EVALUATION OF THE SOUNDNESS OF THE NIGERIAN FINANCIAL SYSTEMS- ANEMPIRICAL REVIEW OF THE COMMERCIAL BANKS

Abstract

The study examined the soundness of the Nigerian financial system in viewof stakeholders' increasing dependence on it as a catalyst for achieving individual and corporate prosperity (wealth, access to funding, improved standard of living, etc.).The study examined the influence of capital adequacy ratio as the dependent variablerepresenting the soundness of the banks and financial system. The independent variables examined are regulatory capital (Tier-one qualifying capital, T1CAP), asset quality (NPLR),Management efficiency (EFFIC), earnings (EPS), liquidity (LIQR) and market sensitivity (CDEPO). The study observed that only three of the independent variables (NPLR, EPS and CEDPO) were found to have positive influence on the soundness of the banks and the financial system while the rest (EFFIC, LIQ and T1CAP) were negative. The study further observed that three of the independent variables (NPLR, EFFIC and LIQ) have significant influence on the soundness of the banks while the rest (EPS, CDEPO and T1CAP) influence were insignificant. The regulators should be proactive in their monitoring activities, rather than depending on the historical performance review of the banks. The regulators should devise mechanism to forecast future trends of each of the banks and for each of the measurement metrics to enable them take precautionary actions that would ensure financial stability and protect the interest of all the stakeholders.

Keywords: Banks, banks' soundness, financial system, regulators, significant

JEL Classifications:C12, C31, G01, G21, M21

Introduction

Studies appear to have established consensus on the importance of banks in socio-economic development and growth of any economy. For instance, banks were described by several studies as the life of the economy without which no economy can survive (Kachula, et.al 2022; Le, et. al.,2021; Sanusi,2012). Banksare also seen as the mechanism for effective allocation of resources between competing businesses, sectors and economies (Nguyen, 2022;Battilossi, 2013; Fisman, 2004, Chang, 1992). Financial institutions including banks are similar to public institutions that need to be protected by regulations and relevant government instruments for the benefits of the stakeholders and the national economy. Theyare not just any kind of business ventures that serve only the interests of the shareholders, they are not too different from public institutions that need to be protected by regulations, government instruments for the sake of all stakeholders.

The Nigerian banks have metamorphosed over the years right from the inception of the first set of banks in the country's colonial era. The introduction of the 1974 indigenization policy encouraged Nigerian's ownership of foreign-owned private sector institutions that were hitherto held by foreigners and many Nigerians became owners of some of the pre-independence banks as the foreign investors divest. While other new banks were founded, several the indigenized banks change their names to reflect the new ownership. Some of the banks became distressed and were either outrightlyforeclosed, acquired or merged with others. The Nigeria failed tribunal which operated from 1993 to1998, under the regime of General Sanni Abachainvestigated the numerous cases of failed banks, the causes of their failure and those that were found culpable for the failure were tried under the law(Ogvuvbu, 2021).

In 2005 the Central Bank of Nigeria (CBN) which is the apex regulator of the nation's financial system introduced a policy for banks recapitalization. In 2005, the CBN policy on banks' recapitalization required all the commercial banks to shore up their minimum capital base to N25 billion from a previously minimum capital of a N2 billionin 2001 (Alabi, 2019; Kanu and Isu, 2015; CBN, 2005). To also address transparency in the banks' audited financial statements, CBN imposed a uniform financial year end of 31st December for all the banks. Thenew policies revealed hidden weaknesses in many of the banks. For instance, the recapitalization policy revealed the inability of many banks to raise additional capitals from the public, private investors and their own shareholders. Some of the weakbanks either merged with themselves, acquired by stronger ones or got liquidated as their licenses were revoke for non-compliance with the new minimum capital requirements.While the policies were seen as means ofprotecting the interests of depositors and investors, the larger economy benefited through attraction of foreign direct investmentsfrom investors across the globe, funding of big ticket transactions,advanced banking technologies including internet banking and improved banking operating environment that tamed bank robberies that were rampant prior to the consolidation (Oluitan, Ashamu and Ogunkenu, 2015; Omoruyi and Osawmonyi, 2013; Adegbaju andOlokoyo, 2008).

