CORPORATE FINANCIAL HEALTH AND PERFORMANCE OF FIRMS IN THE BANKING SECTOR OF NIGERIA

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Abstract

The financial health of banking firms in Nigeria is an issue that every stakeholder should be very much concerned about. No one knows the next bank that will be sold by the National deposit insurance cooperation to Asset Management Company of Nigeria (AMCON) who has bought and supervised the sales of distressed banks since its inception in 2010. The study examined the corporate financial health of fourteen Nigerian banks and its impact on performance from 2008 to 2018. The Z score of the banks is above the 2.9 benchmarks of the safe zone indicating sound financial health. Nevertheless, it was detected that the bank's performance as measured by return on equity (ROE) was affected by the bank's financial health. The study contributes to the empirical literature on the relationship between corporate financial health and corporate performance of banking firms in Nigeria. More specifically, the study contributes to existing literature validating financial health as a predictor of firm performance in the Nigerian banking industry.

Key words: Financial health; Bank Performance; Nigeria, Banks; Altman Z score

1. Introduction

The financial health of Nigerian banks is a significant area of concern for researchers at the moment considering the recent unrest in the banking sector that involved Diamond bank and Skye bank. The apex bank in Nigeria which is the Central Bank of Nigeria (CBN) took strategic steps in the 2018 to revoke the operating permit issued to Skye bank. The implication of the move on Skye bank by the regulatory authorities resulted in the transfer of the assets and liabilities of the bank to Polaris Bank. The asset and liabilities of Skye bank was managed by the Asset Management Corporation of Nigeria (AMCON). AMCON specializes in stabilizing banks with the aim of returning it to profitability. Once this aim is realized it can then be sold to Investors (Adekunle, 2018). To achieve the mission of stabilization, AMCON would have to inject billions of naira. Such moves will result in the net value of Polaris Bank becoming zero. The CBN makes tactical moves such as the one described above with the aim of saving investors' funds. Such moves by the regulatory body will also ensure that member of staff do not lose their source of livelihood. Part of CBN's plan was to enable the firm operate efficiently (The Nation Report, 2018).

Diamond Bank had to relinquish its global operational authorization to focus on countrywide set-ups. As a consequence, Diamond bank ceased to function internationally. The move by Diamond bank was to help the bank focus its dwindling incomes on the substantial prospects in its domestic market of Nigeria. Due to dwindling performance, Diamond Bank's had to relinquish its operations in West Africa and the UK. Banks that want to operate globally need a 15 percent capital adequacy ratio compared to 10 percent required by national banks (Tony, 2018). This occurred "after Diamond bank recorded its worst month on record in November with share plummeting to 0.61k per unit on November 30, 2018" (Awojulugbe, 2018; Nweze, 2019).

One would have thought that a bank as reputable as Diamond bank was performing excellently, but the merger of Diamond with Access bank shows that Diamond bank had been under pressure and if not for the merger by Access bank Plc, the depositor's investment could have gotten lost suddenly due to its increasing overhead cost. The research revealed that the financial soundness of Diamond bank was affected by the inability of the bank to "raise fresh capital after huge loan losses worsened by an economy that is recovering from its first recession in 25 years" (Ojekunle, 2019). According to Reuters (2018), "Diamond bank has been managing its capital since 2016, after huge loan losses worsened by a weak economy forced it to trade its foreign subsidiaries".

From the preceding one can see that the financial soundness of banking firms in Nigeria is an important issue which stakeholders do not want to take for granted. No one knows the next bank that will be sold by the NDIC to AMCON, but since the inception of AMCON in 2010, it has bought and supervised the emergence of Mainstreet Bank, Keystone Bank, and Enterprise Bank. Enterprise Bank then later became Heritage bank. Now Polaris banks have also been created. Thus, the analysis of the financial soundness of Nigeria banks is essential as the management of banking firms tries different strategies aimed at improving the company's financial position.

Financiers and potential shareholder are similarly dedicating more time and resources to the analysis of financial health. Investment decisions are consequently based on the outcome of the financial health analysis. The Nigeria financial industry has experienced intense economic growth, characterized by increased financial inclusion (Onyema, Okey, Precious & Amadi, 2018). While growth is indispensable, the sustainability of banking firms in Nigeria is also dependent on its financial soundness. The purpose of this paper is to examine the relationship between corporate financial soundness and organizational performance of banking firms in Nigeria. More specifically, the study seeks to determine if financial soundness is a predictor of organizational performance in the Nigerian banking industry.

