining, and light industries, the debt metrics already returned to acceptable levels. However, in the majority of sectors, leverage still remains high. This limits lending.

Better protection of creditors' rights. Legal protection of creditors is extremely weak in the event of a conflict with borrowers. Huge losses that banks faced are largely the result of fraud by borrowers. Without proper amendments in legislation and, more importantly, without establishment of the constructive practice of dispute settlements, banks' propensity to lend (particularly to large companies) will be extremely weak.

Higher transparency of doing business and reporting of borrowers. Analyzing the borrowers' solvency, banks often rely increasingly on their financial statements rather than on management accounts or informal estimates. This is also the requirement of the new NBU regulation on credit risk assessment. The financial situation becomes the key criterion for determining the probability of a borrower's default and, thus, his credit risk. Changeover to more transparent business standards will substantially expand the list of potential quality borrowers. Starting from 2018, the NBU will require that the financial statements of borrowers where loans exceed UAH 200 million are accompanied by an auditor's opinion.

Emergence of real restructurings. Banks are only occasionally ready to do a real restructuring of debt for a business that found itself in a difficult situation because of the deteriorating economic environment. For some companies, a real restructuring (e.g., through significant reduction of interest rate or substantial deferral of repayment of principal) is the only way out of hardships. The Law of Ukraine *On Financial Restructuring*[11] shall simplify and speed up the process of debt restructuring and facilitate business activities of borrowers.

Cut of interest rates. Current credit interest rates are still too high for long-term lending. Macroeconomic stabilization allows the NBU to gradually reduce the NBU key rate. Consequently, commercial interest rates decrease. In the absence of macroeconomic shocks, the NBU will adhere to its policy of lowering interest rates. The inflation targeting regime that ensures low and stable inflation in Ukraine already allows banks to project medium-term interest rates and make lending decisions based on these outlooks.

Shifting lending towards households and small businesses. These two segments have low or moderate leverage and have the potential for significant credit expansion for banks in the long run. After the credit boom of 2006–2008, millions of retail borrowers fully repaid their mortgage, automobile, and consumer loans in spite of difficult times. Such borrowers have good credit history and might again become bank clients. SMEs are the most attractive segment of corporate lending since they usually fund themselves from internal sources. However, after the crisis, many companies plan to expand and need financing, including new loans.

[11] Adopted on 14 June 2016, No. 1414-VIII.

Changes in the regulatory environment in 2016

After publication of the previous FSR, the NBU continued gradual liberalization of FX restrictions imposed for the crisis period. Adoption of laws regulating financial restructuring and consumer lending stands out as the most notable reforms.

Liberalization of FX restrictions continues

Thanks to macroeconomic and financial stability, the NBU further relaxed the restrictions introduced at the height of the crisis in 2014. During the past six months, cash withdrawal limits for individuals at banks were significantly raised, the rate for the mandatory surrender of FX proceeds by exporters was reduced, the maximum term for the export/import settlements was extended, and the requirement was lifted for import price examination confirming the fair cost of services from non-residents. The NBU also allowed the purchase of FX for the repatriation of dividends for 2014-15 by companies.

Law of Ukraine *On Financial Restructuring* came into effect

It will facilitate out-of-court debt restructuring for honest borrowers. The NBU adopted a number of by-laws needed for the full-fledged effect of this law. Specifically, a template of a framework agreement on financial restructuring was developed and approved. Banks, non-banking financial institutions, and the DGF may now be parties to agreements. According to the framework agreement, arbitration dispute settlement will be final and binding for its parties. Additionally, the procedure for imposition of sanctions on banks for a breach of the law was approved.

Improved control over FX transactions

On 17 June, paperwork for FX control over export and import transactions was simplified. Banks now have an opportunity to use electronic forms of notifications to exchange information and control export and import transactions based on electronic legal deeds. To receive individual FX licenses, legal entities and private entrepreneurs now no longer need to submit documents of general access to the NBU, namely an extract from the Single State Registry of Enterprises and Organizations of Ukraine. Individual license-holders are now authorized to submit to the NBU electronic rather than hard copy reports on transactions on accounts opened outside of Ukraine. As of 18 August, residents can, at their discretion, submit to banks either originals or electronic copies of documents required for the registration of loan agreements with non-residents, payments under these agreements, hryvnia settlements in correspondent accounts at non-resident banks, etc. Conditions for external financing from foreign export credit agencies and IFIs were simplified.

List of high-risk indicators expanded for banks

Following identification of a number of 'fraudulent transactions' that bared no formal high risk indicators for banks, the list of such indicators was expanded. The following indicators were added: first, absence of documentary evidence of economic feasibility of financial transactions of the customers of the bank, and lack of information in the bank as to whether the client has the financial resources to carry out certain transactions. Second, a bank's participation in financial transactions that by external signs might be related to conversion of non-cash funds into cash or to fictitious business. Third, misuse of accounts; financial transactions by a bank or its clients using stolen/void documents. Fourth, multiple pre-payments under foreign trade agreements that a counter-party violates or generally fails to comply with, of which the bank was informed of (might have been informed of), i.e., from public sources or other financial institutions.

Setting up the functioning BankID system

Operating procedures of the Single National System of Electronic Remote Identification of Individuals and Legal Entities (BankID) were approved. Subscription conditions and procedure were defined. Interaction of banks with the system and with the providers of administrative services was regulated. A portal of the Ministry of Justice of Ukraine, the United State Portal of Administrative Services of the Ministry of Economic Development and Trade of Ukraine, and a portal of administrative services of the city of Lviv are already connected to BankID. With the help of the BankID system, citizens can get administrative services via the Internet. This will facilitate the development of e-governance in Ukraine.

Sanctions against international settlement systems (ISS) of Russian origin introduced

Executing the Presidential Decree *On Resolution of the National Security and Defense Council of Ukraine of 16 September 2016 On Application of Personal Special Economic and Other Restrictive Measures (Sanctions)*, the NBU required banks and non-banking institutions to terminate providing ISS services set up by Russian residents, to complete the settlements under executed transactions, and return to the NBU certificates of registration for the participation in such systems. Six organizations were subject to the sanctions. In 2015, over USD 1.2 billion was transferred to and USD 232 million was transferred from Ukraine through Russian payment systems.

Consumer lending legally regulated

The Law *On Consumer Lending* was adopted. It enhances the protection of borrowers' rights and sets the requirements for the provision of services by banks, other financial institutions, and credit intermediaries. Banks are required to establish procedures for computing a variable interest rate for loan agreements. Banks are prohibited to modify this procedure without the borrowers' consent. Banks are also not authorized to unilaterally change the fixed interest rate under a consumer loan.