The banks remained regulated by CBN while the Nigerian Deposit Insurance Corporation (NDIC) remained the loss insurers as fallbacks where depositors take priority over other creditors. Several studies have shown that many of the surviving commercial banks and those

that came on board thereafter have grown over the years post 2005 in terms of profitability, shareholders' fund, customer base, depositors'funds, branch networks, foreign presence and foreign capital attractions. A probing question to askisif the evidence of growthsufficientto guarantee the soundness of the Nigeria commercial banks?

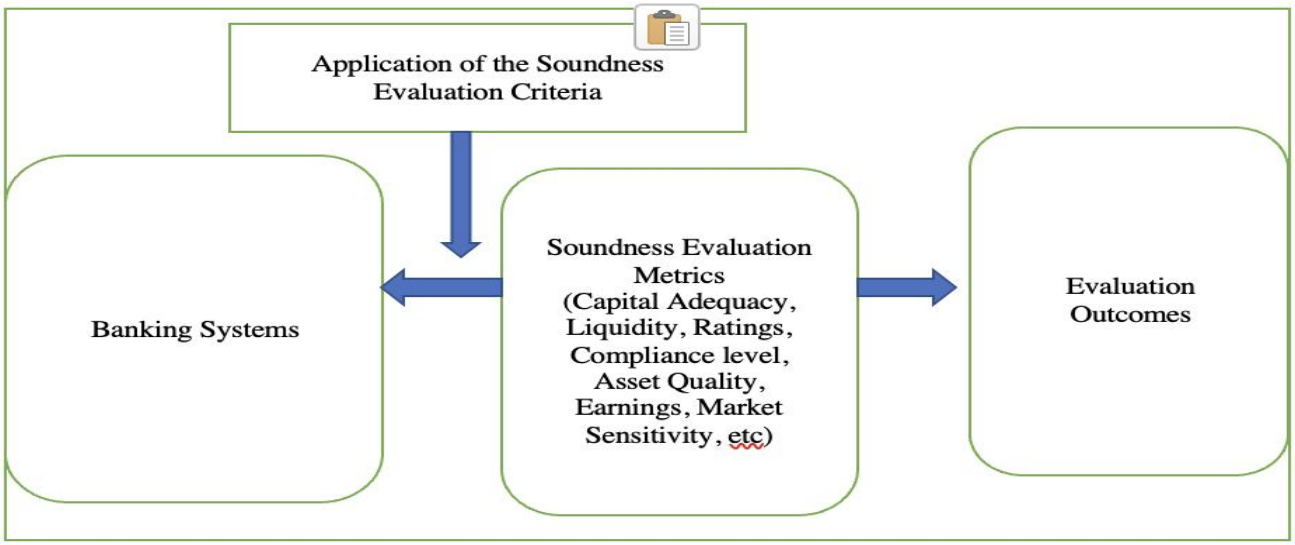
Therefore, this paper is centered on the query by Zhou (2010) that "are banks too big to fail" by examining the soundness of Nigerian commercial banks from the perspective of quantitative analysis. The study is pertinent in view of the recent collapse of Silver Valley Bank, Signature Bank and Credit Suisse which would ordinarily be consideredbetter capitalized, governed and observers of best global practice as compared to what may be obtainable in third world economies. While this study is not suggesting likely collapse of any banks in Nigeria, it is necessary to examine the soundness of the current banking industry in view of the increasing dependence on it by the public and other stakeholders as aids or catalyst to achieve individual and corporate prosperity(wealth, access to funding, improved standard of living, etc.).

The Conceptual Framework

There is a process that creates or leads to a banking and financial system that is sound, reliable and resilient to shocks. The players in either systems must be individually and collective sound to produce a sound system. The players are confronted with challenges from the internal and external environments. While the internal environment is a single layer, the external environment is multi-dimensional and, in many cases, comprises of the sector, national and global economies.