2. Literature Review and Hypothesis Development

Several empirical studies have been piloted on banking sector financial health as a result of challenges being faced by the sector. The conclusions and recommendations of such studies reveal that proper regulatory oversights as seen in developed economies of the world is vital for reducing the degree of bank failure especially in the developing economy. One of such study is Balasundaram (2009) who focused on examining the degree of financial soundness in Sri Lanka. The focus of the researcher was on the manufacturing industry. The author affirmed that investors in Sri Lanka are concerned about the safety of their investments.

According to Balasundaram (2009) investors in Sri Lanka perceived that a relationship exists between financial soundness and the safety of their investment. It is based on the preceding that the management of manufacturing companies in the country make the different decisions with the aim of improving corporate financial soundness and market position. The importance of financial soundness to investors was very important because investors were buying into the stocks and shares of the manufacturing companies studied by Balasundaram (2009). Consequently, Balasundaram (2009) collected secondary data from manufacturing companies listed on the Sri Lanka stock exchange for 5 years, specifically from the years 2003 to 2007. The researcher depended on the Altman's model to evaluate financial soundness. Outcomes reveal that the listed manufacturing companies were on the threshold of financial failure. Balasundaram (2009) recommended measures that would help the manufacturing firms from going bankrupt such as government participation and organizational restructuring.

Roman and Sargu (2013) similarly studied the financial soundness of the commercial banks in Romania. The researchers acknowledge that the Romanian banking system has been exposed to remarkable changes in the past ten years. This makes financial soundness and performance dominant in the realization of a firm and viable economic development. Consequently, Roman and Sargu (2013) analyzed the financial soundness of the commercial banks that operate in Romania. The researchers adopted the CAMELS framework as the method of analysis. Study outcomes revealed the strengths and the vulnerabilities of the studied banks in Romania. The study reveals that it is imperative for the financial soundness of banks in Romania to be strengthened.

Foo (2015) studied financial health and corporate performance of listed manufacturing companies in South Korea and Taiwan. Foo (2015) measured financial health using Altman Z-Score. Return on Equity (ROE) was employed to measure corporate performance. The researchers used Z-scores of data collected over a fourteen-year period. Study findings reveal a substantial correlation between ROE and the Z-Score for listed manufacturing firms in Hong Kong & Singapore. The manufacturing firms in Hong Kong had comparatively healthier financial soundness. The manufacturing firms were the sole focus of this study which is a foremost study limitation. This article will expand the findings of the study by adopting the study's framework in the Nigerian banking industry context. The proposed methodology by Foo (2015) will be applied in the Nigerian context.

Damijan (2017) in a recent study examined the corporate financial health and its impact on firm performance. Damijan (2017) focused on firms in Solvenia. The findings of the study showed that studied firms experienced excessive debts during the period of recession. Damijan (2017) found half of studied firms to have an unsustainable debt-to-EBITDA leverage ratio beyond 4. The outcome of the study shows that the need to pay back debt inhibited firms' productivity and growth. The ability of a firm to invest is also inhibited. The implication of the outcome of the study is that banks in Slovenia should financially restored alongside timely corporate debt restructuring.

Abdul (2017) studied the impact of capital adequacy on the performance of banks. Secondary data was collected from a total of nine deposit money banks in Nigeria. Ordinary least square (OLS) regression was adopted to analyze the study. The dependent variable of this study is profit of tax. The independent variables are total assets (TA), loans and advances (LA), customer deposits (CD) and owner's capital (OC) which influenced PAT respectively. The implication of the study finding by Abdul (2017) is that banks in Nigeria should focus on supervisory review and market discipline.

Onyema, Okeym, Precious and Amadi (2018) evaluated financial soundness of commercial banks in Nigeria. Ten commercial banks were selected for the study in Nigeria. Secondary data was collected over a period of fifteen years. The outcome of the study show that only two out of the ten studied banks were in healthy states. The implication of the outcome is that the other eight banks were undergoing challenges financially. Finally, Onyema, Okeym, Precious & Amadi (2018) concludes that Bankometer S-score is relevant in contemporary banking operations. Centered on the findings of the study, Onyema, Okeym, Precious and Amadi (2018) recommended that bank managers should focus on safeguarding that their banks are well funded, diminish levels of non-performing loans, uphold sound management and guarantee satisfactory liquidity to sustain banks' financial soundness and protect against defenselessness.

