

Research report

Diagnostics of the stability of the Ukrainian banking sector

The report on the stability of the banking sector is an informational and analytical product of the Rating Agency "Standard-Rating", which contains the results of a diagnostic examination of the banking system, the main trends and trends that can significantly affect the development of the banking system of Ukraine.

The report is intended for large depositors and other counterparties of banks, and aims to acquaint them with the conclusions of RA "Standard-Rating" regarding the main trends in the development of the banking sector of Ukraine in terms of the stability level of its work as a whole. As part of the Report, RA "Standard-Rating" may emphasize the work of specific banks or groups of banks in order to provide examples or illustrate the identified trends.

The report reflects the Agency's opinion on the level of stability of the banking sector of Ukraine over the past 12-15 months. In its conclusions, the Agency takes into account both current trends and historical data, its own forecasts or forecasts of state institutions and international organizations. RA "Standard-Rating" considers all the information contained in the Report to be reliable.

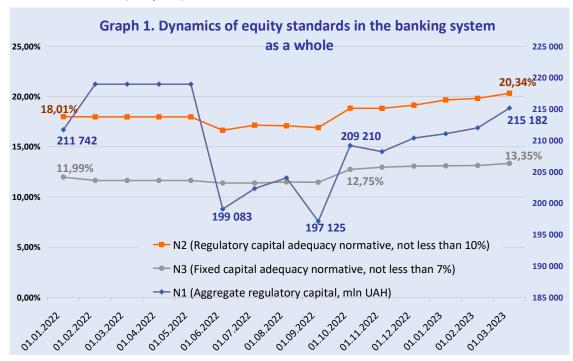
When using the Report, the reference to RA "Standard-Rating" is mandatory. One of the goals of the Report on stability in the banking sector is to combat misinformation and misinterpretation of current trends and tendencies that may be spread in the mass media with the aim of discrediting the work of Ukrainian banks or fanning panic in society.

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1. Equity

From 01.01.2022 to 01.03.2023 RA "Standard-Rating" assesses the level of banks' provision with shareholders' equity as acceptable. In the system as a whole, the level of regulatory capital adequacy (N1) grew from 18,01% to 20,34%, and the level of fixed capital adequacy increased from 11,99% to 13,35% (Graph 1).



Note: Based on data published on the NBU website

The war affected the level of providing banks with fixed and regulatory capital. Analysis of the dynamics of aggregate regulatory capital in the banking system of Ukraine showed that the reduction of N1 value took place on June 1 and September 1, 2022. Then, the N1 ratio decreased down to UAH 199 and 197 billion, respectively, however, this was not significantly reflected in the total value of the regulatory capital adequacy standard (N2), the dynamics of which remained more or less stable. Perceiving the data in graph 1, it should be taken into account that the NBU did not publish the values of the standards for the banking system of Ukraine at the height of the invasion, namely as of: 01.03.22, 01.04.22 and 01.05.22, on the graph the Agency replaced them with the values on 01.02.2022. However, even without the values of the standards for these dates, it can be seen that from October 2022 to March 2023, there was a noticeable increase in the values of all equity standards in the banking system. As a result, as of March 1, 2023, banks' regulatory capital, regulatory capital adequacy, and fixed capital adequacy increased to levels that were higher than the values on February 1, 2022 (i.e. before the war).

The Agency conducted an analysis of the provision of regulatory capital of all banks whose public reporting it monitors, and identified the TOP-30 banks based on the H2 value (*table* 1).

Table 1
TOP-30 banks by N2 level, whose N1 was more than UAH 500 mln, as of 01.03.2023

No	Bank's name	Regulatory capital adequacy	Regulatory capital	
IN=		normative N2	normative N1 (th UAH)	
1	JSC "BANK 3/4"	105,95%	521 155	
2	JSC "UKRSIBBANK"	46,81%	13 798 576	
3	JSC "JSCB "CONCORD"	43,18%	771 138	
4	JSB "CLEARING HOUSE"	37,82%	670 870	
5	JSCB "INDUSTRIALBANK"	37,62%	1 089 203	
6	JSC "Poltava-bank"	35,54%	795 169	
7	JSC "BANK OF INVESTMENTS AND SAVINGS"	35,20%	617 597	
8	JSC "CITIBANK"	34,44%	2 062 036	
9	JSC "OTP BANK"	31,55%	11 935 350	
10	JSC "BANK CREDIT DNIPRO"	28,43%	1 654 676	
11	JSC "KREDOBANK"	25,52%	4 007 910	
12	JSC "UNIVERSAL BANK"	25,40%	10 210 453	
13	JSC CB "PrivatBank"	23,28%	54 560 341	
14	Joint-Stock bank "Pivdennyi"	22,12%	4 264 373	
15	JSC "A - BANK"	21,97%	2 400 711	
16	PJSC "BANK VOSTOK"	20,13%	2 086 501	
17	JSC "PIREAUS BANK ICB"	19,98%	547 362	
18	JSC "Raiffeisen Bank"	19,97%	16 536 738	
19	JSC "PUMB"	19,38%	11 945 442	
20	JSC "CREDIT AGRICOLE BANK"	18,85%	6 545 187	
21	JSC "COMINBANK"	18,75%	587 179	
22	JSC "TASCOMBANK"	17,38%	2 946 935	
23	JSC "PROCREDIT BANK"	17,18%	3 183 565	
24	JSC "CB "GLOBUS"	16,70%	574 810	
25	PJSC "MTB BANK"	15,84%	939 446	
26	JSC "Idea Bank"	15,80%	778 899	
27	JSC "BANK ALIANCE"	15,78%	968 037	
28	JSC JSCB "Lviv"	15,18%	788 385	
29	JSC "PRAVEX BANK"	15,14%	697 428	
30	JSC "Oschadbank"	14,54%	19 174 643	