The conceptual framework for a sound banking system is based on the premise that the industry players would meet the minimum thresholds pre-determined by the regulators for the soundness assessment regardless of the internal and external challenges. Therefore, based on the indices that the regulators might haveidentified ,a conceptual framework is described below to explain the variables that are considered to impact the soundness of the banking system and the outcomes.

Figure I: Evaluation of Banks' Soundness



Source: Author (2023).

The Figure I above depicts in a very simple technique the banking system, the application of the soundness evaluation metrics and the outcome of the exercise. A sound banking system must have most if not all the players satisfying the minimum ratio for each of the criteria for soundness assessment which could vary from one country to the other. In fact, Salina, Zhang and Hassan (2021)and Seyedi and Abdoli (2019)considered a bank to be sound if the financial indicatorssuch as capital adequacy, asset quality and liquidity ratios of that bank satisfy the minimum requirements defined by the regulators. It is expected that where unacceptable number of banks are are found to fail the soundness test, the regulators should introduce reforms to reposition the systems otherwise take decisive steps to assure the depositors and investors of the safety of their investments.

Literature Review.

Financial stability is a central focus of the apex (central) banks in many countriesAlmahadin, Kaddumi and AL-Kilani, 2020. It is practically impossible to achieve financial stability without the soundness of the financial system and especially the banks (Almahadin, 2020; Mirzaei, Moore and Liu, 2013). Though there are no widely adopted definitions of either financial stability or banks' soundness, however there are quite a number of studies that have made

attempts in that regards. Swamy (2014) argues that a bank is considered sound when it is has the resilient ability to operateunder difficult business environments.

In their study of bank soundness, Joneidy and Ayadurai (2021), and Ayadurai and Eskandari(2018) argues that the various regulations that came out of Basel Accords which provide global standards for supervision and regulations of the banking sector were unable to guarantee banks' soundness. Nevertheless, some studies identified some requirements for a sound banking system in any economy. White and Morrison (200) identified capital adequacy as a requirement for a sound banking system. Regulations are key to a sound banking system, (Kroszner, 1999). In their study of bank failures in East Asian countries, Lin and Yang (2016) established that the elements of asset quality, liquidity, capital adequacy, profitability, management quality and conducive business environment are measures of the banks' soundness.

On the other hand, Demirguc-Kunt, Detragiache and Tressel (2008) considered ratings as accurate determinants of banks soundness as both quantitative and qualitative including the enabling environments are inputs in the assessment process. The arguments of Demirguc-Kunt, Detragiache and Tressel (2008) was contradicted by Tatyana, Nina and Elena (2017) when they opined that ratings does not significantly influence the soundness of the rated banks and the financial system. However, several studies support capital adequacy, asset quality, management quality, earnings, liquidity and sensitivity to markets (CAMELS) as the inputs for determining banks soundness by regulators in several countries. (Magoma, et. al., 2022; Abusharbeh, 2020; Bernanke, 2019; Saiya and Pandovo, 2015; Ferrouhi, 2014). On the other hand, Boyd and Runkle (1993) included loan size and deposit size as factors required to determine the soundness of the financial system. In the study of the nexus between banks' soundness and financial stability in Jordan, Almahadin, Kaddumi and AL-Kilani (2020) model consisted of capital adequacy, non-performing loan (asset quality), customer deposits and fraction of domestic credit facilities to Gross Domestic Product (GDP). Similarly, Pietrzak(2021) argues that the indicators of financial soundness are good predictors of distress in the financial systems. According toArzova, and Sahin (2023), the measures and indicators of the banks' soundness affect the performance of the banks. The findings show that the correlation between the soundness indicators and the bank's performance is positive and significant.

