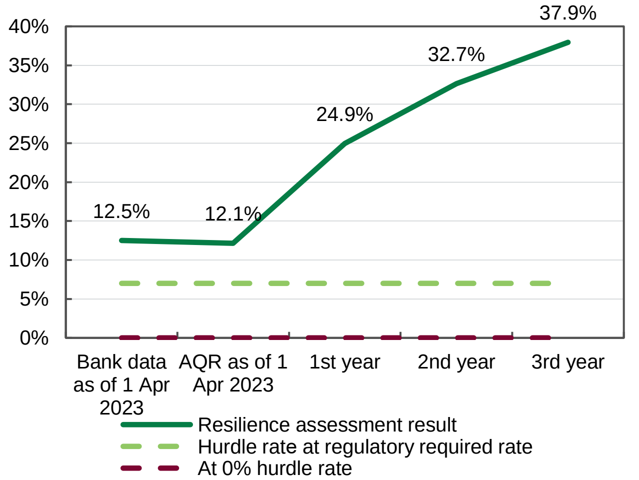
National Bank of Ukraine

Resilience Assessment of Ukraine's Banks

2023

In 2023, the NBU conducted a resilience assessment of Ukraine's largest banks after a one-year break caused by the full-scale invasion. Approaches to the resilience assessment and its general findings are described in the June and December Financial Stability Reports, respectively[1]. This report presents bank-specific results of the resilience assessment and the required (target) capital adequacy ratios set by the NBU based on the assessment. The banks that face higher target capital adequacy ratios will have to draw up recapitalization or asset restructuring programs.

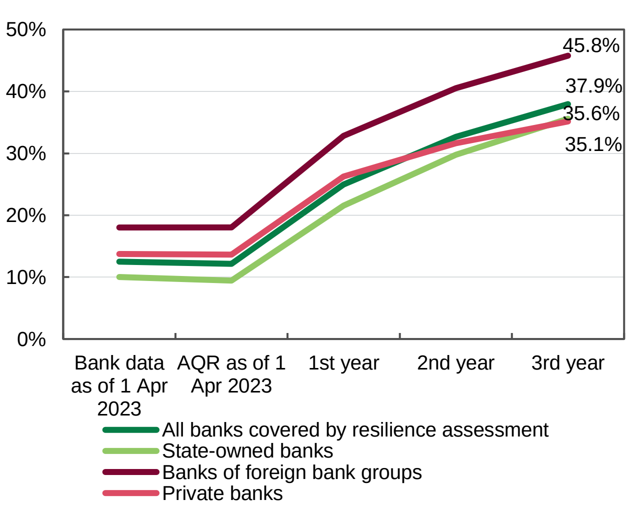
Figure 1. Weighted average estimates of the banks' core capital adequacy ratio based on the resilience assessment results



Weighted by risk-weighted assets for each year. AQR stands for asset quality review. This year, two hurdle rates of capital adequacy ratios have been set for banks: regulatory required and 0%.

Source: NBU.

Figure 2. Weighted average estimates of the core capital adequacy ratio based on the resilience assessment (by group of banks)



Source: NBU.

Last year, 20 banks with more than 90% of the banking system's assets underwent the resilience assessment. The resilience assessment was carried out by the NBU and included an asset quality review (AQR), a verification of the value of the largest collaterals, an extrapolation of AQR results (where necessary), and a calculation of the banks' performance indicators for the next three years. The calculation of performance indicators essentially replaced conventional stress testing. The latter was done only under the baseline macroeconomic scenario informed by the NBU's macro forecast. This scenario was made moderately conservative to identify the possible impact of the main risks on the banks' operation in their current condition.

The results of the resilience assessment, in particular the estimated performance indicators over a three-year horizon, should be interpreted exclusively in the context of the model's key assumptions:

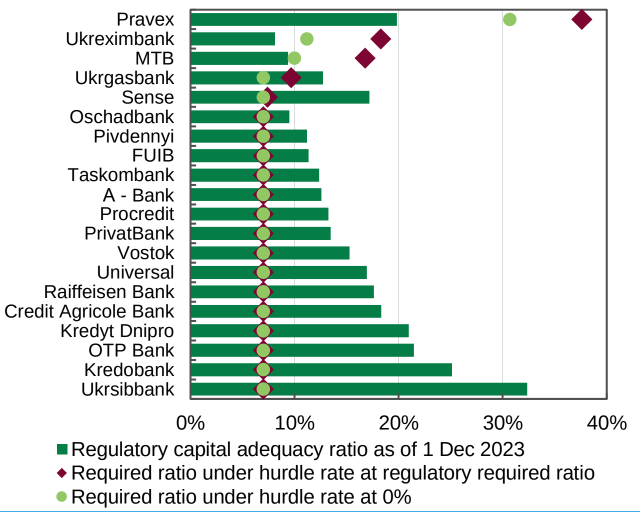
- that the banks' balance sheets remain static, i.e. affected only by changes in asset quality and exchange rate.
- that current profit is capitalized throughout the entire forecast period.

At the same time, the calculations did not take into account the increase in the tax rate on the banks' profits. This decision was made almost simultaneously with the completion of the resilience assessment. However, the higher tax rate will not affect the banks' target capital adequacy ratios. In the resilience assessment, higher ratios were only set for those banks that are loss-making in the forecasting period. These banks do not incur any income tax liabilities. That said, the increased tax rate will slow capital growth going forward.

About 60 corporate and 30 retail borrowers of each bank were reviewed in the AQR. As a result of the AQR, the credit risk assessed in accordance with Regulation No. 351 (prudential provisions) was adjusted by about 1%, primarily for business loans. Errors were found in the credit risk assessments of about one-tenth of corporate clients, with 8% of the errors pertaining to failure to recognize borrower defaults. However,

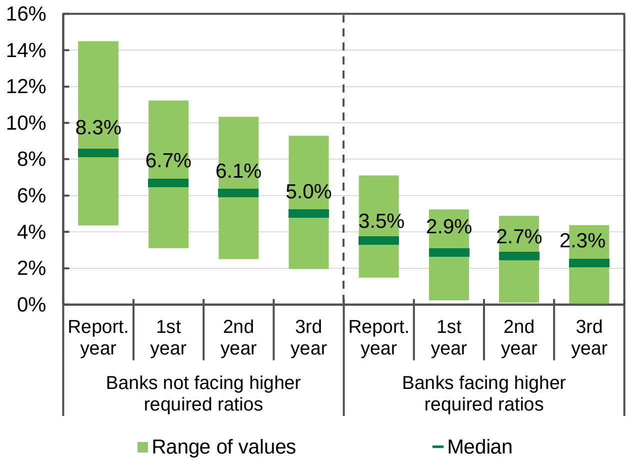
[1] For approaches to the resilience assessment, see Box 3. Peculiarities of Bank Resilience Assessment in 2023 of the June 2023 Financial Stability Report. The overall results of the assessment are outlined in Section 3.6. Capital Adequacy Risk of the December 2023 Financial Stability Report.

Figure 3. Required banks' core capital adequacy ratios based on the resilience assessment results



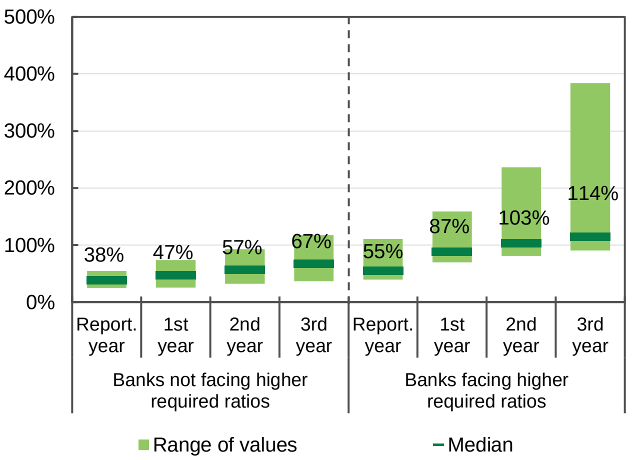
Source: NBU.

Figure 4. Banks' net interest margin based on the resilience assessment results



Source: NBU.

Figure 5. Banks' cost-to-income ratios



Data for the reporting period omit adjustments for one-off items in line with the Terms of Reference for stage three of the resilience assessment.

Source: NBU.

this average reading was significantly distorted by the results of four banks. For these banks, the estimate for more than 15% of the borrowers in the sample was adjusted.