Note: Compiled based on data published on the NBU website, from the list of banks whose public data the Agency monitors

Analyzing the ranking data by the level of N2 (*table* 1), it should be taken into account that traditionally the highest level of N2 value was owned by small Ukrainian banks that did not maintain a significant level of business activity and remained captive or were "one client" banks.

In addition to the high level of N2 value, it should be taken into account that during the war, various force majeure circumstances are possible, when the level of external support from the bank's shareholders becomes more important than the capital standards. According to the Agency, two groups of banks had the greatest influence on the stability of the banking system: banks controlled by the Ukrainian government and banks with foreign capital. Analysis of historical data from the crises of the past years (2008-2009, 2014-2017) and banks' response to the challenges of 2022 shows that it was the government and foreign shareholders (excluding russian) that came to the aid of their banks. During the entire period of analysis (since 2008), there are no precedents when banks controlled by the government of Ukraine or non-residents from far abroad were withdrawn from the market.

The data in Table 1 regarding the values of regulatory capital adequacy indicate that the following banks with foreign capital had a high level of N2: UkrSibBank (BNP Paribas, France), Citibank (Citigroup, USA), OTP Bank (OTP Group, Hungary), Kredobank (Powszechna KasaOszczednosci Bank PolskiSpolka Akcyjna, Poland), Piraeus Bank (Piraeus Bank SA, Greece),

Raiffeisen Bank (RBI Group, Austria), Credit Agricole Bank (Credit Agricole Group, France), COMINBANK (non-resident investor, Great Britain), Procredit Bank (International organizations), Pravex Bank (Intesa Sanpaolo Group), etc. As well, such state banks as Privatbank and Oschadbank were in the TOP-30 banks with a high level of N2.

Ukraine should continue to keep its banking system open to foreign investors, which automatically diversifies the sources of capital for the banking sector and positively affects the level of stability of the banking sector of Ukraine.

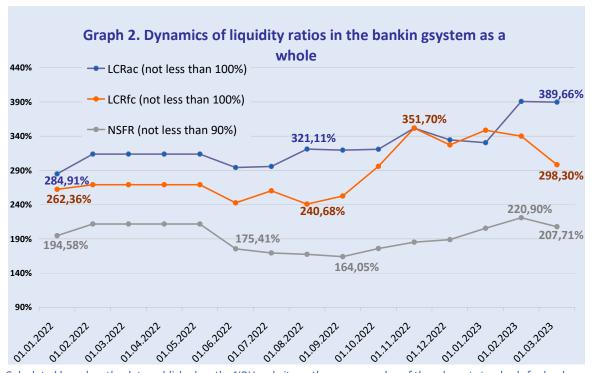
2. Liquidity and resource base

There is much discussion in the Ukrainian media about how the war affected the demand for bank deposits. In terms of the stability of the banking sector, it is not so important how the war changed the demand for bank deposits, as what trends could be observed in the dynamics of bank liquidity. As of March 1, 2023, all liquidity standards that were in effect at the beginning of the aggression significantly exceeded their pre-war values (*Graph* 2).

There are three liquidity ratios in force in Ukraine today:

- LCRac liquidity coverage ratio standard for all currencies, not less than 100%;
- LCRfc liquidity coverage ratio standard in foreign currency, not less than 100%;
- NSFR standard of net stable financing ratio, not less than 90% (from 01.04.2023 not less than 100%).

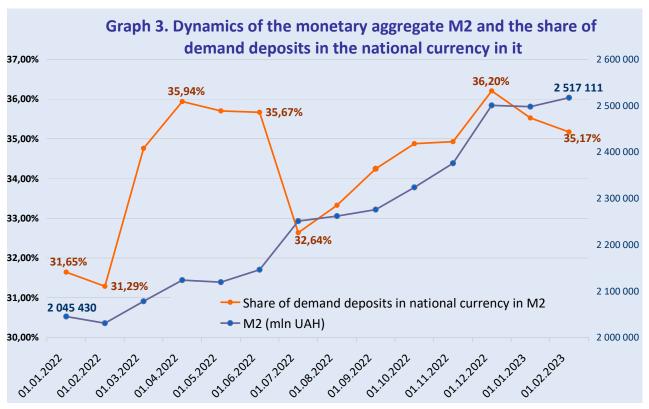
For the period from 01.01.2022 to 01.03.2023 the liquidity coverage ratio for all currencies grew most noticeably: from 284,91% to 389,66%. The corresponding trend can be explained by the increase in banks' investments in NBU Deposit Certificates, which became attractive after the discount rate was raised in the summer of 2022 year.