Investments in FX securities were authorized

The NBU expanded opportunities for banks' short-term FX liquidity management. Under a simplified procedure, they are allowed to buy highly liquid investment grade FX debt instruments. This comprises debt securities of IFIs and public authorities of the 'Big Seven' countries with an official rating not lower than AA–/Aa3. The period between the investment date and the security's maturity date shall not exceed five years.

Brokerage at banks regulated

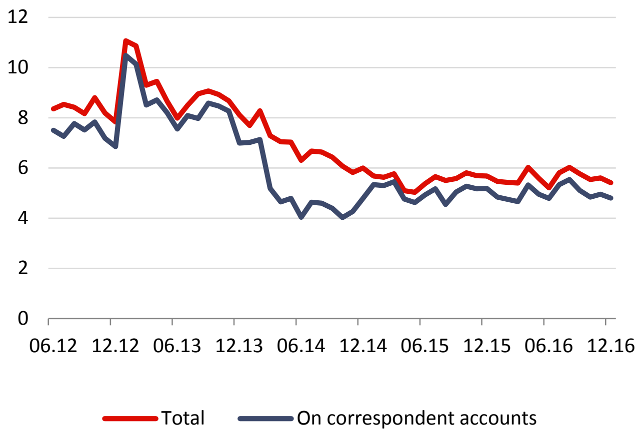
Under the Law of Ukraine *On Amendments to Certain Laws of Ukraine on Indemnity to Individuals under Individual Deposits through the Deposit Guarantee System for Damage Caused by Abuses in the Banking and other Financial Services*, banks are prohibited from raising retail deposits and issuing them directly as loans without their reflection as the bank's liabilities and assets. Meanwhile, banks' intermediary functions within P2P-lending were *de facto* legalized. However, a mandatory prerequisite for raising individual deposits in favor of third parties is that prior written notification stating that such funds are not a covered retail bank deposit must be made.

Box: NBU expanded the opportunities to manage FX liquidity for Ukrainian banks

Banks now have more opportunities for management of FX liquidity: the NBU allowed them to buy foreign debt securities with high ratings under a simplified procedure. Corresponding changes to the *Instruction on the Procedure for Issuing Individual Licenses for Outward Investment* came into effect on 23 November 2016.

Until recently, financial institutions were only allowed to place unencumbered FX funds on correspondent accounts at non-resident banks in the form of deposits or interbank loans. Funds on the correspondent accounts made the largest share. As of 1 November 2016, balances of these accounts totaled USD 4.9 billion in hryvnia equivalent, while before the crisis this amount was more than twice as high. However, the main purpose of correspondent accounts is arranging for customer settlements rather than liquidity management. Therefore, the total balance in these accounts, according to Basel III standards, does not belong to high-quality liquid assets.

Funds placed with non-resident banks, USD billion



Source: NBU

From now on, Ukrainian banks will be able to buy sovereign debt instruments of the ‘Big Seven’ countries and IFIs. Securities must have a rating of AA-/Aa3 or higher assigned by at least two international rating agencies.

This change enables banks to earn a higher interest on their own FX funds bearing lower credit risk. The high liquidity of ‘Big Seven’ countries’ government securities means that they can be easily converted into cash by selling or pledging as a collateral under repo agreements. Meanwhile, investing in debt instruments bears interest risk because their market value depends on rates. To limit this risk, the NBU only authorized purchase of securities where maturity as of the date of purchase does not exceed five years.

Investment in public debt of ‘Big Seven’ countries will not squeeze out investment in FX-denominated domestic government bonds since they offer different yields and risks. Unlike Ukrainian FX debt, the debts of advanced countries have a very low yield. Therefore, under Ukrainian conditions, they will be used as a short-term liquidity management instrument rather than as a long-term investment tool. Therefore, this instrument is not expected to replace FX lending since the volume of the latter depends exclusively on domestic business activity, risks in the FX market, and the level of creditors’ rights protection.

Therefore, a new opportunity for banks to buy foreign debt securities provides a tool for more efficient FX liquidity management. Better liquidity management will in turn foster higher resilience of the banking system. Additionally, the mentioned innovations will expand the range of high quality assets available for liquidity management in line with the Basel III requirements. This will be a significant step towards implementation of the liquidity coverage ratio (LCR), which will also later become a driver of higher financial resilience of the system.

Recommendations

The NBU needs to work together with banks and other financial institutions, as well as authorities, in order to achieve and maintain financial stability. The NBU publishes recommendations to banks and authorities and discloses its own plans and intentions for the nearest future.

Recommendations to authorities

To speed up the reform at State-owned banks

Early in 2016, the Government backed up the Development Strategy for State-owned Banks. It provides for more focused business models of the banks, establishment of efficient independent supervisory boards, and privatization of minority stakes at Oschadbank and Ukreximbank in 2018. The state shall divest from Ukrgazbank by the end of 2017. There was little progress in the Strategy's implementation through 2016. The most remarkable event was the signing of a memorandum between the EBRD, Oschadbank, and the Government on implementation of a comprehensive program aimed at commercialization and partial privatization of Oschadbank. The next big step shall be adoption of the law anchoring new rules of establishment of supervisory boards at State-owned banks.

To adopt the law on a credit register

In the course of 2017, the NBU is going to establish a centralized credit register accumulating data on borrowers: households with large loans and corporates. Keeping credit registers is common for most advanced countries. The data allows banks to overcome information asymmetry, ensures better estimation of borrowers' solvency, and to make more balanced lending decisions. A credit register cannot replace information collected by credit bureaus on small retail loans. Access of banks to the credit register has to be regulated by law.

To adopt a law protecting creditors' rights

The deteriorating quality of banks' loan portfolios during the last years was caused by the reluctance of many borrowers to pay rather than by lack of funds to do so. However, the parliament adopted draft law No. 4529 on lending promotion. It enhances creditors' rights in litigation with unscrupulous borrowers, which greatly reduces risks to banks. Creditors' rights protection has to be supported by appropriate legislation that prevents any abuses under bankruptcy procedures. Yet the draft law No. 3132-d registered at the parliament to replace the previous draft No. 3132 does not resolve problems of creditors lending against collateral.

To ensure efficient financial restructuring

The Law *On Financial Restructuring* established a mechanism for voluntary out-of-court restructuring of corporate debt. In the course of restructuring loans, it allows banks to set terms that borrowers can realistically meet in crisis times. This is especially important for State-owned banks and the DGF. The Supervisory Council, comprising representatives from the Government, the NBU, and market participants, has to ensure an efficient restructuring process. Its work should be professional and free from political influences.

Recommendations to banks

To adopt/change business models in order to make sustainable profits

Banks do not just have to implement recapitalization programs based on diagnostics; they might also have to adjust business-models. Financial institutions generating negative net interest income or operating losses before provisioning must change their interest rate policy, launch new products, or substantially cut operating costs. Such banks will remain under enhanced supervision until they earn sustainable operational incomes.