At stage two of the resilience assessment, the value of bank collateral was verified. During the verification, the NBU made a number of critical remarks on the appraisal reports, which the banks took under advisement. The banks updated the appraisals that got critical NBU review. However, this did not result in a significant adjustment to the level of credit risk. It stood at only 0.5%. For five banks, it was necessary to extrapolate the results of the AQR (which drew on a sample of borrowers) to the entire loan portfolio. The extrapolation led to an additional credit risk adjustment of less than 0.5% for all banks. None of the adjustments to the level of credit risk (prudential provisions) had a significant adverse impact on the banks' capital, because in 16 out of 20 banks, the total amount of IFRS provisions and negative revaluations exceeded the level of prudential provisions by about 10%. The increase in the level of credit risk (prudential provisions) did not give rise to non-covered credit risk and capital adjustments.

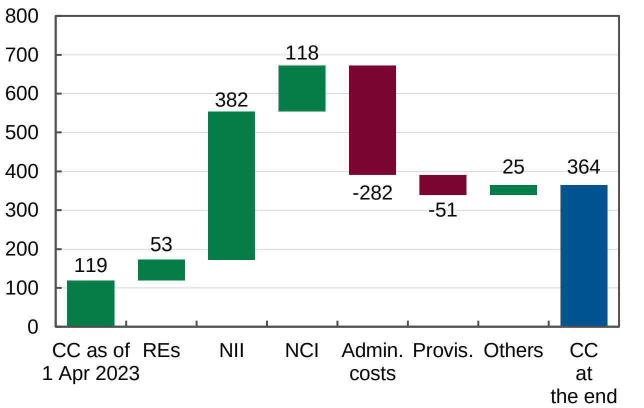
In the forecast period, the adequacy of the banks' core capital grows by an average of 20 pp, to 38% at the end of the third year, as most financial institutions remain profitable. However, the banks' estimated profitability declines over the forecast period, primarily due to narrowing net interest margin of the banks. The resilience assessment assumed that interest rates on assets would fall much faster than those on the banks' liabilities. The forecast also projected a reduction in net fee and commission income and income from FX transactions, with a simultaneous increase in administrative costs. Therefore, the banks' cost-to-income ratio was deteriorating. At the same time, it was assumed that the banks would take losses from credit risk. The cumulative effect of these factors for five banks resulted in their required capital adequacy ratios being set above the regulatory minimum.

The main reason why the five banks need capital was that their operating efficiency was far below the sector average. Almost all of these banks had low interest margins and high cost-to-income ratios in the reporting period, which spanned the last three quarters of 2022 and Q1 2023. Estimated losses from the credit risk had a material adverse impact on the capital of a few banks.

Two of the five banks that face higher required ratios have already achieved capital adequacy ratios above the required level as of early December. These banks must at least maintain their capital at the target level set for them. The calculated equivalent of capital needs for the rest of the banks in December 2023 was about UAH 10 billion. This is how much these banks need to achieve the target capital adequacy ratios that guarantee their compliance with regulatory ratios over the forecast horizon.

The banks facing higher required capital adequacy ratios must submit their restructuring or recapitalization programs to

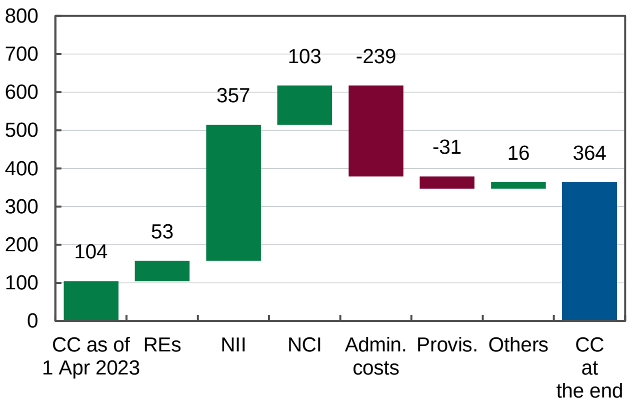
Figure 6. Factors behind changes in the banks' core capital (CC) over three years based on resilience assessment results, UAH billions



REs – retained earnings, NII – net interest income, NCI – net fee and commission income.

Source: NBU.