List 1 :Results of empirical analysis of some previous studies

Areas of Studies	Scholars	Variables for measuring banks' soundness	Methodologies	Findings
An assessment of the financial soundness of the Kazakh banks	Salina, Zhang and Hassan (2021)	Capital Adequacy, Return of Asset, Profitability, Asset Quality, Liquidity and Leverage	Cluster Methodology and Principal Component Analysis	As at January 1, 2008. i) No unsound banks in Kazakhstan ii) 44% of the banks were considered risky iii) 56% of the banks were sound As atJanuaay 1, 2014 i) 16% of the banks were unsound ii) 60% were risky iii) 24% were sound
Banking soundness-financial stability nexus: empirical evidence from Jordan	Almahadin, Kaddumi and Al-Kilani, (2020)	Capital adequacy, NPL, growth rate of customer deposits, domestic credit facilitated by the banking sector as a proportion of GDP	Fully Modified OLS Regression Analysis	The study established a positive and significant nexus between banking soundness and financial stability. Also, capital adequacy ratio was discovered to have the most important positive influence on the soundness of banks while the NPL ratio was found to negatively

				affect the banks' soundness
Corruption and the soundness of banking systems in middle-income countries	Tran, Nguyen and Nguyen (2018)	NPL, Corruption index, Interest rate spread, efficiency (i.e. overhead cost/total assets), liquidity capital adequacy, World governance indicators, political stability, regulatory quality, rule of law, deposit insurance, real GDP growth, inflation and house expenditure to GDP	Ordinary Least Square (OLS)	The relationship between corruption index and banks' soundness (NPL) was positive. The interest rate spread, efficiency ratio and liquidity were found to have significant effect on banks' soundness in the middle-income countries. No mention was made of the effects of other variables examined in the study on the banks' soundness.
Financial Soundness Evaluation of Selected Commercial Banks in Bangladesh: An Application of Bankometer Model	Rahman (2017)	Capital to Assets ratio, Equity to Assets ratio, Capital Adequacy ratio, Non-performing Loans to Loans ratio, Cost to Income ratio, Loans to Assets ratio	Bankometer Model	The banks were found to be soundindividually. Also, the financial system was found to be stable under the period of the study i.e.between 2010 and 2015.

Key Drivers for Soundness of the Banking Sector: Lessons for Developing Countries	Vaithilingam, Mahendhiran and Muthi(2006)	ICT infrastructure, Intellectual Capital, Institutions, Integrity (Governance), Strategic Partnership and Innovations	OLS	The development of the variables in the developing and underdeveloped countries were found to be significantly lower than what was obtainable in developed economies. However, the variables like governance and innovative capability of banks impacted positively on their soundness.
Bank-Specific Variables and Banks' Financial Soundness: Empirical Evidence from Nigeria	Salami, Uthman and Sanni (2021)	Capital adequacy, Asset quality, management quality, earning capacity, liquidity and sensitivity to market risks (CAMELS)	OLS	Capital adequacy (gross revenue ratio), asset quality (NPL ratio), liquidity ratio and market sensitivity (interest expenses to total deposit) were found to be effective in measuring the soundness of the banks
Analysis of Performance and Financial soundness of financial institution (Banks): A Comparative Study	Qamruzzaman (2014).	Financial ratios (current, quick, working capital, account receivable, etc. ratios), asset turnover ratios, collection period ratio, ROA, ROE, profitability and liquidity ratios	Multivariate Discriminate Analysis (MDA), mean, standard deviation (SD) and coefficient of variance (CV)	Overall financial soundness of banks in Botswana was found to be declining from "safety zone' between 2008 and 2012. Over 60% of the financial institutions had liquidity issues and could not meet their obligations.

From literatures and experiences in different countries, the indices for evaluating banks' soundness are neither totally the same nor exhaustive. There are however, indices that are common to all the countries. These include the capital adequacy, asset quality and liquidity. The cause of the non-uniformity in the indices vary by country. In other words, they regulators determine what to the indices based on their perception of what can be used to objectively determine the banks' soundness. Similarly, scholars like Vaithilingam, Mahendhiran and Muthi (2006) are looking beyond the traditional financial indices to measure the soundness of the banking system. They unlike many other studies focused on ICT infrastructure, Intellectual Capital, Institutions, Integrity (Governance), Strategic Partnership and Innovation to determine the soundness of the banking system in some developing economies in comparison to other developed economies.