To prepare for introduction of IFRS 9

Starting from 2018, IFRS 9 (*Financial Instruments*) will replace the current IAS 39. This means a shift to calculation of provisions against expected losses instead of incurred losses.

IFRS 9 is much more complex. Therefore, its implementation will require banks to start assessing losses expected over the next 12 months, as well as over the whole term of maturity of the loan. These assessments have to take into account several alternative macroeconomic scenarios. Based on test calculations for certain Western banks, the transition to the standard might cause a one-off increase in loan provisions. The NBU Regulation on credit risk assessment coming into force in 2017 is also based on the concept of expected losses. Thus, it will be easier for banks to get ready to transition to IFRS 9.

To further wind up lending to related parties

Lending to parties related of banks was a common practice for a long time. The NBU required banks to materially bring down lending to related parties in five years. The NBU estimates that 28 out of 58 banks tested do not comply with the related requirement. The NBU requirement to wind up related party lending is strict; non-compliance with the schedule leads to sanctions. The NBU continuously monitors banks' clients to identify new related parties, as such lending results in accumulation of systemic risks in the banking sector.

Plans and intentions of the NBU

To introduce a new facility for emergency liquidity assistance (ELA)

Next year the NBU plans to introduce the ELA facility. It shall be applied to support viable banks experiencing a short-term liquidity gap. The ELA shall be available for banks that exhausted all other sources of liquidity support. The ELA shall facilitate banks' access to NBU credit lines provided proper collateral. It shall replace NBU stabilization loans.

To raise the standards for disclosure of banks' financial and prudential reports

In Q1 2017, the NBU intends to discuss with banks and to introduce stricter requirements for disclosure of financial and prudential reports. The NBU suggests that banks should publish a detailed composition of regulatory capital, data on the quality of the loan portfolio, its breakdown to periods past due, and the amount of uncovered credit risk. The NBU will also offer banks to publish balance sheets on a monthly basis. This should expand the available information on a bank's financial condition for external users, including clients, analysts, and media.

To develop a roadmap for approximation of banking regulation to recommendations of Basel Committee and EU Directives

The concept is to be presented in H1 2017. It shall outline the directions and timetable for adoption of capital and liquidity requirements for the medium term. New regulations shall be implemented gradually in line with best international practices.

To offer a macroprudential policy strategy for public discussion

Scheduled for H1 2017. The strategy shall offer ways to mitigate systemic risks to the financial sector. It will complement the NBU's monetary policy strategy.

To develop the LCR to be introduced in 2018

The NBU started to develop a new liquidity requirement together with banks – the LCR. From 2018, it will be binding for banks. To comply with the requirement, banks will have to hold highly liquid assets sufficient to cover expected net cash outflow over 30 days. The requirement is going to be stricter than those applied today and thus shall materially enhance the resilience of banks to liquidity shocks, e.g., related to bank runs. Through the transition period, banks will have to comply with both old and new liquidity requirements.

To implement a new supervisory approach

One of the key tasks for the NBU today is introduction of a new risk-based approach to supervision. This means than the supervisor's focus will shift from formal compliance of banks with prudential requirements to identification of risks that can lead to losses of capital and liquidity. The supervisory review and evaluation process (SREP) applied in the EU within the ECB's Single Supervisory Mechanism was chosen as a target model. A bank's operations are to be assessed by a number of parameters including the quality of its business model, internal approaches to liquidity and capital management, corporate governance standards, etc. The introduction of new supervisory approaches is a long-term multi-stage project. Starting from early 2017, the new approach will be tested based on available instruments (supervisory data, on-site inspections, AQR). Later on, the assessment is to be supplemented and refined while implementing new requirements and procedures, such as requirements on risk management systems. By 2019, the NBU plans to launch the bulk of changes. By 2020, the new capital buffer requirements will be operational, thus completing the project.

To continue FX liberalization gradually

In Q2 2017, the NBU is going to present a draft Law *On Foreign Currency*. It takes into account European regulations and best practices, and it is necessary to overcome the complexity of the FX regulation and over-regulation of the FX market in Ukraine. The law is founded on principles of transparency, clarity, and a clear division of regulators' mandates. The priorities are liberalization of long-term direct over short-term investment, first for corporates and later for households. The timing for each stage will depend on macroeconomic and financial stability and meeting other preconditions, including FX market development and adoption of OECD principles on BEPS.[12] At the moment, we are at stage zero of liberalization. It provides, inter alia, a gradual lifting of requirements on partial surrender of FX proceeds, as well as limitations on purchase of FX cash, extending term margins for export and import operations, and simplification of FX licensing.

[12] Base erosion and profit shifting

Additional thematic materials

Deposit Guarantee System: closer to EU practice

The Deposit Guarantee System in Ukraine weathers through the greatest storm in its history. Although it meets best international practices in some parameters, the crisis has revealed its weaknesses and need for transformation. In particular, the system needs to approximate to European standards, the scope of covered depositors should expand, the covered deposit amount should increase, and contributions to the Deposit Guarantee Fund of Households of Ukraine (DGF) should be differentiated according to the degree of risk incurred by the institution. The DGF's capacity to recover assets of insolvent banks should be enhanced. This requires not only coordinated measures by the DGF and other financial sector regulators, but also a reform of the judiciary and law enforcement systems.

The Deposit Guarantee System faced the biggest challenge in its history and needs to change

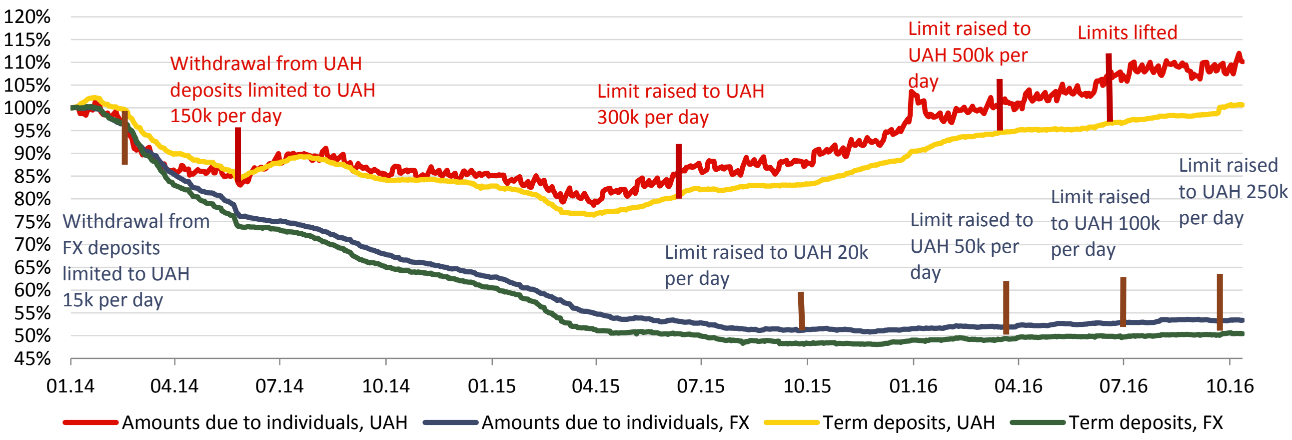
A financial safety network is an important factor of financial stability. It protects depositors when an insolvent bank is withdrawn from the market and prevents bank runs that usually cause a massive outflow of funds from banks. Deposit Guarantee Schemes/Funds exist in virtually all advanced and emerging markets except for New Zealand, Georgia, and Israel (the latter two currently explore the opportunity for their establishment). Deposit Guarantee Schemes (DGSs) cooperate under the International Association of Deposit Insurers (IADI), to which the DGF is also a member.

