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PERFORMANCE OF COMMERCIAL BANKS IN UZBEKISTAN: AFFECTING FACTORS

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ABSTRACT

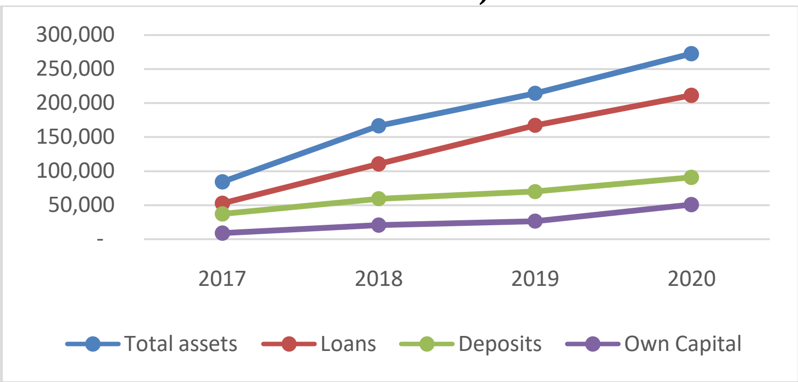
The key purpose of the study is to identify the factors determining the performance of commercial banks ofUzbekistanduring2016 to2020. The defining factors of the study are the financial ratio representing the CAMEL standard (capital adequacy, foreign share, asset quality, bank age, management, government share, earnings and liquidity, number of branches and bank size) while commercial bank's performance and profitability are restrained by return on assets (ROA). Overall, in our study chosen factors mostly affects to ROA. In conclusion, performance (ROA) of commercial banks of Uzbekistan mainly effected by loans to deposit ratio and total loans to total assets ratio. Taking into account above-mentioned facts, in order to increase performance of commercial banks, it's recommended to increase amount of total loanfor bank managers and banking regulators.

KEYWORDS: *ROA, ROE, Bank Performance, CAMEL, Financial Ratios Of Commercial Banks, Banks In Uzbekistan.*

INTRODUCTION

The banking sector in Uzbekistan has practicing fast growth in the last years, by increasing main indicators (see Figure 1). Since independence in 1991 financial system is under transformation toward liberalization after Soviet system. Banking sector is dominant in financial sector. However, there are so many problems and issues to be solved. Majority banking assets (around 80%) are held by government-owned banks, banking system's loans and deposits are not proportional. There are few studies are done on this subject, but no one clearly analyzed financial performance of Uzbek commercial banks. Hence, more detail analysis of Uzbek banking performance is needed in order to better understand banking system situation in Uzbekistan.

Figure 1. Total assets, Loans, Deposits and Own Capital in Uzbekistan Banking system (bln. Uzbek sum*)



Source: Central Bank of Uzbekistan

*** Note:** 1 USD = 10129.56 Uzbek sum (May 18, 2020)

The primary purpose of the study is to identify important factors determining the performance of commercial banks of Uzbekistan during 2016 and 2020. The defining factors are the financial ratios (certain ratios will be selected from capital adequacy, asset quality, management, earnings and liquidity ratios) while bank performance is measured by return on assets (ROA).

After independence (since 1991), the banking sector in Uzbekistan continued to improve its role in the financial system and further promoted its transfer networks. The total number of commercial banks fluctuated between 25 and 35. As per technological development and increased customer needs banks started to offer modern banking services, such as, e-banking, mobile banking, digital banking, etc.

At present the banking industry in Uzbekistanis built by minor number of commercial banks and expanding size of assets. The effects of such changes into the bank's efficient operation are becoming an up-to-date issue in this sphere.

Currently, the commercial banking industry in Uzbekistan has experienced notable growth. As of October 01, 2021, the commercial banking industry in Uzbekistan was comprised of 32 institutions, of which, 12 state-owned, 12 domestic fully private or joint stock banks and 8foreign banks.

Currently, the share of banks with state share remains high, 82.1%. The most of state banks play policy banks rather than commercial banks. They usually support strategic industries and companies under full support of the government.

