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Firms Specific Factors That Determine Financial Performance in Nigerian Banking Sector

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Abstract: This study on firm's specific factors that determine financial performance in Nigerian banking sector adopts the ex post factor research design. The study uses linear multiple regression model and Ordinary Least Square on pooled data to estimate the parameters. The findings show that banks performance in Nigeria is only affected by the operating expenses and firm size when performance is measured by return on asset (ROA) and return on equity (ROE). The coefficients representing operating expenses, in ROA and ROE are negatively and statistically significant at 1% and 5% levels respectively. Moreover, the size of the banks is positively and statistically significant at 5% level in the both models. However, performance of commercial banks in Nigeria is not influenced by capital strength as its coefficient is not statistically significant. Regardless of measures of performance employed, liquidity and credit ratio also are not significant factors that contribute towards profitability of Nigerian banks. Thus, it is apparent that performance of Nigerian banks is affected by only two of the selected firm-specific determinants. The study therefore recommends that banking industries should adopt a drastic strategy in managing their operating expenses and also in determining the size of the firm.

Key words: Financial Performance · Bank Specific Factors and Macroeconomic Variables

INTRODUCTION

Banks serve vital intermediary roles in a market oriented economy and have been seen as the key to investment and growth. With this in mind, the performance of banks is of importance to investors because it determines both the returns on investment and is also a measure of economic stability and secured investment environment.

How to accurately identify the precise factors that influence firm's performance has agitated the minds of scholars for decades. It is still not empirically clear why one firm may be doing better than others even for firms that are in the same industry; or the reasons for the wide disparity in performance among industries. For instance, in the last two decades studies have shown that commercial banks in Sub-Saharan Africa (SSA) have been more profitable than the rest of the world with an average Return on Assets (ROA) of 2 percent [1]. Several reasons have been adduced though. For instance, it has been argued that one of the reasons behind high return in the region was investment in risky ventures. The other reason for the high profitability in commercial banking business in SSA is the existence of huge gap between the demand for bank service and the supply thereof. That means, in SSA the number of banks are few compared to the demand for the services; as a result there is less competition and banks charge high interest rates. All these however, cannot fully account for the wide disparity in performance among firms that operate in the same industry or in the same region. Generally speaking, the performance of firms can be determined by internal and external factors [2 and 3]. These factors can be classified into firm specific (internal) and industry (macroeconomic) factors. For commercial banks, the firm-specific factors are individual bank characteristics which affect the bank's performance. Performance of individual banks depends upon the strengths, weaknesses, opportunities and threats they are facing. Those forces originate from both external and internal environments of the firm. Hence, both firm-specific and industry (environmental) factors may influence the performance of a bank. Consequently, banks with sound internal environments may perform better than other banks in the industry [4].

Statement of the Problem: Performance of the banks is crucial for any country's economic development because of the critical role of banks in the economy.

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Empirical analysis of performance of banks is an important requirement for further policy changes. As indicated in Central Bank of Nigeria Banking Sector Report [5], the health of financial system depends to a larger extent on the soundness of financial institutions, particularly the commercial banks. Accordingly, study in this area is important for the following reasons. First, improvements in the performance of commercial banks are vital for providing a more efficient system of asset allocation in the financial services sector. Since, Nigeria has a bank-led financial services sector, performance of banking industry is important for providing financial infrastructure for economic development [6]. Secondly, some banks are still facing crisis that threatens their survival despite the continuous reform process that kicked off during the Charles Soludo regime. However, the studies on organizational performance of other sectors in Nigeria are broad but there are few works on banking sector performance especially on the specific factors that determine financial performance in commercial banks in Nigeria [7]. The study to the best of my knowledge is sparse.

Therefore, this study aims to investigate the impact of bank-specific factors that determine financial performance of commercial banks in Nigeria.

Objectives of the Study: The main objective of the study is to examine the specific factors that determine financial performance in the Nigerian banking industry. Specifically, the study is carried out ;

- To examine the impact of operating expenses on the financial performance of commercial banks.
- To determine the extent to which credit risk and liquidity risk determines the financial performance of commercial banks.
- To evaluate if Capital strength of a bank determines it's financial performance. when measured with return on equity model.(ROE)
- To measure the effect of firm size on financial performance of banks when measured with return on asset model (ROA).