Components of the Financial Safety Net for Banks in Ukraine

	Function	Mandated agency
1	Prudential regulation and banking supervision	NBU, some aspects – DGF
2	Lender of Last Resort	NBU
3	Withdrawal of insolvent banks from the market	DGF following the NBU resolution
4	Deposit insurance	DGF

Since the beginning of the crisis and until the end of October 2016, around 80 insolvent banks were transferred to the DGF. The DGF paid out UAH 80.2 billion to the depositors of these banks. No DGS in the world is designed to withstand such a shock. Therefore, the DGF applied to the government and the NBU for aid. Their loans almost entirely compensated the mentioned amount. Today, the DGF tries to recover the costs, inter alia, through the sale of assets of insolvent banks.

Retail deposits, December 2013 = 100%*



** Chart is based on data of banks that were solvent as of 13 October 2016.*

Source: NBU

Today, thanks to the established efficient system of deposit indemnification, the DGF quite swiftly repays deposits within the covered amount of UAH 200,000. Under the new rules, repayment shall begin no later than 20 days after declaring a bank insolvent. This term is to shorten in the future. Such reforms have brought, alongside other changes over the recent years, the deposit guarantee system of Ukraine closer to best international practices. Such changes should continue.

After the outbreak of the crisis in Ukraine, the number and amounts of retail deposits declined, while the average deposit amount marginally increased. The reason behind the latter is an intense withdrawal of smaller deposits during the crisis while the withdrawal of large deposits was complicated due to administrative restrictions. Without proper functioning of the DGS, it will be impossible to restore full confidence in banks. The system shall be reformed with a view towards best international practices.

Key indicators of the Deposit Guarantee System of Ukraine[13]

Date	Total deposits of households, UAH billion	Number of depositors, millions	Average deposit amount, UAH	Coverage of depositors[14]	Covered to eligible deposits ratio		
					in hryvnia	In FX	total
01.14	403	47.4	8,486	99.4%	66%	49%	61%
01.15	382	46.5	8,213	98.7%	57%	40%	55%
01.16	362	44.7	8,104	98.8%	60%	37%	53%
10.16	378	41.9	9,010	98.6%	59%	40%	54%

Source: DGF

The EU-Ukraine Association Agreement stipulates that in four years Ukraine shall approximate its national legislation to the Directive 94/19/EC of 30 May 1994 on DGS. To replace this act, the EU adopted a new Directive 2014/49/EC of 16 April 2014 that is effective now. Its key provisions can serve as a benchmark for further transformation of the Ukrainian DGS. Below you will find an analysis of the key aspects that need to change.

Covered deposit amount should increase gradually

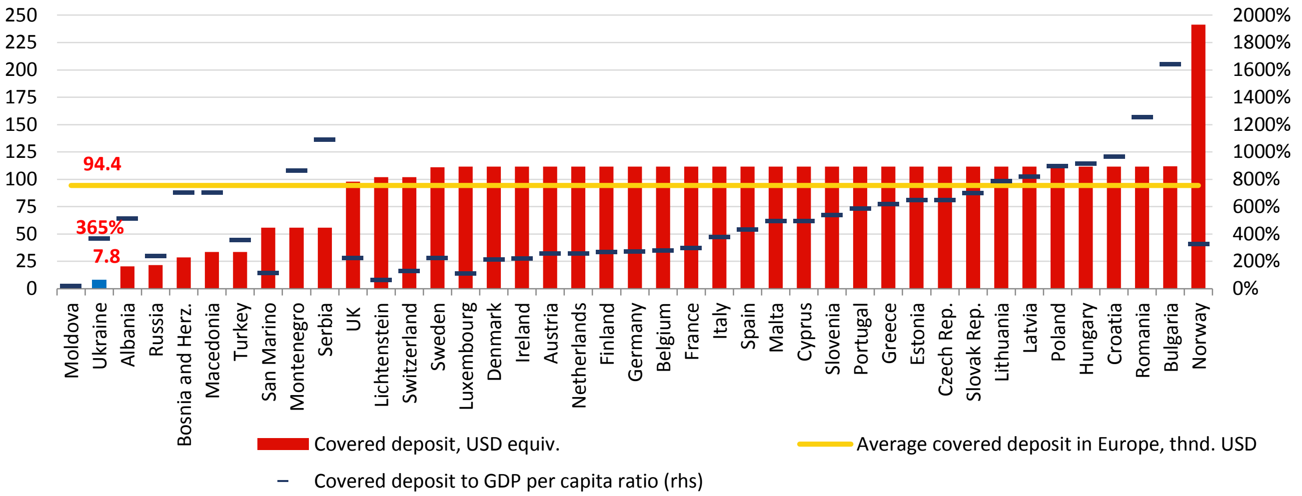
Currently, the covered deposit amount in Ukraine is the second lowest in Europe after Moldova. It is UAH 200,000, or less than USD 8,000. Directive 94/19/EC originally provided for deposit coverage of ECU 20,000, later increased to EUR 100,000. This coverage level is effective now.

State guarantee covers 98.6% of deposits of households, in excess of 90–95% recommended by the Financial Stability Board and IADI in 2013. It is necessary to raise the deposit insurance amount. However, such an increase should be in line with deposit growth and economic recovery. Covered deposits make up 54% of eligible deposits in Ukraine, 83% in Croatia, and 91% in Romania. However, the ratio of covered deposits to GDP per capita in Ukraine is close to levels observed in European countries, i.e., it corresponds to households' income.

Covered deposits in Eastern European countries increased in a few steps in 2007–2011. It was one of the anti-crisis measures. The deposit insurance amount grew from EUR 15,000–25,000 before the crisis up to EUR 100,000 in the aftermath.