Number of foreign banks is also increasing recent years. The existence of foreign-owned banks in national financial system has much encouraging affects rather than harmful for developing country. In addition, existence of foreign-owned banks supports positively in the development of a solid and stable national banking sector with great competition among them. After foreign currency liberalization in 2017and improvement investment environment in the country, many foreign banks are estimating entry to Uzbek banking market. Especially, recently fully digitally organized Georgian TBC Bank has received banking license from Central Bank of Uzbekistan for conducting banking operations in the territory of Uzbekistan. In addition, Tenge Bank, subsidiary of Kazakhstan's Halyk Bank, is operating in Uzbek market since May 2019. However, some scholars argue that more competent foreign banks adopt advanced know-how in banking business, creates competitive burden on the local banks leading in positive pushes on the banking sector in overall.

Hence, the study is to investigate the banking performance in Uzbekistan, both banks with state share and other banks (private and foreign) for the period from 2016 until 2020. In the research, we will compare performance of banks by their size, financial condition, ownership and also find results showing high performance banks. A question is rising from the discussion which type of banks is presenting high profitability, in overall, do other banks (private and foreign) function better than banks with state share? Many research works tried to answer those questions by analyzing productivity, cost efficiency and market performance of commercial banks in theory. Though, most of the previous studies examined the performance of banks in developed countries, but very little research is done on commercial banks of Uzbekistan.

This research examines the performance of Uzbek commercial banks for the period from 2016to 2020. The main emphasis is basically in the context of CAMEL standard, which is related to capital, earnings, assets, and liquidity management considerations.

According to Asian Development Bank's Report (ADB 2007) on Uzbekistan Banking review"the banking system is highly segmented and concentrated". Majority state-owned banks hold almost two-thirds total banking assets. "Banks with considerable state minority shareholdings account for another quarter of banking system assets. Private domestic and foreign banks control less than 10 percent of banking assets".

The primary objective of the research is to examine and finding the factors affecting the performance of commercial banks of Uzbekistan during 2016-2020. The identifying factors are the financial ratios symbolizing the CAMEL conception while commercial banks performance is quoted by return on assets (ROA).

The primary objective can be broken down as follows:

1. To find commercial banks' asset quality during the research period;
2. To identify whether capital adequacy ratio of banks has an impact on their performance during period of the research;
3. To observe whether management of commercial bank influences the performance of banks during the research period;
4. To determine the effect on bank performance (measured by ROA);
5. To examine whether liquidity of banks has effected and has contributed to the performance of the commercial banks, or not.
6. To analyze effects of bank age, bank size, foreign and government share to bank performance in Uzbekistan.

I. BANKING SYSTEM IN UZBEKISTAN AND LITERATURE REVIEW

Commercial bank is a credit institution carrying out banking operations for individuals and legal entities (payment operations, attracting deposits, provision of loans, as well as transactions in the securities market and brokering). In addition, banks are most effective tool for pushing local economy by financing businesses.

As the sample of our research covers commercial banks of Uzbekistan, it is very important if we review information on banking system of Uzbekistan. Currently, the banking system of Uzbekistan is a two-level: it consists of the Central Bank and commercial banks. All commercial banks are universal banks. Just after independence after Soviet Union most banks were specialized, such as, agricultural bank, industrial bank, savings bank, mortgage bank etc. The non-bank financial intermediaries, comprising insurance companies, microcredit organizations, and credit unions complement the banking institutions in mobilizing savings and meeting the financial needs of the economy and customers.

In recent years, ensured a steady growth of volume of the gross domestic product of the country. It is noted that stable economic growth by comfortable macroeconomic conditions will positively affect the country's banking system, growth in the volume of deposits and an increase in demand for bank loans.

Achievement of financial and macroeconomic stability, year by year, increasing volumes of investments and savings of the population testify to strengthening of the banking system of the republic.

In particular, the total capital of banks are increasingyear by year. The capital adequacy ratioof the banking sector of Uzbekistan is now three times more than the commonlyestablished international norms.

As a result of measures taken to stimulate the attraction of free funds of population in bank deposits offered by the convenient types of deposits, legal guarantees of citizens' savings in banks increased the amount of deposits by 52.6 per cent compared with 2019.

