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BANK PERFORMANCE DURING AND AFTER THE COVID-19 PANDEMIC: EVIDENCE FROM THE AZERBAIJANI BANKING SECTOR

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ARTICLE INFO	ABSTRACT
Article history: Received:2025-09-05 Received in revised form:2025-09-11 Accepted:2025-10-18 Available online:2026-06-26 Keywords: ROA; ROE; COVID-19; Banking; Profitability JEL classification G21, G01, G32, I18	<i>This article examines the financial performance of Azerbaijani banks over the period 2019–2024 that corresponds to the COVID-19 pandemic and thereafter. The paper examines the volatility of profitability, credit risk, and post-pandemic recovery dynamics using profitability ratios including Return on Assets (ROA), Return on Equity (ROE), and the Loan Loss Provisions to Total Loans (LLP/Total Loans). It appears that during 2020-2021, there was a significant drop in performance indicators. In that period, ROA, ROE ratios deteriorated, while LLP/Total Loans ratio increased remarkably, due to higher provisions deriving from higher credit risk and precautionary provisioning.</i> <i>The results show that the indicators vary across banks depending on the sensitivity to shocks, risk-exposure and asset quality. Beginning from 2022, profitability figures improved, provisions decreased, credit risk dropped back to normal levels and asset quality improved.</i> <i>By 2023-2024, positive and stable performance was observed in most banks, due to improved borrower creditworthiness and macroeconomic stability.</i>

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1. INTRODUCTION

The COVID-19 pandemic was one of the history's global occasions that brought substantial changes in all areas, as well as global financial system. Due to increased macroeconomic instability, credit risk, and liquidity pressures, banking sector was also exposed to crisis. Assessing the performance of banks is essential as they are of high importance in the maintenance of economic stability.

In 2020, Azerbaijan experienced a dual crisis deriving from both pandemic and global volatility. We analysed the profitability changes and credit-risk trends of Azerbaijani banks for the pandemic and post pandemic periods that correspond to the years of 2020-2021 and 2022-2024 respectively. The analyses were conducted with key profitability ratios: Return on Assets (ROA), Return on Equity (ROE), and the Loan Loss Provisions to Total Loans (LLP/Total Loans) ratio.

ROA demonstrates how much net income does one dollar of asset brings, shortly, asset utilization, while ROE measures how much net income does one dollar of shareholder capital brings in. The LLP to Total Loans ratio reflects the proportion of loss provisions in the total loans, so it provides insight into risk management of banks during uncertain periods.

During 2020-2021, uncertainty and diminished payment capacity of customers led to lower profitability and higher provisioning. These indicators became promising beginning from 2022, due to normalized credit activity and improvements in macroeconomic conditions.

The topic of this paper has high importance nowadays and contributes to the literature on banking performance in emerging markets with ratio-based analysis during shock periods.

2. LITERATURE REVIEW

In the literature, profitability indicators are used to assess efficiency and financial situation of banks. During the pandemic, research on banking suggests that main profitability indicators exhibited visible volatility. Elnahass et al. (2021) states that the pandemic crises affected banking sector profitability and stability negatively across many countries. Other studies also come to the same conclusion that higher credit risk and provisioning caused downward movement of profits during pandemic. The studies also showed that, due to government support and improved economic conditions, many banking systems began to recover in the following years.

The pandemic effect in emerging economies was talked more than developed economies as those countries have less financial diversification and the sector is more vulnerable. The research by Naceur Ben Naceur and Mohamed Goaied states that in emerging banking systems the profitability is highly correlated with asset quality, capital strength and macroeconomic conditions.

Eugene F. Brigham and Joel F. Houston demonstrate that with the help of profitability ratios raw financial statements data can be transformed into meaningful indicators.

Lawrence J. Gitman and Chad J. Zutter emphasize that investors and analysts compare companies using ratio analysis across time and within industries by standardizing financial information.

Mahir Karimli (2023), in his study analyses the **profitability performance of major Azerbaijani banks** focusing on financial indicators including **ROA, ROE, and net profit margins**. According to the results, diversified income and strong capitalization and sources positively influence profitability.