[13] At the bank-participants of the DGS (i.e., all Ukrainian banks, except for Oschadbank, where deposits are guaranteed by the State).
[14] According to best international practices, minor balances on deposits (in the case of Ukraine – less than UAH 10) are not compensated, although they are formally reported as covered.

Deposit coverage level in dollar terms* and its ratio to GDP per capita in European countries



** By the end of September 2016.*
Source: IADI, web-sites of national deposit insurers, NBU staff estimates

The scope of depositors covered by the DGF should expand
In global practice, it is common for a DGS to cover deposits of all depositors who cannot adequately assess the risks of losses themselves. However, the scope of depositors covered by the guarantee differs. In Albania, Belarus, Moldova, and Turkey, the DGSs cover only households, excluding individual entrepreneurs. In Australia, the UK, Norway, and France, the DGSs cover deposits of individuals and legal entities, as well as those belonging to small local communities or certain financial institutions (pension or insurance funds). In the EU today, it is common to cover deposits of individuals and non-profit organizations, as well as of the legal entities (sometimes SMEs only). The covered amount remains the same for all categories of eligible depositors. It is common practice that a DGS, with a few exceptions, does not cover deposits of financial institutions and public authorities.

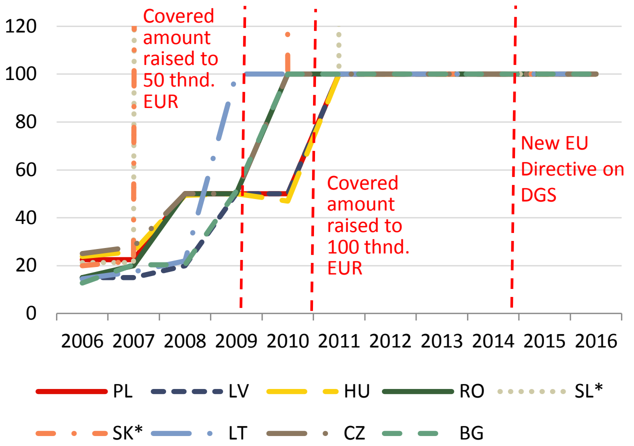
In Ukraine, the DGS should primarily expand coverage to deposits of non-profit organizations and small businesses. Therefore, the decision to extend guarantees on deposits of private entrepreneurs starting from the beginning of 2017 was absolutely justified. Later, the scope may be revised to include legal entities.

The global practice is to insure FX deposits and interest accrued
Apart from EU member-states, at least over two dozen other states guarantee FX deposits. Such a practice is in line with IADI recommendations. Meanwhile, deposit coverage remains the same for hryvnia deposits and FX deposits (in hryvnia terms). Repayments are made in domestic currency, since a DGS must avoid FX risks. In these terms, the Ukrainian DGS meets best international practices. However, in Ukraine, contribution rates to the DGF for FX deposits are higher than contributions for hryvnia deposits. In our case, it is necessary to reduce the level of deposit dollarization.

The majority of DGSs insure both the deposit amount and interest accrued one day prior to declaration of a bank as insolvent. This is a common practice in EU countries as well as many other countries of the world. In some jurisdictions, such as Argentina, the insured interest rate on a deposit is limited.

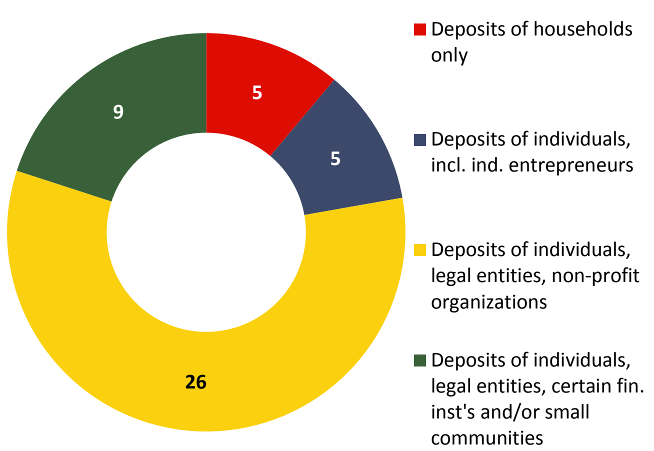
EU legislation requires banks not only to ensure that a depositor receives information on DGS, but also that he or she acknowledges this receipt. Introduction of similar norms in Ukraine might be useful as well.

Deposit coverage levels in Central and Eastern Europe, EUR thousand



PL – Poland; LV – Latvia; HU –Hungary; RO – Romania; SK – Slovakia; SL – Slovenia; LT – Lithuania; CZ – Czech Republic; BG – Bulgaria.
** In times of crisis, Slovenia and Slovakia temporarily introduced a blanket insurance of deposits*
Sources: European Commission

Depositors' coverage by DGSs*



** Sampling from 45 countries.*

Sources: IADI, web-sites of national deposit insurers

Stable funding of the DGF should be a priority

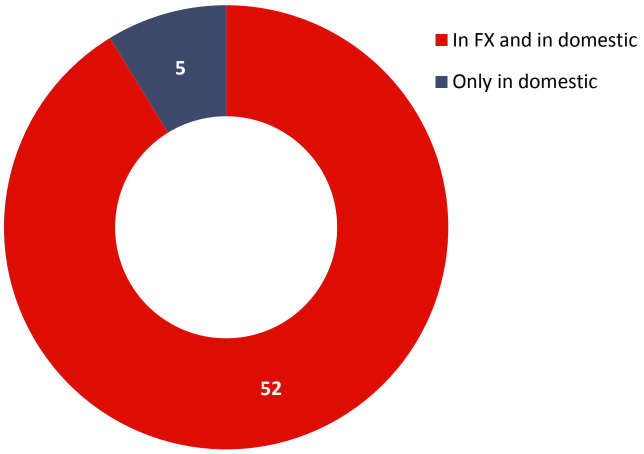
There are several sources of funds for the DGF in international practices:

- initial, one-time contributions of new participants/members of a DGS;
- regular, common annual contributions (premiums). Covered deposit amounts serve as a basis for calculation;
- extraordinary contributions to restore the Fund after substantial payments are made. In the EU, they cannot exceed 0.5% of their insured deposits per year;
- sale of assets of insolvent institutions. Recovered funds are primarily channeled to cover the repaid amounts and costs involved. If something remains after that, payments will first be made in favor of depositors whose deposits exceed the deposit insurance amounts.
- loans and credit lines from the government or central bank;
- ROA in 'normal' times.

The target size of the DGF in Ukraine conforms to regional standards: 2.5% of insured deposits. The target level is the same in Croatia, Lithuania, and Estonia. Globally, the target size of deposit guarantee funds ranges from 0.25% of insured deposits in Hong Kong to 10% of bank deposits in Russia. In the EU, a newly established European Deposit Insurance Scheme aims at 0.8% of insured deposits. On top of that, 1.0% is the target for the EU Single Resolution Fund. It is deemed, among other things, to ensure proper guarantees to depositors.

