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# CAPITALIZATION OF UKRAINIAN SYSTEMICALLY IMPORTANT BANKS IN THE CONDITIONS OF MILITARY AGGRESSION OF THE RF

Introduction. Systemically important banks (SIB) play an important role in stability of the domestic banking and financial system since their activities significantly affect the country's financial system and the economy as a whole.

**Problem.** Domestic banking system constantly functions in a mode of stress and uncertainty In conditions of war, therefore the National Bank of Ukraine pays special attention to the activities of systemically important institutions. Ensuring the proper functioning of SIB depends on the level of their capitalization, which is why the capitalization of systemically important banks is an extremely urgent issue today.

The aim of the article is to determine the ability of SIB to meet capital adequacy requirements as a factor of ensuring the stability and reliability of the domestic banking system and its macroeconomic stress resistance under martial law.

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# КАПІТАЛІЗАЦІЯ ВІТЧИЗНЯНИХ СИСТЕМНО ВАЖЛИВИХ БАНКІВ В УМОВАХ ВІЙСЬКОВОЇ АГРЕСІЇ РФ

Вступ. Вагому роль у стабільності та стійкості вітчизняної банківської та фінансової систем відіграють системно важливі банки (СВБ), діяльність яких суттєво впливає на фінансову систему країни й на економіку загалом.

Проблема. В умовах війни вітчизняна банківська система постійно функціонує в режимі стресу та невизначеності. Відтак, Національний банк України приділяє особливу увагу діяльності системно важливих установ. Забезпечення належного функціонування СВБ залежить від рівня їх капіталізації, що є вкрай актуальним питанням сьогодення.

Мета статті – встановлення здатності СВБ виконувати вимоги до достатності капіталу як фактору забезпечення стабільності та надійності вітчизняної банківської

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Methods. Methods of theoretical generalization, analysis and synthesis, grouping, system approach were used in the paper.

**Results.** The value of the capital standards of domestic SIB during the period of martial law was investigated, a comparative analysis of capitalization indicators of SIB of Ukraine with their normative and forecast values under basic and adverse macroeconomic scenarios was carried out according to the results of the NBU stress testing. Banks that show signs of an unfavorable macroeconomic scenario have been identified, and recommendations have been developed regarding the need to take additional measures to increase the stress resistance of banks.

Conclusions. In conditions of war, the SIB of Ukraine fulfills the requirements regarding the target values of the capital standards and has a sufficient margin of safety due to the appropriate level of capitalization, although the implementation of the basic macroeconomic scenario turned out to be impossible, which caused lower than forecast capital indicators. Therefore, the regulator should pay additional attention to those banks that demonstrate negative trends for the implementation of an unfavorable macroeconomic scenario at this stage and prepare a set of measures for their recapitalization in advance.

Keywords: capital, capitalization, capital requirements, risks, systemically important banks, stress testing.

системи та її макроекономічної стресостійкості в умовах воєнного стану.

Методи. Використано методи теоретичного узагальнення, аналізу та синтезу, групування, системного підходу.

Результати дослідження. Досліджено значення нормативів капіталу вітчизняних СВБ v період дії воєнного стану, проаналізовано індикатори капіталізації СВБ України з їх нормативними та прогнозними значеннями за базовим і несприятливим макроекономічними сценаріями відповідно до результатів стрес-тестування НБУ. Визначено банки, які мають ознаки реалізації несприятливого макроекономічного сценарію, розроблено рекомендації щодо необхідності вжиття додаткових заходів для підвишення стресостійкості СВБ.

Висновки. В умовах війни СВБ України виконують вимоги шодо иільових значень нормативів капіталу та мають достатній запас міиності завдяки належному рівню капіталізації, хоча реалізація базового макроекономічного сценарію виявилася неможливою, що обумовило нижчі за прогнозні показники капіталу. Відтак, регулятор повинен приділяти додаткову увагу тим банкам, які вже на цьому етапі демонструють негативні тенденції для реалізації несприятливого макроекономічного сценарію та завчасно підготувати комплекс заходів шодо їх докапіталізації.