Fariz Hasanov, Nigar Bayramli, & Ahmed Nayef (2018), using econometric analysis studied the **determinants of bank profitability in Azerbaijan**. With the help of ROA and ROE, the study shows that **capitalization and cost efficiency positively influence profitability**, while **higher loan loss provisions and credit risk reduce bank performance**. The study provides important insights into the structural characteristics of the Azerbaijani banking sector.

3. METHODOLOGY

A quantitative, descriptive and comparative research has been conducted to assess financial performance and asset quality of the Azerbaijani banks during 2019-2024. This period covers pre-pandemic period, pandemic and recovery stage.

Financial ratio evaluation rather than econometric modelling has been applied to, focusing on trend analysis, and convergence patterns over time.

The sample is eight selected commercial banks, and they are chosen based on their size and continuity of operations. The data were annual, officially confirmed bank statements that are disclosed and published to the public by the banks and regulatory publications by the Central Bank of Azerbaijan.

In the research, three main financial indicators have been employed: ROA (Return on Assets), which measures how effectively bank utilizes their asset to earn profits; ROE (Return on Equity) which reflects shareholder profitability and LLP/Total Loans (Loan Loss Provisions to Total Loans) which is a proxy for possible credit losses and asset quality.

The following techniques have been applying here in the study: trend analysis, comparative analysis, crisis-phase comparison, and convergence analysis.

This study does not demonstrate intra-year volatility, as it relies on ratio analysis, and it does not implement econometric models. That's why our findings are not casual, but interpretative.

4. BANK PERFORMANCES DURING AND AFTER COVID-19

The COVID-19 pandemic affected the whole world, and naturally, it revealed itself in the Azerbaijan's banking sector as well. To measure the effect numerically, we chose eight distinguished banks in the country and analyzed their statements. Bank performance is assessed using several profitability ratios, and as the main performance indicators, here in the study we took ROA, ROE, LLP/Total Loans.

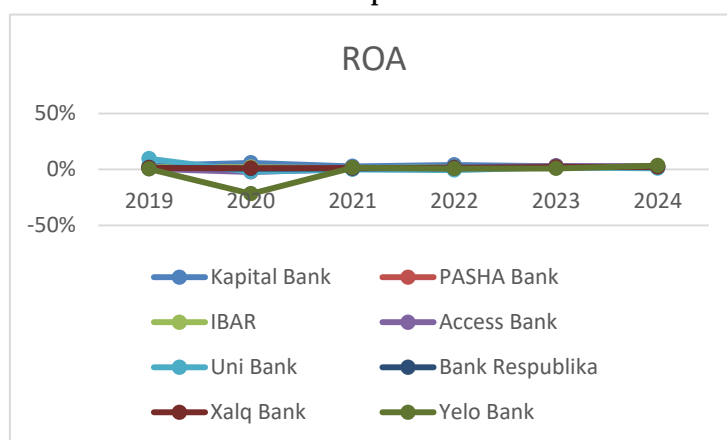
4.1 Return on Assets (ROA)

ROA is one of the top essential ratios that measure bank profitability by dividing annual net income to the annual total assets.⁵⁵ We took eight main banks of the country, reviewed their annual financial statements, calculated the ratio throughout the years for each bank and with the help of the graph below analysed the trend of the Return on Assets (ROA) from 2016 to 2024.

Table 1.

ROA						
Banks	2019	2020	2021	2022	2023	2024
Kapital Bank	3%	6%	3%	4%	3%	2%
PASHA Bank	1%	1%	1%	1%	3%	3%
IBAR	2%	2%	1%	2%	3%	2%
Access Bank	1%	-2%	0%	2%	3%	3%
Uni Bank	10%	-2%	0%	-1%	2%	1%
Bank Respublika	2%	1%	1%	2%	2%	2%
Xalq Bank	1%	1%	1%	1%	2%	2%
Yelo Bank	0%	-22%	2%	1%	1%	3%

Graph 1.



Source: Central Bank of The Republic of Azerbaijan.

⁵⁵ Brigham, E. F., & Ehrhardt, M. C. (20XX). Financial Management: Theory & Practice. Cengage Learning.