Contributions to DGSs are made both in advance, before the crisis (ex ante), as well as after the failure of some member institutions (ex post), when solvent banks contribute to make up for repayments. Globally, the first approach is more common and better suits IADI principles. The second approach is employed, specifically, in Albania and Switzerland. A combination of the two is possible: a certain proportion is collected in advance while the rest is paid in if necessary, which is Poland's pattern.

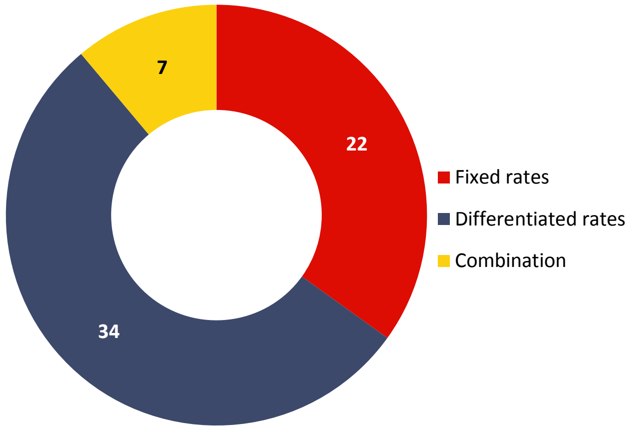
Coverage of deposits by currencies of deposit*



** Sample of 57 countries.*

Sources: IADI, websites of national deposit insurers

Distribution of countries by types of contributions**



*** Sample of 63 countries for 2015–2016*
**** All EU countries transiting to a differentiated system are counted in this category.*
Sources: IADI, websites of national deposit insurers

Regular contributions to the DGF from each institution shall depend on the risks it incurs
Insurance rates should be differentiated. The riskier model a bank has, the higher the contributions to the DGF shall be. Those who take the risk and are in a better position to assess it should pay for it. This approach is employed in the EU and in many other countries.

Differentiated systems of insurance premiums vary in complexity ranging from simple, such as in Singapore, to a more complicated scheme, where within one risk category different rates may apply, like in the US. A common feature is that institutions incurring high risk pay contributions at rates that are many times higher than regular rates. Out of the great variety of national approaches to setting differentiated deposit insurance premiums, two typical ones can be tentatively distinguished. The first approach envisages application of a risk-weighted formula for a member institution, as in the EU member-states. The second approach is scoring-based. It is applied in the US, Canada, Kazakhstan, Malaysia, and Taiwan.

The European DGS provides for harmonization of approaches among EU member-states, while leaving sufficient space for discretion of nationally designated authorities. The European Banking Authority (EBA) suggests a typical formula for calculation of regular annual contributions:

$$\mathrm{C}_i = CR \cdot ARW_i \cdot CD_i \cdot \mu,$$

where C_i – annual contribution from member institution ‘I’;
CR – contribution rate (identical for all member institutions in a given year. In 2015, insured deposits rate in Hungary totaled 0.14%, in Romania it amounted to 0.3%, in Slovakia the same rate was equal to 0.03%; in Latvia it came to 0.2%);
ARW_{and} – aggregate risk weight for member institution ’i’;
CD_{and} – covered deposits for member institution ‘i’;
µ – adjustment coefficient (identical for all member institutions in a given year). It allows an authority to regulate the pace of approximation to the target size of the Fund.

A system applied by the Canada Deposit Insurance Corporation is a good example of a score-based differentiation of rates. It is simpler than that in the US, and allows each participant to determine on its own the size of premiums in the current year. The maximum premium rate exceeds the minimum one by almost ten times, but the majority of member institutions pay at the lowest rate.

System of calculating premiums for guaranteeing deposits in Canada

Score	Premium Category	Member institutions per category, 2015/2016	Premium rate (basis points % of insured deposits) 2014	2015	2016
80 and higher	1	79%	3.5	4.5	5.5
65-79	2	13%	7	9	11
50-64	3	5%	14	18	22
Lower than 50	4	3%	28	33.33	33.33

Source: Canada Deposit Insurance Corporation (CDIC)

The score of an institution is defined by an array of quantitative and qualitative criteria. Each of them has its weight and methodology for calculation. Qualitative indicators allow the supervisor to adjust the total score.

Scoring components, Canada

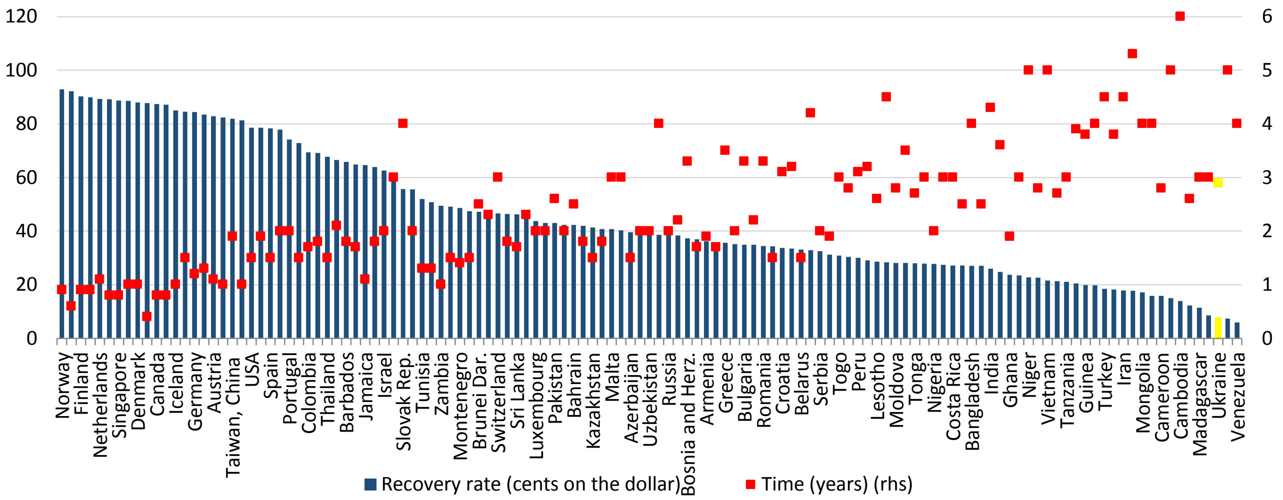
Criteria or factors	Maximum score
Capital adequacy (Leverage Ratio, Tier 1 capital Ratio)	20
Return on Risk-Weighted Assets	5
Mean Adjusted Net Income Volatility	5
Stress-tested Net Income	5
Efficiency Ratio	5
Net Impaired Assets on Total Capital	5
Three-year Moving Average Asset Growth	5
Real Estate Asset Concentration (does not apply to DSIBs)	5
Asset Encumbrance Measure (applies to DSIBs only)	5
Aggregate Commercial Loan Concentration Ratio	5
Sub-Total Quantitative Score	**60**
Examiner's Rating	35
Other information	5
Sub-Total: Qualitative Criteria	**40**

Source: Canada Deposit Insurance Corporation (CDIC)

Proceeds from asset sale of insolvent banks should become a major source of revenues for the DGF

In World Bank estimations, the recovery rate from asset sales of bankrupt banks in Ukraine is one of the lowest in the world. It is several times lower than that in European countries. This is the result of poor performance of courts and law enforcement bodies. For the effective functioning of the DGF, the workout and recovery of assets of insolvent banks should secure the lion's share of the Fund's resources. Without reforming the law enforcement and judicial systems, this is impossible to achieve.