This study will fill the gap that exists presently in the literature on the performance of banking firms in Nigeria by supplying current and empirical substantiation on the state of the financial health of banks in Nigeria using data collected over a ten year period which is 2008 to 2018. This study will provide empirical insights that will help investors to be aware of the financial health of the banking institutions in Nigeria. It is the belief of the researcher that Nigerians and investors generally will want to know the findings of this study as this will put them at peace concerning the viability of their investments. This present study is different from those of Damijan (2017), Abdul (2017), Roman & Sagu (2013) and Foo (2015) which applied the Z-Score, The Bankometer S-score, CAMELS framework on banks to ascertain financial soundness without controlling for the effect of micro and macro factors.

Base on the review of the literature reviewed the hypothesis is stated thus:

H_O: is that there is no significant statistical relationship between financial health and bank performance.
H_1: there is a significant statistical relationship between financial health and bank performance.

3. Data and Method

The Altman (1968) Z-Score model was used in this study. The Altman Z-score formula for calculating bankruptcy was circulated in 1968 by Edward I. Altman, an Assistant Professor of Finance at New York University. The formula was provided in Figure 1.

Figure 1:

X1 = working capital / total assets
X2 = retained earnings / total assets
X3 = earnings before interest and taxes / total assets
X4 = market value of equity / total liabilities
X5 = sales / total assets

Source: Authors' Compilation (2021)

Equation for Altman's Z-Score Model (1968)

Zones of discrimination:

Z > 2.99 – "Safe" Zone
1.81 < Z < 2.99 – "Grey" Zone
Z < 1.81 – "Distress" Zone

A simple linear regression was used to analyze the data derived from annual reports of the Nigeria banks with the equation: $Y = \beta_1 Z_1 + C$. In this equation Y stands for the measure of performance in this study which is Return on Equity (ROE). B_1in the regression equation represents the direction and magnitude of the hypothesized relationship between the dependent and independent variable of the study. In the regression equation, Z_1 represents the independent variable of the study, which is the Altman Z-Score while C in the regression equation represents the constant. The data for the study was collected from the year 2008-2018 spanning a decade. The data used in this study were downloaded from the bank's website, where the annual reports are kept for public usage. Records of all the Nigerian banks listed on the Nigerian stock exchange were utilized in the regression analysis. Additionally, outliers that fall within the top and bottom 1% were excluded for the study analysis.

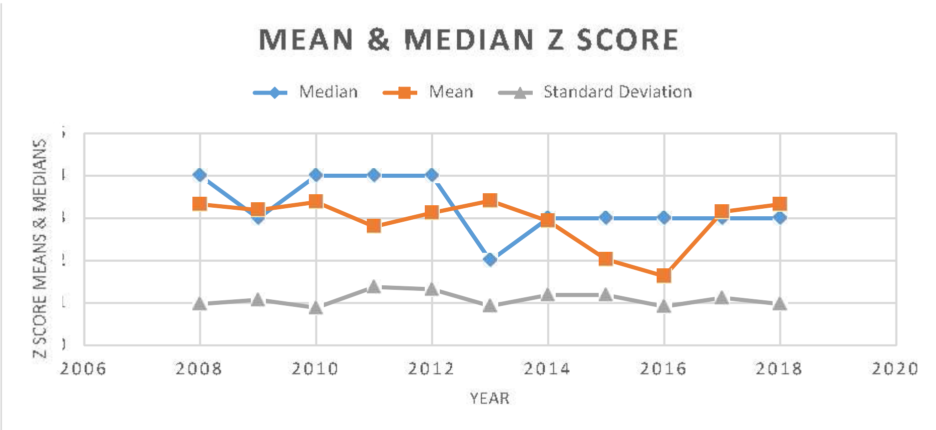
4. data analysis and discussion of findings

Table 1Descriptive Analysis

Descriptive Statistics			
Year	**Median**	**Mean**	**Std. Deviation**
2008	4.0	3.33	.975
2009	3.0	3.19	1.078
2010	4.0	3.38	.886
2011	4.0	2.80	1.380
2012	4.0	3.13	1.323
2013	2.0	3.41	.928
2014	3.0	2.93	1.188
2015	3.0	2.03	1.188
2016	3.0	1.63	.917
2017	3.0	3.15	1.125
2018	3.0	3.33	.975