Evidence from profitability analyses shows variation among banks in ROA performance during the pandemic period (Karimli, 2025). The moderate and positive ROA in most banks indicates stable profitability before COVID-19. The highest one belongs to the Uni Bank which suggests strong profitability before the shock. Kapital Bank, Bank Respublika, Access Bank and PASHA Bank show 1-4% returns which is a sign of stable returns.

In 2020, COVID-19 shock is clearly visible. So that, due to high loss provisions, tense relations with pandemic-sensitive sectors, ROA of Yelo Bank dropped to almost -22%. That of Uni Bank and Access Bank also turned to negative figures.⁵⁶

In the same period, Kapital Bank indicator is positive and the highest among others. Others show only slight positive and close to zero figures. It means, better-capitalized large banks have higher resilience than others.⁵⁷

Until 2021, Yelo Bank recovered from strong negative to positive territory. Uni and Access Bank also recovered and almost they all together stabilized around 1-3% in that period. This is explained with effective loan restructuring, eased provisioning and economic reopening.

Period of 2021-2023 is distinguished for its stability. From 2022 onward, more stable and convergent period began, and sharp movements diminished. Due to better asset quality, improved lending strategy and stronger macroeconomic conditions, by 2024 more balanced profitability is observed.

To sum up the ROA indicator, we can say that Kapital Bank and Uni Bank have the best consistency among others, Yelo Bank had the strongest recovery, while at the same time was the most volatile one. PASHA Bank, Xalq Bank and Bank Respublika were the steadiest ones with small ROA.

4.2 Return on Equity (ROE)

The table below demonstrates the ROE ratio of those eight banks from 2019 to 2024, while the graph describes the movement visually. ROE ratio is obtained by dividing net income to total equity which indicates the level of returns to shareholders.⁵⁸

Table 2.

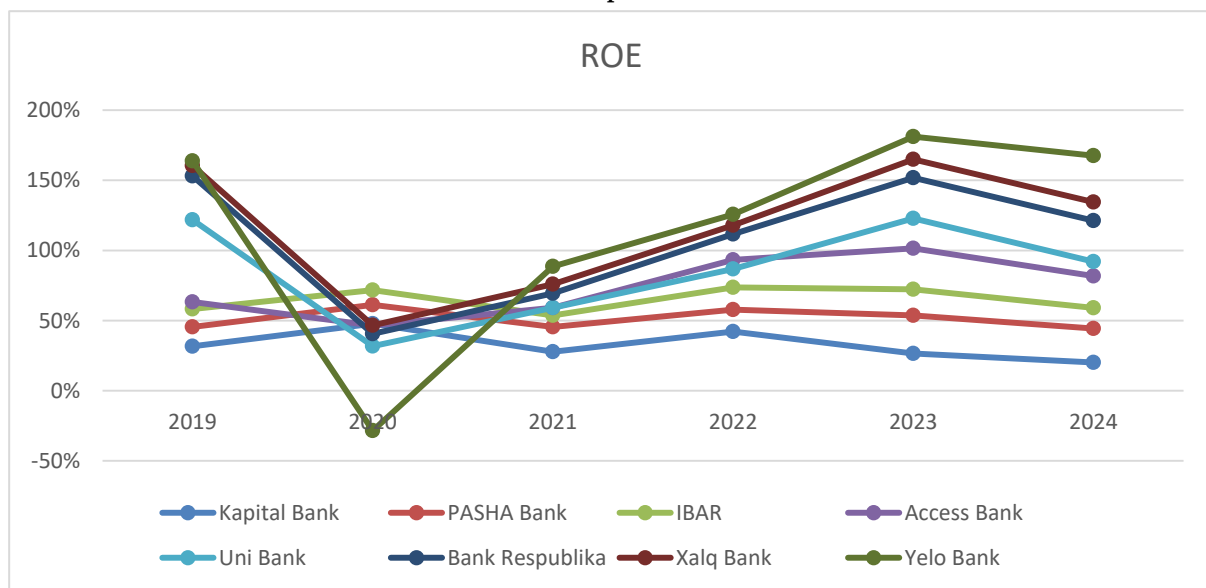
ROE						
Banks	2019	2020	2021	2022	2023	2024
Kapital Bank	32%	48%	28%	42%	27%	20%
PASHA Bank	14%	13%	18%	16%	27%	24%
IBAR	13%	11%	8%	16%	19%	15%
Access Bank	5%	-25%	5%	20%	29%	23%
Uni Bank	59%	-15%	0%	-7%	21%	10%
Bank Respublika	31%	9%	10%	25%	29%	29%
Xalq Bank	7%	6%	6%	6%	13%	13%
Yelo Bank	3%	-75%	13%	8%	16%	33%