Research Questions:

- To what extent does operating expenses determine the financial performance of commercial banks?
- Does the capital strength impact on the financial performance of commercial banks?
- What is the impact of the firm size in determining financial performance of commercial banks?
- What is the extent at which liquidity and credit risk can determine the financial performance of commercial banks

Research Hypothesis: In order to provide empirical analysis that will achieve objective of the study and probable solution to the problem of study, the following hypotheses are formulated for testing.

Ho_1: Operating Expenses have a negative impact on the financial performance of commercial banks in Nigeria.

Ho_2: Liquidity Risk has a negative impact on the financial performance of commercial banks in Nigeria.

Ho_3: Credit Risk has a negative impact on the financial performance of commercial banks in Nigeria.

Ho_4: Capital Strength has a positive impact on the financial performance of commercial banks in Nigeria.

Ho_5: Firm Size has a positive impact on the financial performance of commercial banks in Nigeria.

MATERIALS AND METHODS

Research Design: The design for the study is explanatory and is based on secondary data obtained from published statements of accounts of all commercial banks in Nigeria and Central Bank of Nigeria in the Statistical Bulletins and Annual Reports for the period 2007-2013.

Sample Design: In this study 24 commercial banks were considered. Out of these 24 commercial banks, 13 were used based on data availability.

Analytical Technique: The study employed two measures of profitability, ROA and ROE.The following Ordinary Least Square (OLS) regression models are used to identify the association between banks' performance and their firm-specific attributes.

$$\text{Performance ROA} = \alpha + \beta_1\text{Operating Exp} + \beta_2\text{Credit Risk} + \beta_3\text{Liquidity Risk} + \beta_4\text{Capital Strength} + \beta_5\text{Size} + \varepsilon \quad (1)$$

$$\text{Performance ROE} = \alpha + \beta_1\text{Operating Exp} + \beta_2\text{Credit Risk} + \beta_3\text{Liquidity Risk} + \beta_4\text{Capital Strength} + \beta_5\text{Size} + \varepsilon \quad (2)$$

Data Presentation and Analysis: Table 4.1 depicts some important descriptive statistics of the relevant variables. Average value of ROE over the four year period of sample banks was 18.37%. Mean value of banks return to assets (ROA) was 1.54% and demonstrates a not too fantastic performance of the sample banks in the period under study. The standard deviations for the above were 9.67% and 0.57% respectively. The mean and standard deviation for the operating expenses were 0.035 and 0.137 respectively. The mean value for Credit risk was 0.168 with a standard deviation of 0.235. The mean value of liquidity ratio of the banks was 0.767 which indicates unfavorable situation.

Pearson Correlation analysis was used to evaluate the relationship between firm-specific attributes and performance. The Table 2 presents the result of correlation coefficients. The results show a negatively significant relationship between operating expenses and performance of the banks. This means that the result supports the expectation that a lower operating expense is associated with higher performance. Moreover, the result indicates a significant positive relationship between firm size and performance whereas it shows a significant negative relationship between capital strength and performance.

Two Ordinary Least Square (OLS) regression analyses were performed for all variables and results are presented in table 3. The adjusted coefficients of determination (Adjusted R squared) indicate that 84.8% and62.3% of the variation in the dependent variables (ROA and ROE respectively) are explained by variations in the respective independent variables. Table 1 shows the estimation for the link with ROA and ROE as the measures for banks' performance. In this study, only operating expenses can be viewed as the outcome of bank management. Since improved management of the operating expenses will increase efficiency and therefore raise profits of banks, the ratio of these expenses to total assets is expected to be negatively related to profitability. This implies that a higher operating expenses results in lower profit. As it is expected, the empirical results offer strong evidence of a negative relationship between the operating expenses and performance. As shown by the coefficients in the table 1-3, operating expenses contribute significantly and negatively to performance of commercial banks in Nigeria. The result is consistence with the findings of [8 and 9].

From the regression results, the effect of credit risk, liquidity risk and capital strength on banks performance were not significant. Size of banks significantly and positively related on the performance of banks as proved by Akhavein *et al*. [10], as cited in [9].