Therefore, analysis of bank performance around the world has been done by many researchers by using different tools. In this chapter, we will review previous studies on commercial bank's performance. This will help us to understand bank performance evaluation from different view of point and help us to choose won framework for our research work.

Nonetheless, for our literature review we found were limited number of studies done on Uzbekistan bank performance (Ubaeva Sh.L (2018), Rakhmatov H.U. (2020) and Yuldashev O.A. (2011). We hope that current research work will be useful reference for future studies on Uzbek bank performance.

II. RESEARCH METHODOLOGY

Today's developed banking industry has showed the need for tools to examine the risks and solutions involved in banking business by assessing performance of commercial bank. So far, many researchers used different statistical methods to examine the performance of commercial banks. Most research works said that financial ratios regarding capital adequacy, liquidity and earnings are helpful in analyzing the economic performance and management quality of commercial banks. Whereas the calculation of set of financial ratios is a moderately simple task, the aggregation of these ratios can be a pretty difficult process concerning imagination and qualified decision..

The selected financial ratios which are calculated via financial reports of commercial banks are used to test correlation between factors, descriptive statistics, significance of the factors in the bank performance analysis and t-test analysis.

The data for financial ratios are taken from the selected commercial banks' financial reports during 2016-2020. Due to unavailability of financial data, this study research selected only 22 commercial banks of Uzbekistan which were operating for the period of 2016-2020.

The sample of the research is selected twenty two (22) commercial banks for this study which were operating for the period of 2016-2020. The in accessibility of financial reports of some commercial banks restrain sour study to use bank financials for the analysis of whole banking system. Therefore, the list of banks selected commercial banks of Uzbekistan for this research-work is listed as follows:

Return on Assets (ROA) is one of the main financial ratio which measures performance of bank and it is calculated by the following quotation:

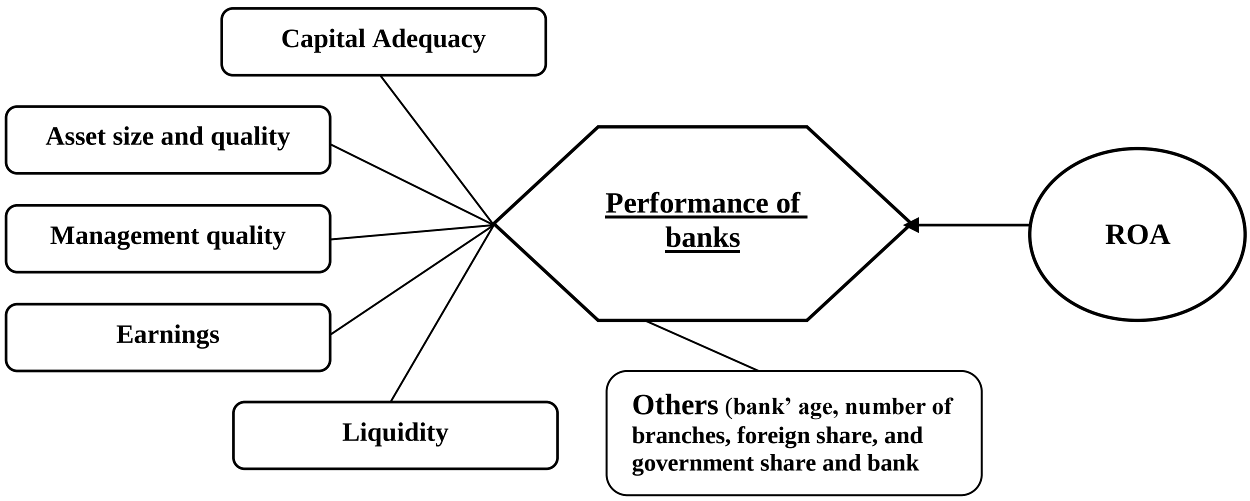
Return on assets (ROA)=(bank's net income)/(total assets of a bank)

The Return on assets is main indicator of managerial effectiveness in commercial banks. The indicator show how much income commercial bank can generate for every sum of its total assets. Total assets consists of cash in vault and central bank accounts receivables, loan and lease allowances, investments, assets as securities, property and buildings, equipment, inventory and furniture of commercial banks.