⁵⁶ Al Zafir, & Sudarjah, I. G. A. (2025). Credit risk, COVID-19, and bank profitability in Indonesian conventional banks. European Journal of Business and Management Research.

⁵⁷ Aliyev, S. (2021, May 3). The Azerbaijani banking sector during pandemic and war. Baku Research Institute.

⁵⁸ Elnahass, M., Soliman, A., & Abdel-Gawad, H. (2023). COVID-19 Pandemic Impact on the Banking Sector: A Cross-Country Analysis. Journal of Banking & Finance, 152, 106-859.

Graph 2.



Source: Central Bank of The Republic of Azerbaijan.

In the graph, we observe that, in 2019, there is an utterly strong **ROE levels in most banks**. Among them, that of in Xalq Bank, Bank Respublika and Yelo Bank is prominent as they have the highest ROE figures-around 150-160%. The ratio in Uni Bank is also high with around 120%. The rest maintain their lower, still positive levels. This can be explained with high profitability, also can be due to relatively low equity bases prior to pandemic.⁵⁹

In 2020, there is a clear impact of pandemic on banks, especially, Yelo Bank was affected more with -30%. Other banks also show prominent decline to around 30-70%, and this is the result of losses or probably, higher provisions. Kapital Bank is distinguished among others with its stable performance over the years. In 2020 the ROE was at its highest point, later diminished slightly but still stayed stable.

Compared to ROA, ROE figures are more volatile, because, relative to total assets, total equity is smaller, so, changes in profitability are reflected in ROE more prominently.

In 2021, Yelo Bank goes back to positive levels fast. IBAR, Xalq Bank, Bank Respublika demonstrate strong recovery momentum. So, because of stabilized credit portfolios, decreased provisioning and economic reopening, majority of banks return to moderate-50-90% ROE levels.⁶⁰

During 2022-2023, ROE levels of Yelo Bank, Xalq Bank, Bank Respublika and Uni bank reached at peak with 150-180%. Access Bank and IBAR also showed considerable improvement. The sector itself moved upward synchronically due to increased lending, better asset quality, lower equity growth relative to net income and macroeconomic recovery.

2024 is a normalization year as in most banks, ROE declined, still higher than that of pandemic period.

⁵⁹ Akbas, F., et al. (2023). Impact of COVID-19 on Commercial Bank Performance: Evidence from Emerging Markets.

⁶⁰ Azərbaycan Respublikasının Mərkəzi Bankı. (2020). Koronavirus (COVID-19) pandemiyası ilə əlaqədar kredit təşkilatlarının müvəqqəti tənzimləmə Qaydası.

4.3 LLP/Total Loans

The Loan Loss Provisions to Total Loans (LLP/Total Loans) ratio is as an indicator of credit risk and asset quality in the banking sector. It measures the proportion of provisions allocated by banks to cover possible loan losses relative to their total loan portfolio. A higher LLP ratio generally indicates increased credit risk and potential diminish in asset quality, while a lower ratio indicates improved loan performance and reduced expected losses (Beatty & Liao, 2014; Demirgüç-Kunt et al., 2021).