Note: Calculated based on the data published on the NBU website as the average value of the relevant standards for banks, according to the public data of which the Agency monitors

The growth of the NSFR standard over the same period was also noticeable: from 194,58% to 207,74%. Its gradual increase can be explained by the planned increase of the regulatory value from 90% to 100%, which banks were warned about in advance.

The trends that were revealed during the analysis of the liquidity standards, LCRac, LCRfc and NSFR are confirmed by the trends shown by the express analysis of the dynamics of the monetary aggregates of the NBU – M0, M1 and M2 (Graph 3).



Note: Based on data published on the NBU website

The share of demand deposits in the national currency (M1-M0) in the monetary aggregate M2 fluctuated during the period from 01.01.2022 to 01.03.2023 within the range of 31,29%-36,20%. As of March 1, 2023, the share of demand deposits in the national currency in M2 grew to a level that was higher than before the war, but its increase was only 3,88 percentage points (p.p.). In fact, this means that the war had an insignificant effect on the behavior of bank depositors, who moved part of their funds to demand accounts, which did not cause significant structural changes in monetary aggregates.

An analysis of the general statistics of the NBU on bank reporting shows that the share of funds (in national and foreign currency) in demand accounts has grown significantly, but it has increased mainly due to devaluation and very low deposit rates for foreign currency deposits, which even before the war shifted the demand for currency deposits towards demand deposits and current accounts.

The ranking according to the LCRac standard as of March 1, 2023 was led by a bank with foreign capital COMINBANK. The TOP-30 also included such banks with foreign capital as Ukrsibbank (BNP Paribas), Credit Europe Bank, Piraeus Bank ICB, UNEX Bank, OTP Bank, Pravex Bank, Raiffeisen Bank, etc. Also, banks controlled by the government of Ukraine, such as PrivatBank and Oschadbank, were included in the TOP-30 in terms of liquidity provision (*Table* 2).

TOΠ-30 banks by LCRac on 01.03.2023

	Bank's name	LCRac (not less 100%)	LCRfc (not less 100%)	NSFR (not less 90%)
1	JSC «KOMINBANK»	953,38%	532,34%	158,39%
2	JSC «FIRST INVESTMENT BANK»	911,47%	557,45%	193,58%
3	JSC «UNIVERSAL BANK»	687,87%	267,40%	196,45%
4	JSC «MOTOR-BANK»	635,84%	729,91%	203,13%
5	JSC «UKRSIBBANK»	584,25%	271,01%	359,79%
6	JSC «CREDIT EUROPA BANK»	562,94%	327,24%	620,15%
7	JSC «BANK OF INVESTMENTS AND SAVINGS»	559,02%	257,37%	219,15%
8	JSC «Poltava-bank»	552,73%	152,85%	171,08%
9	JSC «ALTBANK»	548,70%	334,13%	218,46%
10	JSC CB «PrivatBank»	526,89%	277,01%	178,49%
11	JSC JSCB «Lviv»	500,71%	540,62%	126,39%
12	JSC «KREDITVEST BANK»	482,89%	346,36%	141,78%
13	JSC «IIB»	477,25%	273,26%	257,75%
14	JSC «PIREAUS BANK ICB»	467,11%	204,22%	185,73%
15	JSC «AGROPORSPERIS BANK»	457,75%	120,48%	223,52%
16	JSC «Metabank»	441,18%	296,95%	149,23%
17	JSC «EPB»	432,14%	278,39%	232,99%
18	JSC «CB «GLOBUS»	420,29%	164,45%	145,40%
19	JSC «UNEX BANK»	407,85%	297,41%	422,81%
20	JSC «OTP BANK»	381,65%	234,43%	178,95%
21	JSC «PRAVEX BANK»	375,36%	134,73%	120,74%
22	JSC «Raiffeisen Bank»	368,70%	641,27%	173,67%
23	JSC «PUMB»	346,23%	223,28%	157,68%
24	JSC «JSB «RADABANK»	336,91%	216,38%	207,01%
25	Joint-Stock bank "Pivdennyi"	326,66%	324,84%	187,90%
26	JSC «Idea Bank»	315,53%	386,43%	104,92%
27	JSC «Oschadbank»	304,14%	241,10%	191,84%
28	JSC «BANK ¾»	298,82%	242,35%	185,70%
29	JSC «SKY BANK»	296,12%	249,26%	287,42%
30	PJSC «CB «ACORDBANK»	290,68%	682,76%	311,22%

Note: Compiled based on data published on the NBU website, from the list of banks whose public data the Agency monitors

In general, as of March 1, 2023, Ukrainian banks were very well provided with liquidity. This is partly due to the increase in the discount rate in the summer of 2022 and the increase in the profitability of NBU deposit certificates. From the values of the liquidity standards consolidated by the banking sector (LCRac, LCRfc and NSFR), it can be seen that the system was filled with liquidity, which on average exceeded the minimum value of the standards by 2-2,5 times. Excess liquidity in the banking system was unevenly distributed: we discovered facts when the values of the standards exceeded the limit value of the standard by almost 10 times. The Agency positively assesses the situation with excess liquidity in the banking sector, which thus demonstrates its readiness for any reaction of depositors during the war.