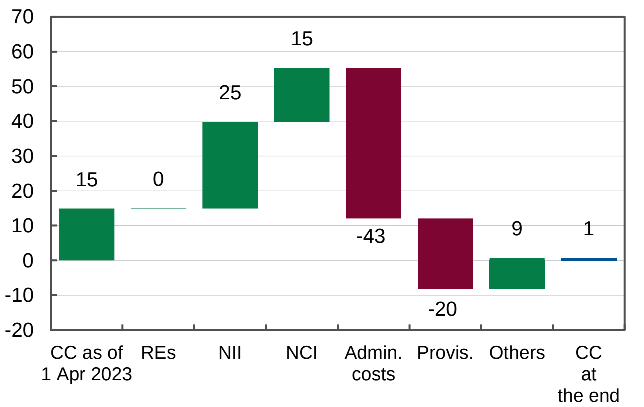
Figure 7. Factors in the changes to core capital (CC) over a three-year period based on the resilience assessment results of the banks that do not face higher required ratios, UAH billions



REs – retained earnings, NII – net interest income, NCI – net fee and commission income.

Source: NBU.

Figure 8. Factors of changes in core capital (CC) over a three-year period based on the resilience assessment results of the banks that face higher required ratios, UAH billions



REs – retained earnings, NII – net interest income, NCI – net fee and commission income.

Source: NBU.

the NBU in the near future. The banks' programs will contain measures to gradually attain the required ratios. By the end of September 2024, the banks must meet a required capital adequacy ratio under the hurdle rate of 0%. The required capital adequacy ratio set under the regulatory required ratios (7% and 10% for core and regulatory capital, respectively) must be achieved by the end of March 2026. The key measures the banks include in their programs are expected to cover balance sheet restructurings and operational efficiency improvements. These measures will reduce the banks' vulnerability, i.e. improve their risk profile. At the same time, the banks need to gradually bring their current capital adequacy ratios to the required levels by ramping up earnings and capital.

Results of the Resilience Assessment by Banks

Table 1. Core and regulatory capital of Ukraine’s bank, based on the resilience assessment, UAH millions

Bank	Core capital					Regulatory capital				
	As of 1 April 2023		1st year	2nd year	3rd year	As of 1 April 2023		1st year	2nd year	3rd year
	Bank’s data	AQR				Bank’s data	AQR			
PrivatBank	27 248	27 248	99 258	137 558	170 105	54 466	54 466	110 363	148 663	181 210
Oschadbank	14 155	14 155	23 903	27 512	28 468	19 650	19 650	25 160	28 769	29 725
Raiffeisen Bank	12 703	12 703	21 221	26 934	30 692	16 438	16 438	21 455	27 169	30 927
Sense	4 958	2 840	2 625	3 041	2 812	6 442	4 324	3 883	3 901	3 256
Universal	6 510	6 510	15 257	19 521	22 853	9 475	9 475	15 257	19 521	22 853
FUIB	7 228	7 228	14 179	16 193	16 823	12 427	12 427	14 449	16 463	17 093
Ukreximbank	4 275	2 712	-3 351	-5 126	-7 450	8 133	5 402	-3 374	-5 148	-7 472
Ukrgasbank	8 309	8 309	6 721	7 238	6 408	8 368	8 368	6 780	7 298	6 467
OTP Bank	7 234	7 234	17 946	22 160	25 203	12 315	12 315	17 807	22 021	25 064
Ukrsibbank	8 808	8 808	19 064	23 092	25 681	14 119	14 119	19 069	23 097	25 685
Credit Agricole Bank	5 565	5 565	9 531	12 753	15 107	6 061	6 061	9 856	12 920	15 191
Kredobank	3 481	3 481	4 875	6 024	6 788	3 912	3 912	4 964	6 113	6 877
A - Bank	1 768	1 768	3 412	4 129	4 553	2 305	2 305	3 414	4 131	4 556
Taskombank	2 269	2 269	2 573	2 774	2 806	3 101	2 578	2 581	2 781	2 814
Procredit	2 407	2 407	2 689	2 758	2 595	3 203	3 203	3 585	3 669	3 515
Pivdennyi	2 505	2 505	5 561	6 607	7 285	4 342	4 342	5 754	6 777	7 431
Kredyt Dnipro	1 236	1 236	1 576	1 736	1 736	1 660	1 660	1 660	1 820	1 820
Vostok	1 262	1 262	2 290	2 710	2 910	1 976	1 976	2 604	2 961	3 096
MTB	684	337	-40	-119	-225	839	434	-40	-119	-225
Pravex	671	675	207	-227	-764	728	733	264	-227	-764

Source: NBU.