Recovery rate and time



** By the end of September 2016.*

Source: Doing business in 2017, the World Bank

Financial stress index

The NBU introduces the calculation of the financial stress index (FSI). This aggregate indicator measures the pressure in the financial system and provides a comprehensive quantitative assessment of its condition. To calculate FSI, four sectors of the financial market were selected: the banking sector, corporate securities, government securities, and the FX market. A separate sub-index is calculated for each of them. Each sub-index has its weight and comprises several financial indicators that reflect the condition of this sector and depend on the behavior of the market players. FSI provides a basis for comparison between the current condition of the financial system with values from previous periods and past crises, and assesses the effectiveness of the measures for mitigating systemic stress. It can also serve as an indicator of the end of a financial crisis. For example, FSI for Ukraine, after a spike at the beginning of the2014 crisis, consistently declined over the course of the past year close to pre-crisis values.

Attempts to quantify financial destabilization started from the beginning of the 2000s when the Bank of Canada proposed the FSI and developed a methodology for its calculation. Work on aggregate indicators reflecting the condition of the financial system sparked interest in other countries. That resulted, in particular, in emergence of Composite Indicator of Systemic Stress (CISS) indicators elaborated by the ECB, and financial stress indices in the Netherlands, Sweden, and US. A variety of high-frequency indicators reflecting trends in the financial sector underlie the FSI.

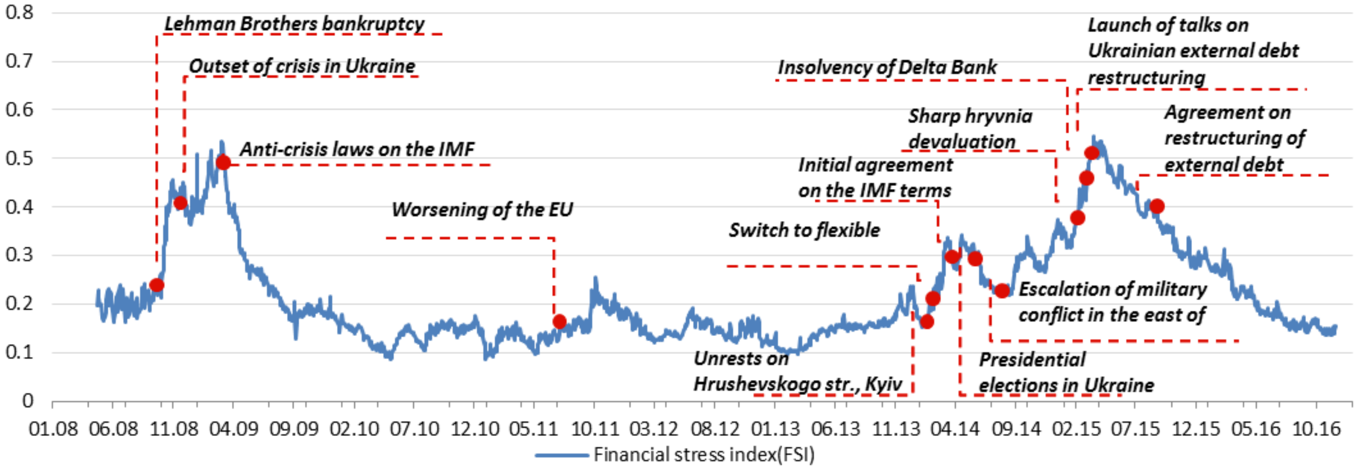
FSI allows for:

- Assessment of the level of pressure in the financial system of a country;
- Comprehension of the depth and duration of the instability on the financial markets, the level of stress relative to the past crises;
- Establishment of the nature of the financial system’s distress and its individual components (systematic or sporadic);
- Simplification of decision-making and the implementation thereof in respect of the financial system’s performance; and
- Assessment of the efficiency of counter-crisis measures implemented during past crises.

While constructing the FSI for Ukraine, we took into account availability, frequency, and impact of individual indicators of the Ukrainian financial market. The FSI consists of four sub-indices reflecting financial market segments: the banking sector, the markets for corporate and government securities, and the FX market. Each sub-index in the FSI has its weight, which is determined based on the size of the segment relative to GDP.

The FSI computed for the financial system of Ukraine grew since the beginning of 2014 against a backdrop of political and economic crisis, having reached its peak in March 2015. During H2 2015 and in 2016, the FSI remained at a high level but the risks in all the sectors of the financial system began to subside gradually, more or less for all of the segments. Over the past few months, the FSI has diminished and almost reached its pre-crisis values.

Ukraine's Financial Stress Index



Source: NBU

Methodology for index calculation

Each sub-index is calculated as the average value of an array of normalized basic indicators. Fourteen indicators in total underlie the calculation of FSI. A time series for them is available starting from 2008.

The banking sector sub-index (weight 0.3) covers the following basic indicators:

- Indicator of FX credit market – the change of overnight and interbank rate. Source: the NBU.
- Liquidity of Eurobonds of Ukrainian banks – average bid-ask spreads on Ukrainian banks' Eurobonds, available on the market on a certain date (Oschadbank, Ukreximbank, Privatbank). Source: Bloomberg.
- Liquidity of banks – total negative deviations from liquidity requirement N4 plus 20 pp weighted by the share of a deviating bank in liabilities of the banking system, taken for N4 calculations. The lower the liquidity of banks and the system as a whole, the higher this rate will be. Source: the NBU.
- Households' confidence in banks – a percentage change of retail deposits over 30 days prior to the calculation date, separately for hryvnia and FX deposits (in dollar terms) and weighted for their share in total deposits. The higher the change, the higher is the confidence in banks. Thus, this indicator is taken with a negative value ('-') so that low confidence will translate into high FSI value. Source: the NBU.