3. Quality of assets and lending

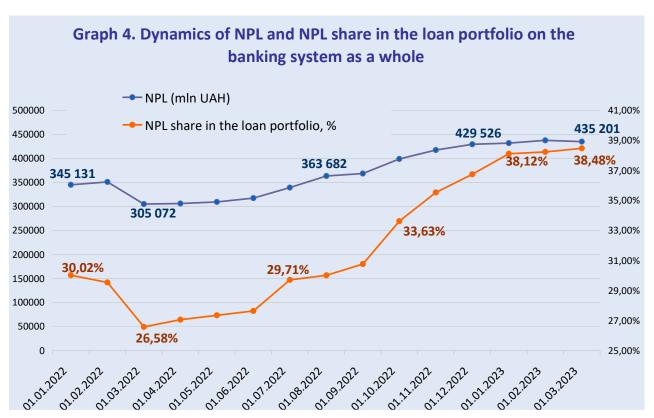
The level of lending to the Ukrainian economy during the war did not show the growth rates observed in peacetime. The lack of credit activity was caused by the following factors:

 curtailment of credit activity by international banking groups due to the introduction of bans by parent banks. In particular, many banking groups set conditions for Ukrainian subsidiaries to lend within the limits of the volume of loan portfolios that existed at the beginning of the war;

- availability of an alternative to credit investments in the form of NBU DC and domestic state loan bonds (DSLB);
- limitation of insurance of new projects in Ukraine due to increase in prices for such insurance and problems with payment by insurers for services of reinsurers outside of Ukraine.

There are both negative and positive aspects to slowing down the growth of banks' lending activity. Slowing down of the growth of lending activity will have a negative impact on the economy of Ukraine and will increase the dependence of economic recovery processes from foreign aid. On the other hand, the banking system now holds a significant amount of resources and redistributes them in favor of liquid assets – more liquid than conventional loans to the real sector. Thus, during the war, the problem of choosing between the impact on economic growth and the level of stability of the banking sector was solved. A completely <u>natural reaction of banks – to hold more liquidity during an unforeseen security situation – guaranteed and guarantees the stable operation of the banking sector during the war.</u>

Today, the impact of the war on the quality of bank loans is tangible, but far from catastrophic. In the period from February 1, 2022, the amount of NPLs increased from UAH 345,13 billion to UAH 435,2 billion, i.e. by 26%, which, taking into account inflation and devaluation, should not affect the work of banks at all (*Graph 4*).



Note: Based on data published on the NBU website

The NPL level for the period from 01.01.2022 to 01.03.2023 increased from 30,02% to 38,48%. The Agency admits that such small growth may continue in the future, and will be stopped as banks begin to increase lending to the economy. A wave of new loans can significantly reduce the NPL level and improve it to values that will be better than the pre-war level. As the reconstruction process begins in Ukraine, excess liquidity from the banking sector will be transformed into new loans. The reality of the implementation of this scenario depends on the

course of military operations and the provision of insurance for project and commercial risks during the war.

Perceiving data on the TOP-30 banks with the smallest share of NPLs, it should be taken into account that such a ranking includes banks that may not have significant volumes of lending, or for which lending was not the main source of income. Among the banks that had noticeable loan portfolios, the following banks can be noted from the TOP-30 banks by NPL level: Piraeus Bank, Pravex Bank, Credit Agricole Bank, Ukrsibbank, Raiffeisen Bank, COMINBANK, OTP Bank and others (table 3).

TOP-30 banks by NPL share on 01.02.2023, %

Table 3

	Bank's name	Share, %		Bank's name	Share, %		
1	JSC "ALTBANK"	2,92%	16	JSC "UKRSIBBANK"	15,52%		
2	JSC "MOTOR-BANK"	3,80%	17	JSC "Raiffeisen Bank"	15,57%		
3	JSC "AP BANK"	4,53%	18	PJSC "MTB BANK"	16,65%		
4	JSC "PIREAUS BANK ICB"	5,07%	19	JSC "UNIVERSAL BANK"	16,99%		
5	JSC "KREDITVEST BANK"	6,48%	20	JSC "COMINBANK"	18,46%		
6	JSC "PRAVEX BANK"	10,07%	21	JSC "BTA BANK"	19,01%		
7	JSC "UKRBUDINVESTBANK"	10,16%	22	JSC "OTP BANK"	19,58%		
8	JSC JSCB "Lviv"	10,30%	23	JSC "CB "GLOBUS"	21,71%		
9	JSC "Poltava-bank"	11,40%	24	JSC "UNEX BANK"	21,91%		
10	JSC "Metabank"	12,72%	25	JSC "ASVIO BANK"	22,78%		
11	JSC "PROCREDIT BANK"	13,95%	26	JSC "JSCB "CONCORD"	24,28%		
12	JSC "CREDIT AGRICOLE BANK"	14,04%	27	JSC "PUMB"	25,73%		
13	Joint-Stock bank "Pivdennyi"	14,35%	28	JSC "TASCOMBANK"	26,38%		
14	JSC "SKY BANK"	14,82%	29	JSC "KREDOBANK"	26,88%		
15	JSC "BANK VOSTOK"	14,89%	30	JSB "CLEARING HOUSE"	26,99%		