Ключові слова: капітал, капіталізація, нормативи капіталу, ризики, системно важливі банки, стрес-тестування.

## JEL Classification: E52, G21, H56

Introduction. With the beginning of hostilities on the territory of Ukraine, the domestic banking system functions in a mode of stress and uncertainty. Banks quickly adapt to functioning in the conditions of martial law, continuing their activities, trying to fulfill their obligations to customers and comply with regulations. The National Bank of Ukraine actively supports banking system stability. Systemically important banking institutions play a significant role in the country's banking and financial system stability.

**Problem.** The activity of systemically important banks (SIB) has a significant impact on the financial system, it can cause damage to it under the condition of their improper functioning and negatively affect country's economy as a whole. Therefore, the NBU pays special attention to the activities of systemically important institutions, especially under martial law, and this is primarily due to the need to preserve the financial stability of the country.

Analysis of recent research and publications. Domestic scientists study the impact of the SIB activities on the banking system stability and the country's economy as a whole in their works. Y. Vladyka, L. Bezugla, L. Turova revealed issues regarding the functioning of SIB and their importance for ensuring the stability of national banking systems and the global financial system with the aim of maintaining the economy in the conditions ISSN 1727-9313; eISSN 2616-5856. SCIENTIA FRUCTUOSA. 2022. № 6 87

of a financial and economic crisis and ensuring economic and social development [1]. L. Bondarenko, I. Ukhova investigated the state of SIB and their concentration in the banking system of Ukraine in the aspect of monopolization of the banking market by state SIB and accumulation of a significant share of problem loans in them. According to the research results, the close connection of SIB with the macro system was proven, and the total consequences of the influence of SIB on lending to small and medium enterprises were revealed, which, in turn, are closely related to the growth of GDP and exports [2].

The aim of the article is to determine the ability of SIB to meet capital adequacy requirements as a factor of ensuring the stability and reliability of the domestic banking system and its macroeconomic stress resistance under martial law.

**Methods.** Methods of theoretical generalization, analysis and synthesis, grouping, system approach were used in the paper. The information and analytical base of the research includes materials of the National Bank of Ukraine, scientific articles, etc.

**Results.** A systemically important bank (SIB) is a bank that meets the criteria established by the National Bank of Ukraine and whose activities affect the stability of the banking system [3]. The National Bank of Ukraine determines the list of systemically important institutions every year and carries out enhanced supervision over them. The failure of SIB can damage the financial system and negatively affect the economy as a whole. Increased attention and enhanced supervision of the regulator over the activities of systemically important institutions under martial law is due to the need to preserve the financial stability of the country.

The methodology for determining SIB is based on the recommendations of the European Banking Authority (EBA) – Guidelines on criteria to assess other systemically important institutions (O-SIIs) [4]. The National Bank of Ukraine determines SIB every year based on data as of January 1 from among banks operating in Ukraine (except banks classified by the National Bank as insolvent).

The regulator determines SIB based on the value of the bank's systemic importance indicator, which is calculated according to the following criteria: size of the bank; degree of financial relationships; directions of activity [5].

It should be noted that the bank's system importance indicator was determined until the middle of 2021, but due to restrictions related to the COVID-19 pandemic, it was temporarily suspended.

For SIB, the NBU establishes additional requirements in order to reduce the probability of their bankruptcy. Such requirements include establishment of a buffer of systemic importance and compliance with the increased standard value of the maximum amount of credit risk per counterparty H7 (no more than 20 %, the general requirement is 25 %).

As of June 1, 2022, the list of the systemically important banks of Ukraine includes: JSC "A – BANK", JSC "ALFABANK", JSC "KredoBank", JSC "OTP Bank", JSC "State Savings Bank of Ukraine", JSB "Pivdenny Bank",

JSC CB "PrivatBank", JSC "First Ukrainian International Bank", JSC "Raiffeisen Bank", JSC "TascomBank", JSB "UKRGASBANK", JSC "The State Export-Import Bank of Ukraine", JSC "UKRSIBBANK", JSC "Universal Bank" [6].