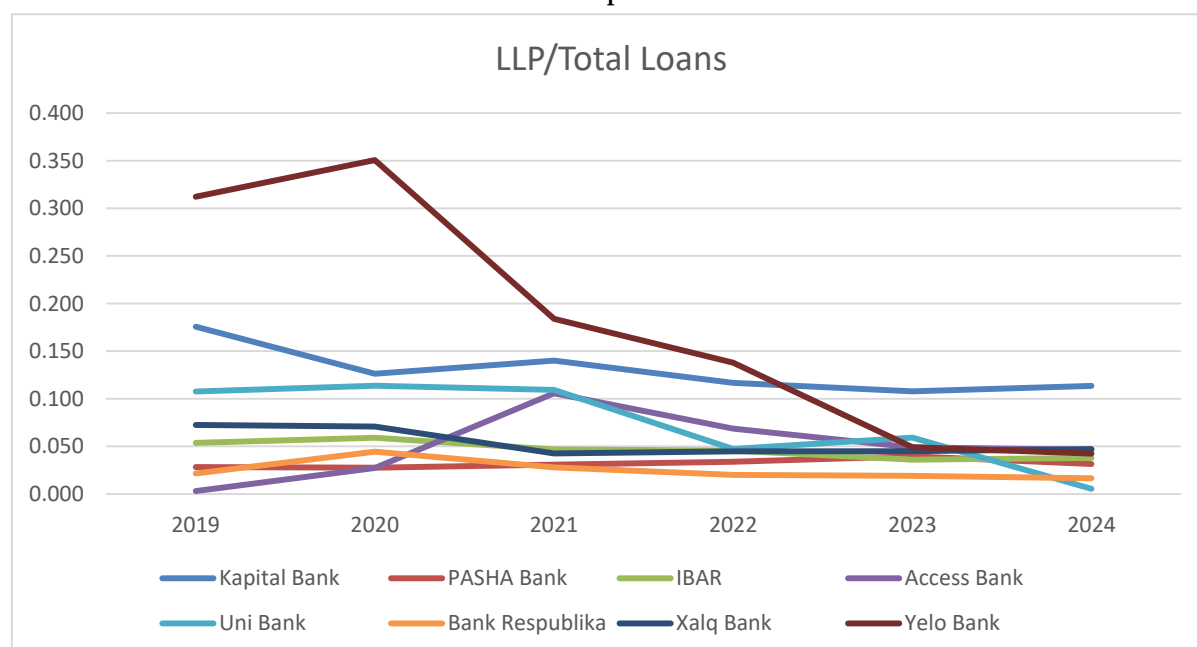
Table 3.

Banks	2019		2020		2021		2022		2023		2024	
	Allow. LL	Total Loan	Allow. LL	Total Loan	Allow. LL	Total Loan	Allow. LL	Total Loan	Allow. LL	Total Loan	Allow. LL	Total Loan
Kapital Bank	319869	1821222	274782	2175951	371475	2652560	368193	3157769	460114	4271823	590952	5211208
PASHA Bank	66921	2363909	74038	2682856	96164	3123469	114470	3388059	125893	3181044	115750	3690825
IBAR	122745	2288549	150265	2547283	145305	3104073	162455	3563513	181438	5040577	241032	6365771
Access Bank	1711	565362	12858	473205	69972	661362	56804	828797	50294	1026453	54304	1171516
Uni Bank	54810	509368	64221	565502	80794	739841	41837	886951	62449	1055441	63970	11919077
Bank Respublika	10668	495562	21836	492742	21409	769069	20866	1043967	22258	1172458	24376	1480504
Xalq Bank	138185555	1904984666	108172800	1527837764	60994275	1431324208	80009945	1788732074	85208770	1895498081	91973122	1954838736
Yelo Bank	130457	417810	142491	406227	95219	517921	95325	691285	39084	794977	40548	956157
Total	138892736	1913446448	108913291	1537181530	61874613	1442892503	80869895	1802292415	86150300	1912040854	93104054	1985633794

Table 4.

LLP/Loans						
Banks	2019	2020	2021	2022	2023	2024
Kapital Bank	0.176	0.126	0.140	0.117	0.108	0.113
PASHA Bank	0.028	0.028	0.031	0.034	0.040	0.031
IBAR	0.054	0.059	0.047	0.046	0.036	0.038
Access Bank	0.003	0.027	0.106	0.069	0.049	0.046
Uni Bank	0.108	0.114	0.109	0.047	0.059	0.005
Bank Respublika	0.022	0.044	0.028	0.020	0.019	0.016
Xalq Bank	0.073	0.071	0.043	0.045	0.045	0.047
Yelo Bank	0.312	0.351	0.184	0.138	0.049	0.042

Graph 3.