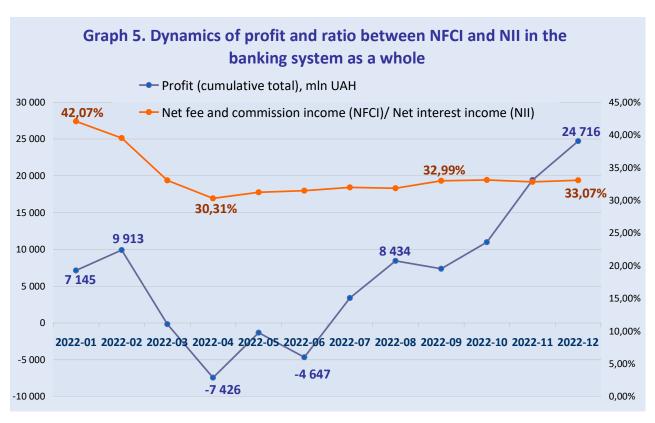
Note: Compiled based on data published on the NBU website, from the list of banks whose public data the Agency monitors

Therefore, the decline in the quality of the loan portfolios of banks during the war was noticeable but not catastrophic, and when adjusted for inflationary processes and devaluation, the change in the level of NPLs in the loan portfolios of banks could be considered insignificant and far from catastrophic consequences. The possibility of starting the process of reconstruction of Ukraine already in 2023 will improve the prospects of the Ukrainian lending market, and a wave of new loans will reduce the level of NPLs to levels better than before the war.

4. Profitability

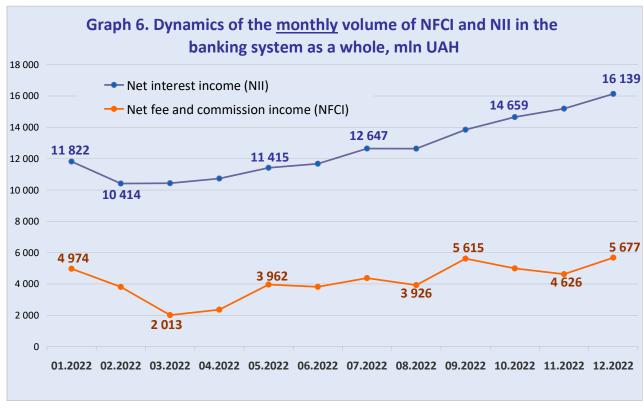
The Agency conducted an analysis of the profitability of the banking sector in Ukraine based on the statistics of 2022 year. Data for the first 2 months of 2023 year are not indicative. The year 2022, full of war risks, became a significant test for banks, but in general the banking system remained profitable. The cumulative amount of banks' profit after taxation for 2022 year reached UAH 24,716 bln. Loss-making work of banks was observed from March to June 2022. Since July 2022, the profits of banks began to grow steadily. The first 2 months of 2023 were also profitable for the banking system of Ukraine, as evidenced by NBU data.

The trends that were revealed when analyzing the ratio of net fee and commission income to net interest income remain interesting. The year 2022 was the year of the NBU's interest rate policy, which was unexpected for most banks, which in June 2022 increased the discount rate. The NBU's necessary step to combat inflation became a generator of interest rate risks for banks. In the opinion of the Agency, the level of independence of bank income from interest rate risk can be shown by the ratio between NFCI and NII. The higher this indicator is, the more the bank's income will be protected from fluctuating interest rates. Since the beginning of the war, the ratio of NFCI to NII as a whole in the banking system has decreased from 42,07% to 33,07%. (*Graph 5*).



Note: Based on data published on the NBU website

An additional analysis of the monthly volume of NII and NFCI as a whole for the banking system showed that starting from March 2022, the key indicators of the profitability of banking operations steadily increased every month (*Graph 6*).



Note: Based on data published on the NBU website

However, the study of the situation on the market showed that by the end of 2022, in the sector there are banks whose ratio of NFCI to NII significantly exceeds this indicator for the banking system of Ukraine, and this is not an anomaly caused by the action of temporary factors, but the result of a well-thought-out business model. For example, COMINBANK, a bank with the participation of foreign capital, according to the results of 2022 year, had a ratio of NFCI to NII at the level of 559%, that is, its net fee and commission income was in 5,6 times more than net interest income (*table 4*).