Since 2018, the National Bank of Ukraine has been assessing the stability of banks, which involves conducting stress testing for a list of banks determined by the National Bank. Based on the results of stress testing, the estimated indicators of the banks' financial statements are identified and the required level of capital for three years after the reporting date is determined under the basic and adverse macroeconomic scenarios.

In 2021, 30 banks, whose assets make up more than 93 % of the assets of the banking system of Ukraine, underwent stress testing. Stress testing made it possible to analyze in detail the state of the banking sector after the crisis of 2020 and predict the resilience of banks to possible adverse events in the future. Stress testing was carried out according to the basic and unfavorable scenarios. Banks went through crisis phenomena in 2020, so the NBU's assumption of an adverse scenario for stress testing was moderately negative, but sufficient to assess the resilience of the banking sector to deep and longterm crises. The adverse scenario was developed by the NBU in such way that it was comparable to the scenarios of leading central banks:

• decreasing on one standard deviation of real GDP in 2021 compared to the basic scenario. Consequently, GDP decreases by 2.2 % in the first year, by 1.7 % in the second year, and then gradually recovers;

• devaluation of the UAH against the USD -29 % during the three-year forecast period, the most in the first year - by 16 %;

• inflation will grow moderately due to a decrease in economic activity and a decrease in aggregate demand;

• an important stress factor in an adverse scenario is the growth of fiscal risks and, accordingly, the yield of government securities [7].

In addition, the stress test traditionally assumes the implementation of credit and market (interest rate and currency) risks (*Table 1*).

Table 1

Risk	Mechanism of realization	Consideration in the stress test
Credit risk	This risk is implemented through the migration of part of the loans to the category of non-performing	It is assessed individually for large loans to big corporate borrowers, and on a group basis for other loans. Under the adverse scenario, about 10–15 % of hryvnia loans will become nonperforming
Interest rate risk	This risk is realized due to the increase in the value of liabilities under the adverse scenario at unchanged rates of return on assets	The interest rate risk in the adverse scenario materializes through increase in deposit rates and market yields on government and municipal secu- rities. Factoring in the negative impact of the macroeconomic conditions on the yields and res- pectively the value of debt securities is a novelty of the stress testing methodology
Currency risk	Currency risk arises from banks' unbalanced foreign exchange positions, as well as indirectly through credit and interest rate risks	It is estimated through the revaluation of the open foreign exchange position and the assumption that hryvnia will depreciate

Assumed risks for stress testing of Ukrainian banks in 2021

*Source*: compiled by the authors on the basis of sources [7; 8].

The impact on banks from regulatory changes scheduled for the next three years is assessed separately as part of stress testing for timely evaluation of potential implications of novelties for banks and avoiding the double-counting of this effect.

According to the results of the 2021 stress test, nine banks successfully passed it. Among them are such systemically important banks as JSC "ALFABANK", JSC "OTP Bank", JSC "Raiffeisen Bank", JSC "UKRSIBBANK", JSC CB "PrivatBank", JSC "First Ukrainian International Bank" (FUIB) and JSC "A–BANK". According to the crisis scenario, the number of banks that could potentially face a lack of capital increased to 20. Among them are such SIB as JSC "State Savings Bank of Ukraine" (Oschadbank), JSC "The State Export-Import Bank of Ukraine" (Ukreximbank), JSB "UKRGASBANK", JSB "Pivdenny Bank", JSC "TascomBank", JSC "KredoBank", JSC "Universal Bank" [9].

Russia's full-scale war against Ukraine demonstrates crisis consequences for Ukraine's economy and the banking sector in particular. Therefore, it is predicted that as a result of the war, the country's GDP will fall by more than a third, so the NBU has introduced a number of strict restrictions on currency transactions and cross-border capital flows. Access to the international private capital market for the Ukrainian government and issuers is currently closed. At the same time, for banks, the closure of external debt markets is not yet critical, because they are funded mainly within the country and do not depend on external borrowing.