Table 2. Core and regulatory capital adequacy ratios of Ukraine's banks, based on the resilience assessment, %

Bank	Core capital adequacy ratio					Regulatory capital adequacy ratio				
	As of 1 April 2023		1st year	2nd year	3rd year	As of 1 April 2023		1st year	2nd year	3rd year
	Bank's data	AQR				Bank's data	AQR			
PrivatBank	11.73	11.73	40.66	55.82	68.76	23.45	23.45	45.20	60.33	73.25
Oschadbank	10.26	10.26	17.13	25.26	28.39	14.24	14.24	18.03	26.42	29.64
Raiffeisen Bank	14.87	14.87	25.10	31.96	36.65	19.25	19.25	25.38	32.24	36.93
Sense	8.74	5.20	4.81	5.60	5.23	11.35	7.92	7.12	7.18	6.06
Universal	16.49	16.49	37.75	49.26	59.08	24.01	24.01	37.75	49.26	59.08
FUIB	12.00	12.00	23.60	27.32	28.93	20.63	20.63	24.05	27.78	29.40
Ukreximbank	4.61	2.98	-3.65	-5.53	-8.01	8.78	5.93	-3.67	-5.55	-8.04
Ukrgasbank	11.97	11.97	9.73	10.44	9.34	12.06	12.06	9.82	10.52	9.42
OTP Bank	19.09	19.09	45.50	56.29	64.44	32.50	32.50	45.15	55.94	64.08
Ukrsibbank	28.31	28.31	59.15	71.33	79.30	45.38	45.38	59.17	71.35	79.31
Credit Agricole Bank	16.43	16.43	27.43	36.28	42.67	17.90	17.90	28.36	36.75	42.91
Kredobank	22.06	22.06	31.08	38.47	43.55	24.79	24.79	31.65	39.04	44.12
A - Bank	16.58	16.58	31.63	38.83	43.55	21.62	21.62	31.65	38.85	43.58
Taskombank	12.67	13.05	14.70	15.83	16.07	17.32	14.83	14.74	15.87	16.11
Procredit	13.33	13.33	14.16	14.42	13.51	17.74	17.74	18.88	19.18	18.30
Pivdennyi	12.37	12.37	27.05	31.86	35.04	21.44	21.44	27.98	32.68	35.74
Kredyt Dnipro	20.43	20.43	26.75	28.97	29.03	27.43	27.43	28.17	30.37	30.43
Vostok	12.83	12.83	22.54	26.62	28.62	20.10	20.10	25.62	29.09	30.45
MTB	11.34	6.00	-0.75	-2.19	-4.15	13.92	7.71	-0.75	-2.19	-4.15
Pravex	14.31	14.39	4.45	-4.88	-16.51	15.53	15.61	5.69	-4.88	-16.51

Source: NBU.

Table 3. **Required capital adequacy ratio based on the resilience assessment, %**

Bank	Required (target) ratio			
	for hurdle rate of 0%, to be reached by October 2024		for hurdle rate at regulatory requirements, to be reached by April 2026	
	core capital adequacy ratio	regulatory capital adequacy ratio	core capital adequacy ratio	regulatory capital adequacy ratio
PrivatBank	10.0	7.0	10.0	7.0
Oschadbank	10.0	7.0	10.0	7.0
Raiffeisen Bank	10.0	7.0	10.0	7.0
Sense	10.0	7.0	10.4	7.4
Universal	10.0	7.0	10.0	7.0
FUIB	10.0	7.0	10.0	7.0
Ukreximbank	14.2	11.2	21.3	18.3
Ukrgasbank	10.0	7.0	12.7	9.7
OTP Bank	10.0	7.0	10.0	7.0
Ukrsibbank	10.0	7.0	10.0	7.0
Credit Agricole Bank	10.0	7.0	10.0	7.0
Kredobank	10.0	7.0	10.0	7.0
A - Bank	10.0	7.0	10.0	7.0
Taskombank	10.0	7.0	10.0	7.0
Procredit	10.0	7.0	10.0	7.0
Pivdennyi	10.0	7.0	10.0	7.0
Kredyt Dnipro	10.0	7.0	10.0	7.0
Vostok	10.0	7.0	10.0	7.0
MTB	13.0	10.0	19.8	16.8
Pravex	33.7	30.7	40.6	37.6

Source: NBU.