Besides Return on assets, ROE (Return on Equity) indicates level of return which shareholders of bank can earn. ROE is simple tool of bank shareholders to examine how bank's management is managing their funds. The ratio indicates whether management of bank is increasing value of bank at planned level or not. Due to limited time and date, for our research we used only Return on assets (ROA) as dependent factor.

The independent factors in the study are capital adequacy of banks (1), asset quality of banks (2), management of banks (3), earnings of banks (4) and liquidity of banks (5). In addition to the above factors, the study examines bank' age (6), number of branches (7), foreign share (8), government share (9) and bank size (10) as affecting factors to bank performance. Theoretical framework of bank performance in our study is described in the following figure.

Figure 2: The Theoretical Framework for Bank Performance



Model Fit of the Research

To examine the determinants Uzbek commercial banks' performance for the period of 2016-2020 years, the research has selected multiple regression analysis method. The period of the research is five years during 2016-2020years. The multiple regression model will be described in the following quotation:

Multiple regression models for the study:

$ROA_{Uzbek\ banks} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \ldots + \beta_5 X_5 + \varepsilon$ ……………………….

III. RESEARCH FINDINGS AND RESULTS

Fourth chapter of the research shows the empirical analysis results based on Regression model to test the findings for 22commercial banks of Uzbekistan which were operating during 2016-2020.

Analysis and findings chapter consists of four parts, such as, descriptive Analysis for the Dependent and Independent Factors, Correlation Analysis, Model Summary and Coefficient Analysis and Chapter summary.

This part of the research shows empirical test findings that include the descriptive analysis. The descriptive analysis found and shows an overview of Dependent and Independent Factors which are used in the study. Table-5 presents twenty two valid cases or "N" for every factor. The descriptive statistics presents the range of mean, standard deviation, maximum and minimum for Dependent and Independent factors.

Descriptive Analysis for the Dependent and Independent Factors

Descriptive Statistics

	N	Minimum	Maximu	Mean	Std.	Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Return on Assets	22	1.63	4.64	3.2514	.70198	.835	.953
Age of Bank	22	2.00	21.00	13.4545	5.71320	-.471	.953
Number of Branches	22	1.00	199.00	36.5909	57.72072	4.608	.953
Foreign Share	22	.00	1.00	.0909	.29424	8.085	.953
Government Share	22	.00	1.00	.5909	.50324	-2.037	.953
Bank Size by Assets	22	21352.61	7040398.00	898730.29	1555093.6	12.102	.953
Capital Adequacy Ratio	22	8.49	97.52	22.0691	24.78205	6.531	.953
Total loans to Total Assets	22	7.61	68.36	49.8586	16.93737	1.595	.953
Total operating profit to total revenue	22	18.58	70.46	35.2727	10.08516	6.902	.953
Net interest margin	22	1.00	2.75	2.1155	.41361	1.233	.953
Loan to deposit	22	11.60	90.55	67.6909	21.01709	2.679	.953
Valid N (listwise)	22						

Table-5 presents that the mean statistics of all factors range between 0.09 (minimum) to a 898730.29 (maximum level). The actual facts presents that the average Return on Assets-ROA for banks of Uzbekistan for the research period is 3.25. The maximum Return on Assets-ROA was 4.64% which belongs to Asaka Bank (state owned bank). This proves that during five years-period of the research, commercial banks of Uzbekistan banks could not generated enough profits or had not obtained high return despite high level of total assets. The results show that commercial banks of commercial banks of Uzbekistan were not capable in exploiting bank assets to earn good profits.

Net interest margin (NIM) ratio was 2.11 in overall for commercial banks of Uzbekistan. A minor adjustment in the margin has an enormous influence on bank performance. Increase in NIM shows good signal toward to bank performance.

Taking in to account that first commercial banks were established after independency in 1991, average age of commercial banks constituted to 13.45 during study period. However, until independency there were several commercial banks in the territory of Uzbekistan which were under control of Soviet State Bank.