Risks caused by war events were not taken into account during stress testing, and therefore it is important to analyze the current level of capitalization of banks, compare it with forecasts based on the baseline and adverse macroeconomic scenarios, and determine the need to take additional measures to increase the stress resistance of SIB using capital management tools.

In order to assess the adequacy of the bank's capital, the National Bank, in particular, the Instruction on the Procedure for Regulating Banks' Activities in Ukraine, approved the relevant norms of the bank's capital, including: Regulatory capital (R1); Regulatory capital adequacy (sufficiency) ratio (R2); Core capitaladequacy ratio (R3) [10].

Regulatory capital is one of the most important indicators of banks' activity, the main purpose of which is to cover the negative consequences of various risks that banks take on in the course of their activities, and to ensure the protection of deposits, financial stability and stable operations of banks [10].

The key component of regulatory capital is core capital. *Table 2* shows the core capital values of systemically important banks for 2021–2022.

As we can see from the data in the *Table 2*, the value of the core capital of majority of systemically important banks as of June 1, 2022 is close to the forecast value under the baseline macroeconomic scenario defined in the

NBU stress testing report, and exceeds the forecast value under the adverse macroeconomic scenario. The exception is JSC CB "Privatbank", whose capital volume as of June 1, 2022 is significantly lower than the value under the baseline and adverse scenarios. JSC "Raiffeisen Bank", JSC "FUIB" and "OTP Bank" also have lower values of core capital than the values under the baseline scenario, but exceed the values of the adverse macroeconomic scenario. At the same time, JSC "Ukreximbank", JSC "KredoBank" and JSC "Universal Bank" demonstrate positive dynamics regarding the increase of capital, which exceeds the forecast values according to the baseline and adverse scenarios.

Table 2

	Bank data		Absolute	Forecast value under the macroeconomic scenarios:				
Bank		01.01.21	deviation 2022/2021	baseline		adverse		
	01.06.22			1st year	Absolute deviation	1st year	Absolute deviation	
JSC CB "PrivatBank"	20 890.5	17643	3 247	34 680	-13 790	30 731	-9 840	
JSC "State Savings Bank of Ukraine" (Oschadbank)	13 358.7	12535	824	14 967	-1 608	8 092	5 266	
JSC "The State Export-Import Bank of Ukraine" (Ukreximbank)	8 606.8	8 969	-363	8 004	603	966	7 640	
JSB "UKRGASBANK"	8 679.5	8 456	223	9 298	-618	1 786	6 894	
JSC "ALFABANK"	8 430.7	7 055	1 376	9 421	-990	4 970	3 461	
JSC "Raiffeisen Bank"	8 300.8	6 904	1 397	11 385	-3 084	8 212	89	
JSC "UKRSIBBANK"	7 579.9	6 245	1 335	8 016	-437	6 803	777	
JSC "OTP Bank"	7 122.2	7 067	55	9 371	-2 249	7 385	-263	
JSC "KredoBank"	3 494.2	2 045	1 449	2 509	986	970	2 524	
JSC "First Ukrainian International Bank" (FUIB)	7 505.6	6 224	1 282	9 561	-2 055	6 098	1 408	
JSB "Pivdenny Bank"	2 482.7	2 263	220	3 061	-579	1 642	840	
JSC "TascomBank"	2 106.3	1 798	308	2 305	-199	945	1 161	
JSC "Universal Bank"	6 6 3 9.3	1 944	4 695	3 726	2 914	1 549	5 090	
JSC "A-BANK"	1 282.7	790	492	1 620	-337	1 328	-46	

Core capital of SIB and its forecast value under the baseline and adverse macroeconomic scenarios, UAH million

Source: compiled by the authors on the basis of sources [9; 11].