Source: Authors' compilation (2021)

Figure 1



Source: authors' compilation (2021)

Table 1 shows the mean and median Z-Scores for Nigerian banks listed on the NSE, while Figure 1 shows the trends for the ten years from 2008 to 2018. The analysis reveals that the Z-Score shows that the banks under study are reasonably financially healthy. This indicates that Nigerian banks listed on the NSE are economically sound despite the economic difficulties experienced in the country. The mean and median Z-Scores tend to be higher before the recession of the year 2008; however, a drop was noticed in financial soundness in the year 2009 the year after the recession.

According to the Z scores, the years 2010, 2011 and 2012 were characterized by good financial soundness however there was a substantial decrease in the Z score in the years 2013, 2014, 2015, 2016, 2017 and 2018. This could also be attributed to falling oil prices, considering that the Nigerian economy was highly dependent on oil during the period under study. The analysis also revealed that the median Z-Scores is significantly similar in magnitude to the mean Z-Scores. This could be likewise clarified by similar variations in the size of the banks under study.

Two years after the global recession of the year 2008, analysis shows an increase in the financial health of Nigerian banks in the years 2010, 2011 and 2012. Following the Global economic crisis of the year 2012, the financial soundness of Nigerian banks dropped from a median Z score of 4.0 to 2.0, and it moved slowly to 3.0 in the following year. The median Z score remained considerably average at 3.0 from the year 2013 to 2018 with some slight reductions in the mean Z score. The median Z score ranged from 4.0 to 2.0, while the mean Z score ranged from 3.41 to 1.63. The mean Z score for Nigerian banks fell below 1.81, which is the distress zone, but the median Z score remained above the distress zone at 3.0.

The mean and median Z score for seven years exceeded the 2.99 grey zone into the safe zone of 3.0 and above while the Z score for three years fell within the grey zone. Overall this presents a stronger financial health outlook considering that in seven out of the ten years, the Altman mean Z scores exceeded the 2.99 benchmarks.

Table 2: Statistical Regression Result

Roew	Coef.	Std. Err.	T	P> t	95% conf .	Interval
Zscorew	4.765453	.3621902	22.64	0.002	5.765432	6.987321
_cons	-6.43295	.8.462216	-6.86	0.000	-10.765421	3.256842

A total of 1,600 observations were adopted for the regression of banking firms in Nigeria (see Table 2). Based on these observations, the banking firms in Nigeria listed on the NSE has a regression coefficient of 4.765. The standard error was close to zero, at 0.362, while the t-statistic was substantial and positive at 22.64, and the p-value was 0.002, validating the dependability of the regression result. This result ratifies the alternate hypothesis with the implication that a positive and significant relationship exists between the financial health of Nigeria banks and corporate performance.

5. Conclusion and recommendations

The study examined the relationship between corporate financial health and performance of firms in the banking sector of Nigeria. The result shows that financial health can predict the performance of banks in Nigeria when measured using Return on Equity. The ROE helps us to understand that the financial health of Nigerian banks influences the banks' ability to use the investment to generate earnings growth. The implication is that Nigerian banks have to pay close attention to financial health.

The study recommends that the Central bank of Nigeria should implement measures that will further strengthen the financial health of Nigerian banks. Also, the bank's board and corporate governance framework should implement measures aimed at ensuring that the bank increases its ability to use its investments to generate earnings.
The study has provided insights into the financial health of Nigeria banks; however, the review is not without certain restrictions. One of the study limitations is that it focuses on fourteen banks and not on all the twenty-two banks in Nigeria presently. The fourteen banks were selected based on their consistency on the Nigerian stock exchange over the ten years of the study.

References

Abdul, M. (2017). Impact of capital adequacy on the performance of Nigerian banks using the Basel Accord framework. *East Africa Research Papers in Business, Entrepreneurship and Management* 7(1)

Adekunle, O. (2018). Why CBN revoked Skye bank license. https://www.vanguardngr.com/ 2018/09/why-cbn-revoked-skye-bank-license/

Altman, E. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *Journal of Finance*, 23(4), 589–609.

Altman, E. (1993). Corporate financial distress and bankruptcy: A complete guide to predicting and avoiding distress and profiting from bankruptcy, NY: John Wiley and Sons.