Source: Central Bank of The Republic of Azerbaijan

This chart shows the **Loan Loss Provisions to Total Loans (LLP/Total Loans)** ratio for several Azerbaijani banks from **2019–2024**. Since this ratio reflects expected credit losses and asset-

quality risk, it is a useful indicator of how banks were affected by the pandemic and how they recovered afterward.⁶¹

In general, this ratio among banks shows an upward trend around 2020-2021 due to more uncertainty, loan restructuring and precautionary provisions, while from 2022 a decline follows it. Main reason of that decline is improved creditability of customers, normalization of credit risk, and reduction of loss provisions. It means, after 2021, an asset quality of Azerbaijani banks increased.

The observation shows that, by 2023-2024, majority of the banks cluster in a tense range. Reduced uncertainty, stabilization of the credit environment, normalized provisioning across the sector is the main reason of that convergence.⁶²

All in all, the LLP to total loans ratio shows that, during the pandemic period, there was a high credit risk, especially, during 2020-2021 as there was increased provisions. From 2022 onwards, that ratio declined in most banks and a convergence is observed due to increased asset quality, borrowers' capacity and macroeconomic stabilization.

5. CONCLUSION

This study measured the financial performance of main Azerbaijani banks over 2019-2024 with the help of Return on Assets (ROA), Return on Equity (ROE) and the Loan Loss Provisions to Total Loans (LLP/Total Loans) ratio. Here we covered the pre-pandemic period, pandemic period and recovery period, evaluating how their financial situation and external shocks affected those banks.

According to the findings, the profitability and the risk profile of banks were highly affected by the COVID-19 pandemic. Due to significant volatility, reduced economic activity, higher credit risk and increased uncertainty, during the pandemic years, there was a considerable volatility.

The banking sector is quite sensitive to borrower capacity and macroeconomic shocks. It is visible when we observe the increase in LLP to total loans ratio across many banks. The reason was the increase in provisions and diminish in expected loan portfolio quality.

Beginning in 2022, performance indicators improved gradually, and credit-risk indicators decreased. In the later years, the convergence of these ratios indicates a stabilization of banking operations and a sounder banking environment.

To sum up, although there were short-term disruptions in banking performance, post-pandemic period came with a relatively strong recovery. These results demonstrate the resilience of the banking sector of Azerbaijan.

6. RECOMMENDATIONS

Several recommendations can be proposed in the direction of strengthening banks' risk management. It will also lead to the maintenance of asset quality during economic downturn periods.

First, banking sector should be strengthened from credit risk management side by applying more advanced monitoring systems. Better real-time monitoring system would help banks to

⁶¹ Beatty, A., & Liao, S. (2014). Financial accounting in the banking industry: A review of the empirical literature on loan loss provisions. *Journal of Accounting and Economics*, 58(2-3), 339-383.

⁶² Azərbaycan Respublikasının Mərkəzi Bankı. (2023). Financial Stability Report 2022. Central Bank of Azerbaijan.

determine changes in the creditworthiness of customers at an early stage. In turn, this will reduce the probability of non-performing loans (NLPs).

Second, the implementation of forward-looking and adequate provisioning policies is advised. If banks adopt international credit loss models, they can absorb potential losses during crisis periods and sudden losses can be prevented.

To prevent the accumulation of systematic risk, capital buffers, capital requirements and limits on excessive credit growth should be continued to be used by regulatory authorities.

Furthermore, investor confidence and market discipline can be fostered by improving transparency and risk disclosure practices.

Finally, a wider set of financial indicators such as liquidity ratios, capital adequacy ratios, cost-efficiency indicators, and profitability measures should be applied to expand the empirical analysis. From econometric models panel data regression models, VAR (vector autoregression), or dynamic panel estimators can be employed to capture the relationships between bank performance and macroeconomic variables.

These analyses help to provide better insights into the resilience of banking sector and support evidence-based policy formulation in Azerbaijan

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