Table 4
TOP-30 banks by the ratio of net fee and commission income (NFCI) to net interest income (NII)
according to the results of 2022 year

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No	Bank's name	NFCI/NII	Profit after taxation, th. UAH	Nº	Bank's name	NFCI/NII	Profit after taxation, th. UAH
1	JSC "COMINBANK"	559,09%	191 959	16	JSB "CLEARING HOUSE"	43,05%	83 575
2	JSC "JSCB "CONCORD"	312,80%	262 992	17	JSC "MOTOR-BANK"	41,16%	-8 721
3	JSC "COMINVESTBANK"	284,28%	15 914	18	JSC "Oschadbank"	40,13%	689 848
4	JSC "UKRBUDINVESTBANK"	191,83%	39 810	19	JSC "Poltava-bank"	38,93%	41 181
5	PJSC "CB "ACORDBANK"	116,67%	11 553	20	JSCB "INDUSTRIALBANK"	33,12%	-234 223
6	JSC "MetaBank"	102,58%	877	21	JSC "KREDITVEST BANK"	30,74%	-3 520
7	PJSC "MTB BANK"	97,95%	35 005	22	JSC "ASVIO BANK"	29,07%	27 070
8	PJSC "BANK VOSTOK"	66,28%	290 427	23	JSB "UKRGASBANK"	28,65%	-2 756 744
9	JSC "BANK 3/4"	63,35%	25 690	24	JSC "Ukreximbank"	27,83%	-6 886 183
10	JSC "IIB"	54,27%	7 018	25	JSC "KRYSTALBANK"	25,76%	42 479
11	JSB "Pivdennyi"	53,34%	408 391	26	JSC "KREDOBANK"	23,43%	142 416
12	JSC CB "PrivatBank"	51,21%	30 252 395	27	JSC "PIREAUS BANK ICB"	22,61%	-108 003
13	JSC "JSB "RADABANK"	47,07%	9 303	28	JSC "AP BANK"	21,35%	-62 682
14	JSC "ALTBANK"	45,79%	26 993	29	JSC "Reiffeisen Bank"	21,27%	1 547 313
15	JSC "CB "GLOBUS"	44,79%	25 080	30	JSC JSCB "Lviv"	18,98%	127 209

Note: Compiled based on data published on the NBU website, from the list of banks whose public data the Agency monitors

Hence, since March 2022, the banking sector showed a steady growth in net interest and net fee and commission income. The activity of domestic banks since July 2022 was generally profitable. The Ukrainian banking system ended the 2022 year with a profit after tax of UAH 24,716 bln. The first 2 months of 2023 year were also profitable for the banking sector. The situation in the sector was improved by a significant increase in the profitability of liquid assets, and in the market the presence of banks, whose the ratio between the NFCI and the NII was higher than the market average.

5. Countermeasures against military risks

In general, the banking system of Ukraine coped with military risks. One of the significant risks that war affects is operational risk. Temporary occupation of certain territories of Ukraine, physical destruction of bank branches and infrastructure, turning off lights, etc. – all these factors contribute to the implementation of operational risk in banks. The NBU played an important role in countering these risks.

- 1. At the beginning of the war, the NBU expanded the regulatory focus that allowed cash withdrawals at supermarket and other retail establishments. This relieved the banking system and made it possible to provide the population with cash hryvnia more efficiently. As a result, the settlement infrastructure in the segment of conversion of non-cash hryvnia into cash expanded, which had a positive effect on the system's ability to satisfy the population's demand for cash.
- 2. Implementation of the POWER BANKING project (organization of a network of bank branches that work even in the absence of light) with the help of the NBU stabilized the work of the banking sector during the blackout. Currently, the POWER BANKING network has more than

2300 branches equipped with alternative energy sources and backup communication channels, enhanced cash collection and additional staff. Currently, about 70% of all branches of the POWER BANKING network belong to systemically important banks, one third – to branches of other banks. The availability of this project strengthened the banking sector's opposition to russia's military aggression against Ukraine.

- 3. Despite the war, the NBU continued to improve the payment infrastructure. So, on April 1, 2023, there was a transition to the new generation Electronic Payment System (EPS) according to ISO 20022 standards, which works around the clock (24/7). The transition to ISO 20022 together with the introduction of IBAN create a technological basis for joining Ukraine to the Single Euro Payments Area (SEPA) and implementing instant payment services in Ukraine. The international standard ISO 20022 is a universal way of interaction of various automated systems of financial and trading market participants in the world. It is the basis of the functioning of European payment systems.
- 4. The banking sector of Ukraine organized itself during the war and demonstrated a high level of social responsibility. The Agency actively monitors the actions of banks that can be attributed to the policy in the field of social responsibility. We remind you that in March 2023, the Agency conducted a study of social responsibility and compiled a list of socially responsible banks. According to the results of 2022 year, the Agency determined the TOP-3 banks by the level of social responsibility, which, in the opinion of the Agency, were the most socially responsible. The following banks were included in the group of leaders of the rating by the level of social responsibility:
 - JSC «KREDOBANK»
 - JSC «COMINBANK»
 - PJSC «ACORDBANK»

In particular, Kredobank has a rather strong product line and loyal tariffs, which are aimed at facilitating the use of banking services by citizens who are outside Ukraine. As of January 1, 2023, the bank's investments in DSLB amounted to UAH 3,356 billion. The Bank spent UAH 31,928 million on income tax for 2022 year. In addition, in 2022 year Kredobank allocated UAH 7,7 mln for the completion of the Mine Action Center of the Ministry of Defense of Ukraine, and also took care of the accommodation of people who were forced to leave their homes due to the war.