We will analyze the volume of regulatory capital of systemically important banks. The minimum amount of the bank's regulatory capital (R1) must be at least UAH 200 million [10].

*Table 3* shows the values of regulatory capital of systemically important banks for 2021–2022.

So, as we can see from the data in *Table 3*, all systemically important banks fulfill the requirements regarding the size of the regulatory capital, significantly exceeding its regulatory value.

As of June 1, 2022, the regulatory capital of all systemically important banks, except JSC CB "PrivatBank", exceeds the forecast value under an adverse scenario. In addition, JSC CB "PrivatBank" and two more state banks – JSC "Oschadbank", JSC "UKRGAZBANK", as well as the bank with foreign

capital JSC "OTP Bank" demonstrate the amount of regulatory capital lower than its forecast value under the baseline scenario, which indicates the presence of the influence of destructive factors on the capitalization processes of these banks.

Table 3

	Bank data		Absolute	Deviation	Forecast value under the macroeconomic scenarios:				
Bank		01.01.21	deviation 2022/2021	norm*	ba	seline	adverse		
	01.06.22				1st year	Absolute deviation	1st year	Absolute deviation	
JSC CB "PrivatBank"	41 750.8	35 256	6 495	41 551	46 245	-4 494	42 295	-545	
JSC "State Savings Bank of Ukraine" (Oschadbank)	15876.8	17 168	-1 291	15 677	16 322	-445	9 539	6 338	
JSC "The State Export- Import Bank of Ukraine" (Ukreximbank)	13154.8	13 506	-351	12 955	11 518	1 636	1 910	11 245	
JSB "UKRGASBANK"	9 355.0	8 695	660	9 155	9 357	-2	1 845	7 510	
JSC "ALFABANK"	12 153.2	8 391	3 762	11 953	10 486	1 668	6 2 3 1	5 922	
JSC "Raiffeisen Bank"	14 357.8	10 652	3 706	14 158	11 685	2 673	8 512	5 846	
JSC "UKRSIBBANK"	9 703.8	6 851	2 853	9 504	8 021	1 683	6 808	2 896	
JSC "OTP Bank"	9 058.1	8 621	437	8 858	9 232	-174	7 246	1 812	
JSC "KredoBank"	3 736.9	2 151	1 586	3 537	2 615	1 122	1 076	2 661	
JSC "First Ukrainian International Bank" (FUIB)	12 853.9	8 347	4 507	12 654	9 866	2 988	6 403	6 451	
JSB "Pivdenny Bank"	4 087.0	2 857	1 230	3 887	3 117	970	1 702	2 385	
JSC "TascomBank"	2 818.7	2 619	199	2 619	2 317	501	958	1 861	
JSC "Universal Bank"	7 674.4	2 633	5 041	7 474	3 726	3 949	1 549	6 125	
JSC "A-BANK"	2 129.8	1 061	1 069	1 930	1 622	508	1 330	800	

Regulatory capital (R1) of SIB and its forecast values under the baseline and
adverse macroeconomic scenarios, UAH million

\* No less than UAH 200 million.

Source: compiled by the authors on the basis of sources [9; 11].

Regulatory capital adequacy (sufficiency) ratio (R2) is established to prevent excessive transfer by the bank of credit risk and the risk of non-return of bank assets to the bank's creditors/depositors [10]. The normative value of R2 is set at the level of 10 %. *Table 4* shows the values of regulatory capital adequacy (sufficiency) ratio (R2) of systemically important banks for 2021–2022.

As can be seen from the *Table 4*, all systemically important banks fulfill the requirements regarding the size of the regulatory capital adequacy (sufficiency) ratio (R2). However, the majority of systemically important banks demonstrate its negative dynamics during the last six months. Thus, during this period, the regulatory capital adequacy (sufficiency) ratio of JSC CB "PrivatBank" was reduced by almost half, JSC "Oschadbank", JSC "Ukreximbank", JSC "OTP BANK", JSC "TascomBank" by one third. Only JSC "ALFABANK", JSC "KredoBank", JSC "Pivdenny Bank" and JSC "Universal Bank" demonstrated the positive dynamics of this ratio.