The effects of collapsed banks on the depositors and the general economy are numerous and could be devastating (Baron, Verner and Xiong, 2021, Calomiris and Mason, 2003). They include loss of capital, disincentive to savings, decline in economic activities with impacts on economic growth and development, (Yomboi, et. al., 2021; Githinji-Muriithi, 2017). In their study of the significance of bank specific and macroeconomic determinants on performance of Indian private sector banks, Aspal, Dhawan and Nazneen (2019) posited that there is a very strong correlation between the health of the nation's financial system and its propensity for growth and development. Banks are indeed a significant part of any nation's financial system. Their roles in the economic growth and development of any nations are non-negotiable. Elliot (2014) posits that the roles of banks are very central to modern financial systems and for those roles to be performed effectively the banks must not only be safe but must be perceived by all stakeholders to be stable and safe.

Methodology

a) Data collection

The dependable variable isthe capital adequacy ratio (CAR) which represents the soundness of the banks and financial system. It is the product of the total regulatory capital divided by the total risk-weighted assets of the banks as defined by the Central Bank. It is argued that the bigger

the CAR the higher the level of preparedness of the banks to absorb shocks arising from non-performing loans, illiquidityand other losses from operations (Ogere, Peter and Inyang, 2013).The independent variablesdeployed for the study are the regulatory capital (Tier 1), the non-performing loans ratio, management efficiency ratio , earnings ratio,liquidity ratios and market sensitivity measure.

All the variables were secondary data and was sourced from the published audited financials of the banks. The study understands that eventhough only quantitative data was considered in its analysis, a combination of the outcomes of the quantitative analysis as well as the roles of regulations, political factor, technology, cultures and religion on organization's sustainability and resilience are equally important in determining the soundness of any bank and / or the financial system of any economy.

Hypothesis

Below is the hypothesis tested by the study to determine the soundness of the banks and the financial system.

Ho: The model developed using CAMELS does not influence the soundness of banks and financial system.

Ha: The model developed using CAMELS influence the soundness of banks and financial system

Model

The study used both descriptive and quantitative statistics for the analysis of thecross-sectional data .For the quantitative analysis, the study adopted the Model used by Almahadin, Kaddumi and Al-Kilani, (2020)in their study of the nexus between banking soundness and financial stability in Jordan.

The model used by Almahadin, Kaddumi and Al-Kilani, (2020) is stated below:

$ZS_t = \alpha_0 + \beta_1 CA_t + \beta_2 NPL_t + \beta_3 GD_t + \beta_4 DC_t + \beta_5 RIR_t + \beta_6 GDP_t + \pi 0\ Dummyt + e.$ ....eqn (1)

Where ZS represents financial stability and proxied by the product of return on assets and equity to asset ratio to the standard deviation. The banking soundness are represented by independent variables of capital adequacy (CA), non-petforming loans ratio (NPL), customer deposit growth rate (GD), ratio of domestic loans to Gross Domestic Product (DC). Other independent variables are the real interest rate (RIR) and the annual GDP growth rate (GDP).

The model of Almahadin, Kaddumi and Al-Kilani, (2020)discussed above was adapted as follows:

CAR =∫ (T1CAP, NPLR,EFFIC, EARNS, LIQ, CDEPO) ……. eqn (2)

Mathematically, stated as:

$CAR = \alpha_0+\beta_1 T1CAP + \beta_2 NPLR +\beta_3 EFFIC +\beta_4 EARNS+ \beta_5 LIQ + \beta_6 CEDPO + e.$ ….. eqn (3)

Where:

CAR = the capital asset ratio being the product of qualifying regulatory tier one capital and risk-weighted capital which is a proxy for the banks' soundness

TICAP = the regulatory capitals of the bank

NPLR = the non-performing loan ratio which is a proxy for asset quality (Igbinosa and Naimo, 2020).