JSC "COMINBANK" strongly developed charity even before the war, and in December 2022 the bank presented the updated corporate social responsibility DOBROKOLO, within which a number of philanthropic initiatives are systematically carried out, in particular, monthly assistance to a military hospital. As of October 2022, the bank has paid more than UAH 83 mln in taxes and fees to the state budget of Ukraine. Also, during the war, the bank created more than 150 new jobs.

- 5. The banking sector also suffers from hacker attacks. It is known from public information that during the war hacker attacks were carried out on Universalbank (Monobank brand), Privatbank and other popular banks and portals of state institutions. The enemy tried to sow panic in the banking sector through an attack on IT systems, and to take advantage of the high level of digitalization of the banking sector. But thanks to the coordinated actions of banks and the NBU, such attacks did not cause significant damage to the banking sector, although they caused some discomfort.
- 6. Artificial attempts to destabilize the situation in the banking sector during the war are a classic measure in the general list of actions of the enemy's special services. Unfortunately, the banking sector of Ukraine was one of the priority targets of the aggressor from the beginning of the invasion. In the first days of the full scale war, the banking sector survived, including due to the concerted actions of the NBU and banks. However, given the new wave of information attacks in the spring of 2023, it can be concluded that the enemy, who failed to physically destroy the banking infrastructure, is now trying to sow panic among Ukrainians and hit our economy. This is evidenced by the "black PR" that Ukrainian banks are currently dealing with.

According to the Agency's observations, the origin of the threat is indicated by the fact that commissioned materials against the banking sector are placed on resources that the country's authorities and Ukrainian special services have already publicly identified as those coordinated by the aggressor country with a corresponding public call to avoid such channels, because they are a dangerous source of information. Unfortunately, systematic destructive work is being carried out against the banking sector of our country. Panic moods, which play into the hands of the aggressor, were deliberately fueled by relevant information campaigns.

The enemy uses any excuse to sow panic: from the leak of information about a failed bank check to the impact of the bankruptcy of small American banks in the USA on the mood of Ukrainian depositors. The commissioned articles are attempts to discredit not only a specific bank, but also the actions of the NBU and its management. Such nonsense, on the one hand, is very easily refuted by a simple fact check in official sources of information, on the other hand, it is an eloquent testimony of systematic attempts to shake the Ukrainian banking system as a whole. Criminal activities are conducted in an organized and professional manner, with fabricated references to the intentions of the market regulator. Some articles are accompanied by edited photo/video materials and contain the names of real companies.

This situation has not been observed for the first time, at the beginning of the summer of 2022, some banks have already faced a wave of information attacks. Some were even artificially accused of false connections with the enemy (russian federation). Not only the banking system, but also the energy system of Ukraine was targeted. Both systems are important for the Ukrainian economy, their operation affects the mood of the population, the demand for cash from the population and the level and structure of consumption. Fortunately, both systems survived. The banking sector manages to be stable thanks to quick self-organization, efficient and systematic work of the NBU, the Government, and special services responsible for national security.

Today, the Bureau of Economic Security of Ukraine, together with the Security Service of Ukraine, is conducting an audit of the activities of a number of commercial banks. Such inspections are a normal practice. They in no way indicate that the banking system of Ukraine, and in particular the banks undergoing such an inspection, are in danger. Moreover, against the background of information attacks, the transparency of the banking system is the basis for internal economic and political stability, therefore the conscious banking sector comprehensively supports it and contributes to measures aimed at building a self-sufficient, independent, professional, strong and protected banking sector of Ukraine.

Banks conduct an open communication policy and also strengthen financial monitoring measures, including with the aim of nullifying possible attempts by the enemy to use them for their criminal purposes – to strike both from the inside and from the outside. It is worth talking about this situation publicly in order to prevent the enemy from achieving its goal, and not to lead to destruction and financial losses: population and business. The agency calls on the banking sector to increase the level of self-organization and maintain transparent relations with financial monitoring authorities in order to minimize the risks of financing enemy operations inside the country. Consolidation of the efforts of the banking sector of Ukraine for the sake of joint victory and ignoring attempts to sow panic is the guarantee of further effective and uninterrupted work of the banking sector.

6. Methodology of calculations

The rating agency "Standard Rating" provides data of banks and other financial institutions in its public products on an "as is" basis, i.e. as they are on the website of the National Bank of Ukraine (NBU) and banks.

RA "Standard-Rating" can carry out its own calculations of statistical indicators of banks' work, using generally accepted calculation methods, statistical formulas and methods. The results of the Agency's calculations may contain rounding within the limits of generally accepted mathematical rules.