## Table 4

	Bank data		Absolute	Deviation	Forecast value under the macroeconomic scenarios:			
Bank			deviation	from the	baseline		adverse	
	01.06.22	01.01.21	2022-2021	norm*	1st	Absolute	1st	Absolute
					year	deviation	year	deviation
JSC CB "PrivatBank"	17.08	28.5	-11.42	7.08	25.6	-8.52	23.0	-5.92
JSC "State Savings Bank	13.18	18.4	-5.22	3.18	15.2	-2.02	8.5	4.68
of Ukraine" (Oschadbank)	13.10	10.4	-5.22	5.16	13.2	-2.02	8.5	4.08
JSC "The State Export-Import	14.91	21.2	-6.29	4.91	17.1	-2.19	2.6	12.31
Bank of Ukraine" (Ukreximbank)	17.71	21.2	-0.27	ч. <b>7</b> 1	17.1	-2.17	2.0	12.31
JSB "UKRGASBANK"	14.13	15.0	-0.87	4.13	15.0	-0.87	2.8	11.33
JSC "ALFABANK"	13.98	13.4	0.58	3.98	13.9	0.08	8.2	5.78
JSC "Raiffeisen Bank"	15.18	16.9	-1.72	5.18	15.5	-0.32	10.9	4.28
JSC "UKRSIBBANK"	23.21	23.5	-0.29	13.21	22.3	0.91	18.4	4.81
JSC "OTP Bank"	17.73	25.4	-7.67	7.73	22.6	-4.87	17.6	0.13
JSC "KredoBank"	17.08	15.4	1.68	7.08	15.9	1.18	6.5	10.58
JSC "First Ukrainian	16.25	17.0	1.55	( 25	167	0.25	10.6	5 75
International Bank" (FUIB)	16.35	17.9	-1.55	6.35	16.7	-0.35	10.6	5.75
JSB "Pivdenny Bank"	17.54	14.3	3.24	7.54	14.4	3.14	7.3	10.24
JSC "TascomBank"	13.70	18.3	-4.60	3.70	14.2	-0.50	5.8	7.90
JSC "Universal Bank"	17.46	14.3	3.16	7.46	13.3	4.16	5.6	11.86
JSC "A-BANK"	13.15	13.2	-0.05	3.15	13.0	0.15	10.9	2.25

# Regulatory capital adequacy (sufficiency) ratio (R2) of SIB and its forecast values under the baseline and adverse macroeconomic scenarios, %

\*No less10 %.

Source: compiled by the authors on the basis of sources [9; 11].

This was also reflected in the compliance of the forecast with the baseline macroeconomic scenario, thus the majority of banks have lower the regulatory capital adequacy (sufficiency) ratio (R2) than planned under ordinary operating conditions. This is connected with the growth of risks in the conditions of military actions. At the same time, all systemically important banks except JSC CB "PrivatBank" have the regulatory capital adequacy (sufficiency) ratio higher than forecast value under an adverse scenario. This indicates that these banks have the ability to timely and in full pay off their obligations arising from trade, credit or other monetary transactions.

The core capital adequacy ratio (R3) reflects the level of protection of the bank's assets in terms of the adequacy of the first level capital size, the main part of the regulatory capital [10]. The normative value of R3 is set at a level of not less than 7 %. *Table 5* shows the value of the core capital adequacy ratio (R3) of systemically important banks for 2021–2022.

As we can see from the data in the *Table 5*, all systemically important banks fulfill the regulator's requirement regarding the minimum value of the core capital adequacy ratio (R3). However, the majority of systemically important banks show a negative trend in the value of this indicator during the last six months. In this regard, almost all systemically important banks, except for JSC "KredoBank" and JSC "Universal Bank" could not achieve the value of the norms that were forecasted under the baseline macro-economic scenario.