Sub-index of corporate securities market (weight 0.1) – sum of the following indicators:

- Cost of financial resources on the corporate debt market – the difference between the two indices calculated by Cbonds agency, reflecting the yield of the Ukrainian corporate and government Eurobonds respectively. Source: the Cbonds agency.
- C_{max} indicator for Ukrainian stocks ($C_{max} = 1 – X_t/max(X_T)$) shows deviation of stocks index on a specified date from its maximum over the previous 12 months. In calculations, the PFTS index is taken for calculations before 2011 and the WIG-Ukraine index from the Warsaw Stock Exchange for later periods. Sources: PFTS and the Warsaw Stock Exchange.
- Volatility of Ukrainian stocks – a standard deviation of the values of stock indices over the 30 days prior to the date of calculations. In calculations, before 2011, the PFTS index was applied; for later calculations, the WIG-Ukraine index is applied. Sources: PFTS and the Warsaw Stock Exchange.

Sub-index of government securities market (weight 0.25) comprises the following indicators:

- Sovereign risk – difference between the weighted average yield of Ukrainian government Eurobonds and the yield of ten-year US Treasury bonds (US Treasury 10Y). Source: the Cbonds agency.
- Liquidity of Ukrainian government Eurobonds – simple mean ratio of spread to ask price for Eurobonds of all issues circulated in the market on a certain date. Source: Bloomberg.
- Change of credit default swap rates. Source: Bloomberg.

FX market sub-index (weight 0.35) made of the following basic indicators:

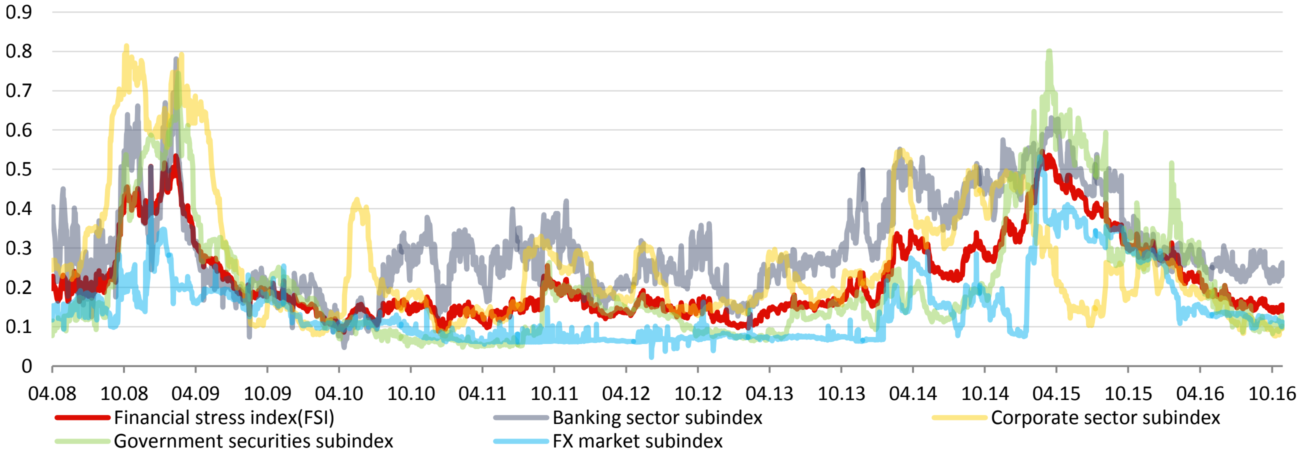
- Devaluation expectations – the difference between NDF (Non-deliverable forward) UAH/USD 3M and interbank UAH/USD rate, adjusted for interest rate gaps between the Ukrainian interbank market (KievPrime3M) and the London interbank market ($Libor3M), in percentage. Sources: the NBU and the Cbonds agency.
- C_{max} indicator of interbank UAH/USD rate – calculated similarly to C_{max} for Ukrainian stocks. Source: the NBU.
- Volatility of interbank UAH/USD rate – calculated in the same way as the volatility of Ukrainian stocks. Source: the NBU.
- FX market imbalance – Net purchase/sale of FX by the NBU on the interbank market on the date of calculations. Source – NBU.

To bring all 14 base indicators to a common denominator and to aggregate them this way, the values of each indicator are normalized through the min-max normalization method using the following formula:

$$V'(i) = \frac{V(i) - \min(V(i))}{\max(V(i)) - \min(V(i))}$$

Therefore, FSI and all sub-indices range from zero to one.

FSI sub-indices for Ukraine



Source: NBU

Abbreviations and notes

APR	Annual percentage rate
AQR	Asset quality review
BoP	Balance of payments
CAR	Capital adequacy ratio
CEE	Central and Eastern Europe
DGF	Deposit Guarantee Fund
DSIB	Domestic Systemically Important Bank
DTEK	Donetsk Fuel and Energy Company
EAD	Exposure at default
EBITDA	Earnings before interest, taxes, depreciation and amortization
EBRD	European Bank for Reconstruction and Development
EFF	Extended Fund Facility
ELA	Emergency liquidity assistance
EU	European Union
FDI	Foreign direct investment
FSI	Financial Stress Index
FSR	Financial Stability Report
FX	Foreign currency/exchange
GDP	Gross Domestic Product
H1/H2	First/second half of a year
HH	Households
IADI	International Association of Deposit Insurers
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
LCR	Liquidity coverage ratio
LTD	Loan-to-deposit ratio
LTV	Loan-to-value ratio
MEDT	Ministry of Economic Development and Trade
MOF	Ministry of Finance of Ukraine
MOJ	Ministry of Justice of Ukraine
Naftogaz	National Joint Stock Company Naftogaz of Ukraine
NBU	National Bank of Ukraine

NFC	Non-financial corporation
NJSC	National Joint-Stock Company
NPF	Non-state pension fund
NPL	Non-performing loans
OPEC	Organization of the Petroleum Exporting Countries
Oschadbank	JSC Oschadbank
Parliament	Verkhovna Rada of Ukraine (Supreme Council)
PD	Probability of default
PFU	Pension Fund of Ukraine
PJSC	Public Joint-Stock Company
Q	quarter
RE	Real estate
ROE	Return on equity
SME	Small and medium-sized enterprises
SOB	State-owned bank
SOE	State-owned enterprise
SREP	Supervisory review and evaluation process
SSSU	State Statistics Service of Ukraine
STSU	State Treasury Service of Ukraine
TSA	Treasury Single Account
UAH	Ukrainian hryvnia
Ukreximbank	JSC The State Export-Import Bank of Ukraine (JSC Ukreximbank)
Ukrgazbank	Public JSC Joint Stock Bank Ukrgazbank
US	United States of America
USD	US dollar
k	thousand
m	million
bn	billion
rhs	right hand scale
pp	percentage points
yoy	year-on-year
qoq	quarter-on-quarter