In the Report on the stability of the banking sector, the Agency can use the method of cleaning the series of dynamics from statistical anomalies, when one of the indicators of the bank is ten times higher than the normal value in the banking system as a whole. In this case, the bank may be excluded from the sample, and the value of its standards may not be taken into account when calculating the average value of the standard for the banking system. Alignment of the series of dynamics according to standards is allowed if the value of the indicator is given on a separate date (for example, at the beginning of the month).

Since 2018 year, the Agency excludes from its public research banks that are registered in Ukraine, but that work in narrow markets, are captive or created to service 1-2 clients. Banks that were fully or partially controlled by the government of the russian federation or owned by shareholders who lost their business reputation are also excluded from public research. In addition, banks, whose activities the Agency considers as non-transparent, are excluded from the research.

7. Conclusions

Artificial attempts to destabilize the situation in the banking sector during the war are a classic measure in the general list of actions of the enemy's special services. Unfortunately, the banking sector of Ukraine was one of the priority targets of the aggressor from the beginning of the invasion. In the first days of the full scale war, the banking sector survived, including due to the coordinated actions of the NBU and banks. However, given the new wave of information attacks in the spring of 2023, it can be concluded that the enemy, who failed to physically destroy the banking infrastructure, is now trying to sow panic among Ukrainians and hit our economy. This is evidenced by the "black PR" that Ukrainian banks are currently dealing with. In order to counteract artificial risks, the source of which is the aggressor country, the Rating Agency "Standard-Rating" conducted a diagnostic examination of the banking sector and prepared a special Report on the stability of the banking sector, which presented the main results of such an study.

- 1. Ukraine's banking sector was well capitalized. All equity standards (regulatory capital (N1), regulatory capital adequacy (N2), fixed capital adequacy (N3)) increased for the period from 01.01.2022 to 01.03.2023. In fact, at the beginning of March 2023, all equity standards in the system as a whole increased to levels greater than before the war. It is important that the sources of capital for the banking sector of Ukraine are diversified. Not only the state of Ukraine and Ukrainian businesses provide external support to their banks in Ukraine, but also banking groups and portfolio investors from Great Britain, EU countries, the USA, Turkey, etc.
- 2. As of March 1, 2023, Ukrainian banks were very well provided with liquidity. It can be seen from the LCRac, LCRfc and NSFR liquidity norms consolidated by the banking sector that the system was filled with liquidity, which on average exceeded the minimum value of the norms in 2-2,5 times. Excessive liquidity in the banking system was distributed unevenly, we found facts when the standards exceeded the limit value almost in 10 times. The Agency positively assesses the

situation with excessive liquidity in the banking sector, which demonstrates its readiness for any reaction of depositors during the war.

- 3. The decline in the quality of banks' loan portfolios during the war was noticeable, but not catastrophic, and when adjusted for inflationary processes and devaluation, the change in the level of NPLs in banks' loan portfolios could be considered insignificant and far from catastrophic consequences. The possibility of starting the process of reconstruction of Ukraine already in 2023 year will improve the prospects of the Ukrainian lending market, and a wave of new loans will reduce the level of NPLs to levels better than before the war. The decrease in lending growth was due to the increase in bank liquidity. That is, the banking sector during the war chooses safer instruments for the placement of assets, which increases the security of the banking sector.
- 4. Since March 2022, the banking sector has shown a steady growth in net interest and net fee and commission income. Banks' activities have been profitable since July 2022. The domestic banking system ended the 2022 year with a profit after tax of UAH 24,716 bln. The first 2 months of 2023 were also profitable for the banking sector. The situation in the sector was improved by a significant increase in the return on liquid assets and the presence of banks in which the ratio between net fee and commission income and net interest income was higher than the market average. The ability of banks to be liquid and profitable at the same time significantly stabilized the situation in the banking sector and protected it from systemic risks.
- 5. The banking sector of Ukraine suffers from hacker attacks. It is known from public information that during the war hacker attacks were carried out on Universalbank (Monobank brand), Privatbank and other popular banks and portals of state institutions. The enemy tried to sow panic in the banking sector through an attack on IT systems, and to take advantage of the high level of digitalization of the banking sector. But due to the coordinated actions of the banks and the NBU, such attacks did not cause significant damage to the banking sector.
- 6. The banking sector makes effective resistance to war risks, showing an effective capacity for self-organization and increasing the level of social responsibility. Special mention should be made of the efforts of the National Bank of Ukraine through which the POWER BANKING project was created, which strengthened the banking sector during power outages, as well as the transition to a new generation electronic payment system (EPS) according to ISO 20022 standards, which brings Ukraine closer to European integration. Improving banking infrastructure during wartime and jointly resisting influence operations from an aggressor country allows the banking sector to gain advantages on the economic front to ensure joint victory.

Thus, as the results of the diagnostic examination of the banking sector over the past 12–15 months showed, in general, Ukrainian banks are well provided with equity and liquidity, their activities remain profitable in general, and the decline in the quality of the banks' loan portfolio is far from catastrophic and is partially compensated by the increase in liquidity to levels better than pre-war ones. Currently, there are no grounds for negative conclusions regarding the work of Ukrainian banks. Therefore, the Rating Agency "Standard-Rating" calls on society not to react to the release of negative information about the activities of Ukrainian banks.