Altman, E. (2000). Predicting financial distress of companies: Revisiting the Z-score and ZETA models. Stern School of Business, New York University.

Altman, E. (2008). Forecasting default rates: A tricky business. Stern School of Business, University, mimeo.

Altman, E., Haldeman, R., & Narayanan, P. (1977). ZETA analysis: A new model to identify bankruptcy risk of corporations. *Journal of Banking and Finance*, 10(1), 29–54.

Ashraf, A. & Tariq, Y. (2016). Evaluating the financial soundness of banks: An application of bankometer on Pakistani listed banks. *Journal of Financial Risk Management* 13(3):47.

Avkiran, N. & Cai, L. (2012) Predicting bank financial distress prior to crises, UQ Business School, The University of Queensland, Australia, Working paper. Available at http://www.nzfc.ac.nz/archives/2012/papers/updated/24.pdf

Awojulugbe, O. (2018). Exclusive: Access Bank acquires Diamond Bank [online] https://www.thecable.ng/exclusive-access-bank-acquires-diamond-bank

Balasundaram, N. (2009). An Investigation of Financial Soundness of Listed Manufacturing Companies in Sri Lanka: an Application of Altman's Model. *International Journal of Economics*, 11(2)

Bricongne, J. C., Fontagne, L., Gaulier, G., Taglioni, D., & Vicard, V. (2012). Firms and the global crisis: French exports in the turmoil. *Journal of International Economics*, 87(1), 134–146.

Damijan, J. (2017). Corporate financial soundness and its impact on firm performance: Implications for corporate debt restructuring in Slovenia. *Post-Communist Economies*, DOI: 10.1080/14631377.2017.1398518

Ezike, J. & Oke, M. (2013). Capital Adequacy Standards, Basel Accord and Bank Performance: The Nigerian Experience (A Case Study of Selected Banks in Nigeria). *Asian Economic and Financial Review*, 3(2), 146-159.

Foo, S. (2015). Financial health and corporate performance oflisted manufacturing companies in Hong Kong andSingapore – A comparative study of the two Asian tigers. *Asian Journal of Business and Management.* 3, (2), 148-154. Research Collection School of Accountancy. Available at: https://ink.library.smu.edu.sg/soa_research/1594

Kenn-Ndubuisi, J. & Akani, H. (2015). Effects of recapitalization on commercial banks survival in Nigeria: Pre and Post camel analysis. Eur J Acc ; 3(9):12-30.

Mishra, A., Harsha, G., Anand, S. & Dhruva, N. (2012). Analyzing Soundness in Indian Banking: A CAMEL Approach. *Research Journal of Management Sciences,* 1(3)

Nweze, C. (2019). CBN, 15 banks inject N228 billion into AMCON [online] https://thenationonlineng.net/cbn15-banks-inject-n228-billion-into-amcon/

Ojekunle, A. (2019). Access Bank, Diamond Bank successfully complete merger to create one of Africa's largest banks [online] https://www.pulse.ng/bi/finance/access-bank-diamond-bank-complete-merging-process/gkprhnj

Onyema, J., Okey, N., Precious, O. & Amadi, S. (2018). Evaluation of financial soundness of selected commercial banks in Nigeria: An application of Bank meter S-score model. *Journal of Finance and Marketing 2(3)*

Rahman, Z. (2017). Financial soundness evaluation of selected commercial banks in Bangladesh: An application of bank meter model. *Res J Fin Acc*, 8(2):2222-847.

Reuters, (2018). Nigeria's Access Bank to buy rival Diamond Bank to create Africa's biggest bank. https://www.reuters.com/article/nigeria-diamond-bank/nigerias-access-bank-to-buy-rival-diamond-bank-to-create-africas-biggest-bank-idUSL8N1YM62W

Roman, A. & Sargu, A. (2013). Analysing the Financial Soundness of the Commercial Banks in Romania: An Approach Based on the Camels Framework. *Procedia Economics and Finance* (6) 703 – 712

Tony, S. (2018). Breaking: Access Bank acquires Diamond Bank.

https://www.vanguardngr.com/2018/12/breaking-access-bank-acquires-diamond-bank/

The Nation Report (2018). Skye Bank takeover: Shareholders kick, to sue CBN, AMCON, others [online] https://thenationonlineng.net/skye-bank-takeover-shareholders-kick-to-sue-cbn-amcon-others/