While analyzing Standard Deviation statistics, some factors show high rate, such as, Number of branches and Bank size. The reason for the above matter is that some banks have over 100 branches, while some have only 1 branch. And also, difference of assets between banks is very high. For example, National Bank of Uzbekistan holds almost 25% of total banking assets. Though, return on assets-ROA was 1.06%and net interest margin-NIM was 0.75%, which shows low Standard Deviation. This means level of ROA and NIM is almost similar among selected banks which are highly correlated with conservative approach of Central Bank of Uzbekistan.

The correlation coefficient shows the linear relationship between two different factors. The most commonly used form is *Pearson-r*, which is also named as *linear* correlation. The importance rate measured for each correlation is main source of data about the trust worthiness of the correlation. The significance level of correlation coefficient hinges on data volume. In the research, we examine correlations between independent factors and dependent factor separately, to come into a decision whether to recognize or refuse the hypothesis.

Table-6 presents correlations between return on assets-ROA (dependent factor) and independent factors separately. For instance, ROA and Capital adequacy ratio (CAR) has negative correlation between each other. The result indicates correlation at

-0.385 level. This finding proposes that increase in Capital adequacy ratio is independent from ROA.

The best positive results show total loans to total assets and loan to deposit ratios. The correlation levels of those ratios are 28.8% and 19.7% respectively. This mean ROA positively correlated with total loans to total assets and loan to deposit ratios. It indicates that TLTTA and LD ratios increases, ROA also will grow. The results and findings demonstrate that other factors are not significantly correlated with ROA and each other.

The R coefficient amounts to 57.1. It describes that selected independent factors together demonstrate 57.1% changes in Return on Assets (as in Table 7). The research attempted to use

TABLE 7: SUMMARY OF ANALYSIS (ROA)

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.571[a]	.326	-.286	.79606	.326	.533	10	11	.834	2.361

a. Predictors: (Constant), Loan to deposit, Total operating profit to total revenue, Foreign Share, Number of Branches, Age of Bank, Net interest margin, Capital Adequacy Ratio, Bank Size by Assets, Government Share, Total loans to Total Assets

b. Dependent Variable: Return on Assets

cumulative influence of the ten various independent factors employed in this study, such as, capital adequacy, foreign share, asset quality, bank age, management, government share, earnings and liquidity, number of branches and bank size**.** Out of results it is obvious that there is correlation (not significant) between ten independent factors and Return on Assets of selected commercial banks of Uzbekistan. The other 43.9% of changes in the model will be determined by other factors which are not used in our research. The findings propose that CAMEL (capital adequacy, asset quality, management, earnings and liquidity) and other selected factors are enough good model to examine performance of banks, since they influence 57.1% of Return on Assets. The Durbin-Watson analysis equals to2.361 which presents that there is no sequential correlation between Return on Assets and selected independent factors.

IV. CONCLUSION AND OUTCOMES OF THE RESEARCH

The key purpose of the study is to identify the factors determining the performance of commercial banks of Uzbekistan during 2016 to 2020. The defining factors of the study are the financial ratios representing the CAMEL standard (capital adequacy, foreign share, asset quality, bank age, management, government share, earnings and liquidity, number of branches and bank size) while commercial bank's performance and profitability are restrained by return on assets (ROA).

The descriptive statistics proposed suggested that the average Return on Assets for the commercial banks of Uzbekistan for the period of 2016-2020 was equal to 3.25%. But, this is significant improvement since independence. It is observed that at the beginning of research period; banks showed increase in their earnings and kept on stable growth thereafter. In addition, local Uzbek banks presented higher Return on Assets compare with foreign banks.

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In conclusion, performance (ROA) of commercial banks of Uzbekistan mainly effected by loans to deposit ratio and total loans to total assets ratio. In addition to the above, total operating profit to revenue, number of branches, government share and bank size by assets has positive impact on ROA. However, factors such as, the capital adequacy, interest expenses to total loans and NPL to total asset shave minor effect on the performance of commercial banks of Uzbekistan.

Taking into account abovementioned facts, in order to increase performance of commercial banks, it's recommended to increase amount of total loan. Once more time, it is proved that loan business still remains the main income source of commercial banks in Uzbekistan.

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