## Table 5

	Bank data		Absolute	Deviation	Forecast value under the macroeconomic scenarios:			
Bank		01.01.21	deviation 2022–2021	from the norm*	baseline		adverse	
	01.06.22				1st	Absolute	1st	Absolute
					year	deviation	year	deviation
JSC CB "PrivatBank"	8.55	14.3	-5.75	1.55	19.2	-10.65	16.7	-8.15
JSC "State Savings Bank	11.09	13.4	-2.31	4.09	13.9	-2.81	7.2	3.89
of Ukraine" (Oschadbank)	11.09	13.4	-2.31	4.09	13.9	-2.01	1.2	5.69
JSC "The State Export-Import	9.76	14.1	_4.34	2.76	11.9	-2.14	1.3	8.46
Bank of Ukraine" (Ukreximbank)	9.70	17.1	т.5т	2.70	11.7	2.17	1.5	0.40
JSB "UKRGASBANK"	13.11	14.6	-1.49	6.11	14.9	-1.79	2.7	10.41
JSC "ALFABANK"	9.70	11.3	-1.60	2.70	12.5	-2.80	6.6	3.10
JSC "Raiffeisen Bank"	8.77	11.0	-2.23	1.77	15.1	-6.33	10.5	-1.73
JSC "UKRSIBBANK"	18.13	21.5	-3.37	11.13	22.3	-4.17	18.4	-0.27
JSC "OTP Bank"	13.94	20.8	-6.86	6.94	22.9	-8.96	18.0	-4.06
JSC "KredoBank"	15.97	14.6	1.37	8.97	15.3	0.67	5.9	10.07
JSC "First Ukrainian	0.55	12.2	2 75	2.55	1()	( (5	10.1	0.55
International Bank" (FUIB)	9.55	13.3	-3.75	2.55	16.2	-6.65	10.1	-0.55
JSB "Pivdenny Bank"	10.66	11.3	-0.64	3.66	14.1	-3.44	7.0	3.66
JSC "TascomBank"	10.24	12.6	-2.36	3.24	14.1	-3.86	5.7	4.54
JSC "Universal Bank"	15.11	10.5	4.61	8.11	13.3	1.81	5.6	9.51
JSC "A-BANK"	7.92	9.8	-1.88	0.92	13.0	-5.08	10.9	-2.98

## Core capital adequacy ratio (R3) of SIB and its forecast values under the baseline and adverse macroeconomic scenarios, %

\*No less than 7 %.

Source: compiled by the authors on the basis of sources [9; 11].

The value of R3 of some systemically important banks, in particular JSC CB "PrivatBank", JSC "Raiffeisen Bank", JSC "FUIB", JSC "OTP Bank", JSC "A–BANK" are even lower than the forecast values of the ratio under an adverse macroeconomic scenario. This indicates that the dynamics of the increase of the core capital of banks is lower than the growth of banking risks, primarily credit risks, which may lead to negative consequences in the future.

**Conclusions.** We found that all domestic systemically important banks fulfill the requirements regarding the target values of capital ratios. However, full-scale military actions led to the impossibility of realization of the baseline macroeconomic scenario, which led to lower capital figures than were predicted by this scenario. A general unfavorable trend is observed for banks with a state-owned form of ownership, and especially for JSC CB "PrivatBank", which, according to the results of five months of 2022, demonstrated lower values of capital standards not only under the baseline, but also under the adverse scenario.

The worst results are observed for the core capital adequacy ratio (R3) – almost all banks showed values of the ratio lower than those predicted according to the baseline scenario.

Thus, it can be stated that systemically important banks of Ukraine, despite the influence of destructive factors during the last four months, have had a sufficient margin of safety due to the appropriate level of capitalization. However, the regulator should pay additional attention to banks that already at this stage demonstrate tendencies to adverse scenario realize and prepare in advance a set of measures for their recapitalization in order to avoid a negative impact on the entire domestic banking system.

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