Table 1: Descriptive Statistic

Dependent Variable: Bank financial Performance
Method: Ordinary Least Squares
Date: 07/07/12 Time: 09:16
Sample(adjusted): 2007-2012
Included observations: 78 after adjusting endpoints
No prewhitening
Bandwidth: Fixed (2)
Kernel: Bartlett
Convergence achieved after: 1 weight matrix, 2 total coefficient iterations
Instrument list: LOGOE LOGCR LOGLR LOGCS

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Operating Expenses	0.0353	0.0138	0.073609	0.0001
Credit Risk	0.1678	0.2352	0.092176	0.0004
Liquidity Risk	0.7675	0.1916	0.081701	0.0000
Capital Strength	0.0861	0.0514	0.086376	0.0002
Firm Size	5.2887	0.5022	0.044686	0.0000
ROE	18.3728	9.6721	0.332150	0.0000
ROA	1.5436	0.5687	0.315500	0,0001
R-squared	0.855075	Mean dependent variable		6.897917
Adjusted R-squared	0.848420	S.D. dependent variable		1.094669
S.E. of regression	0.187179	Sum squared residual		185207.7
Durbin-Watson stat	1.938926	J-statistic		6.65E-26

Table 2: Correlation Analysis (Correlation Matrix)

	Operating Expenses	Credit Risk	Liquidity Risk	Capital Strength	Firm Size
Operating Expense	1.000000				
Credit Risk	-0.23004	1.000000			
Liquidity Risk	0.1650	0.1960	1.000000		
Capital Strength	0.0500	0.0.510**	0.2030	1.000000	
Firm Size	-0.2750	-0.599**	-0.1360	-0.723	1.000000
ROE	-0.397	-0.362*.	-0.0290	-0.616	0.738*
ROA	-0.585	-0.1530	-0.490	-0.337	0.588

*p <.05. **p <.01 (2-tailed)

Table 3: Firm-specific Determinants and Performance

	ROA			ROE		
Variable	B	SE.B	β	B	SE.B	β
Operating Expense	-19.153	6.107	-0.464**	-210.165	93.683	-0.299*
Credit Risk	0.105	0.419	0.006	-2.116	6.424	-0.051
Liquidity Risk	0.263	0.397	0.089	7.495	5.623	0.148
Capital Strength	0.237	1.930	0.021	-54.678	29.604	-0.291
Firm Size	0.557	0.246	0.492*	8.365	3.773	0.434*
Intercept	-0.952	1.535		-19.136	23.551	
R^2	0.848			0.623		
F	8.246			11.699		
N	40			40		

*p <.05. **p <.01.

The positive regression coefficient for firm size was significant for both models, implies that a bank with a relatively large size of bank is more profitable. Based on the findings, it is clear that out of five hypotheses; three were unsupported (H2, H3andH4) and two were supported (H1and H5). In general, the ultimate effect of firm-specific determinants on Nigerian commercial banks' performance may be influenced only by operating expenses and size of the bank.

CONCLUSION

This paper evaluated the relationship between banks' performance and five selected bank-specific (internal) factors which are extracted from the financial statements of commercial banks in Nigeria. According to the mean values of ROE and ROA over the six year period, there is no remarkable performance of the sample banks in the period understudy. The results reveal that operating expenses and capital strength are negatively related with banks profitability. On the other hand, firm size is positively related to banks profitability. Statistical significant impact of liquidity risk could not be established. The result shows negative relationship between the credit risk and performance. The negative correlation coefficient for credit risk was significant only with ROE.

From the results, it is obvious that banks' performance in Nigeria is only affected by the operating expenses and firm size when performance is measured by ROA and ROE. The coefficients representing operating expenses, in ROA and ROE are negatively and statistically significant at 1% and 5% levels respectively.

Moreover, the size of the banks is positively and statistically significant at 5% level in the both models. However, performance of commercial banks in Nigeria is not influenced by capital strength as it's coefficient is not statistically significant. Regardless of measures of performance employed, liquidity and credit ratio also are not significant factors that contribute towards profitability of Nigerian banks. Thus, it is apparent that performance of Nigerian banks is affected by only two of the selected firm-specific determinants. On the whole, results imply that firm-specific attributes employed in this study have only a modest contribution on the financial performance of Nigerian commercial banks.

Recommendations: From the analysis done so far, the researcher is of the view that the following recommendations be put forward.

- Banks should implore all necessary measures that will enable them monitor the operating expenses and ensure it is reduced to the barest minimum. Efforts should be made to decongest expenditure areas that the cost benefit analysis is not feasible.
- Effective internal control system is highly recommended in check mating the activities of those responsible for authorization and disbursement of funds appropriately authorized for expenditures.
- Efforts should be made towards building up the total assets, human capital, Intellectual capital and other variants that will boost the firm size of banking industries.
- Banks should also concentrate on the other internal factors that make impact even though not significantly like firm size and operating expenses

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