EFFIC = the ratio of non-interest expenses to operating income

EARNS = Earnings per share

LIQ = Liquidity ratio which defines the ability of the banks to meet their obligations as and when due including the statutory cash reserve ratio (CRS)

CEDPO = Customer deposit growth rate represents the market sensitivity to the banks

The CAR, NPR and LIQ variables were chosen on the premises that they were regulatory requirements for banks and non-compliance at any point in time could influenceany stakeholder' perception of the affected bank's soundness(Michael, Etukafia, Akpabio and Etuk, 2018).Though the T1CAP is a regulatory requirement to determine the banks' CAR but there are no regulatory

thresholds for EARNS, EFFIC and CDEPO rather they assist the going concern capacity of the banks and benefit the interests of the shareholders.

Without disregarding the other components of CAMELS which have been a comprehensive quantitative method for determining bank's soundness by many central banks, the elements of capital adequacy, asset quality (NPLR) and liquidity (illiquidity) are either the products of management quality, earnings, and market sensitivity (deposit and fund mobilizations) or they are embedded. While it is pertinent to note that the trio of CAR, NPR and LIQ represents the internal environment of the financial system the import of external environment inensuring the soundness of the system cannot be ignored. The study therefore incorporated the actual Gross Domestic Product growth rate (GDPGR) and inflation (INFL) which influences the market propensity to save or invest(Tobias Adrian, 2023 –The Role of Inflation Expectations in Monetary Policy) to the model. In addition, the two exogenous variables are homogenous to the sample population used by the study.

Results and Discussions

a) **Descriptive analysis**

The study observed a sample mean of 13% against the CBN threshold of 10% for the industry. A sample mean of 5.32% and 47.56% were observed for NPLR (asset quality deterioration) and liquidity against the threshold of maximum of 5% and minimum of 30% respectively.

Table I: Descriptive Statistics							
Descriptions	**CAR**	**NPLR**	**T1CAP (N)**	**EFFIC**	**EPS (K)**	**LIQ**	**CDEPO (N)**
Mean	12.86%	5.32%	205,553	64.00%	149	46.56%	1,827,224
Median	17.39%	4.12%	117,582	70.65%	89	40.40%	1,126,535
Standard Dev	25.61%	7.05%	304,533	20.16%	184	18.90%	1,883,062
Kurtosis	1201.67%	1048.15%	1	413.39%	584	389.44%	0
Skewness	-320.71%	302.90%	1	-175.48%	1146	141.38%	1
Minimum	-86.18%	0.00%	(277,607)	0.00%	86	12.75%	54,721
Maximum	42.47%	31.84%	957,625	88.27%	642	105.35%	5,849,487

The trio of CAR, NPLR and LIQ as measures of resilience in the face of shocks show that the Nigerian financial systems was resilient and able to withstand shocks without jeopardizing the interest of the various stakeholders at least in the short-run. However, it was also observed that one of the sampled banks showed signs of distress with a negative CAR of 86.18%, NPLR of 31.84% and LIQ of 12%.

The performance of the three key evaluators of soundness of a financial system were abysmal to the regulatory thresholds. All the sampled banks were profitable with minimum EPS being 86 kobo and maximum of 642 kobo and although one of the sampled banks' T1CAP was in deficit.

Multicollinearity Test

The study tested the correlation between the variables for the purpose of determining highly correlated variables that could jeopardize the reliability of the outcomes of the study. Table II below provides the summary of the Pearson's (correlation coefficient) multicollinearity test at 0.05 level of significance.

Table II: Results of Multicollinearity Test

DESCRIPTION	*CAR*	*NPLR*	*T1CAP*	*EFFIC*	*EPS*	*LIQ*	*CDEPO*
CAR	1.000						
NPLR	0.021	1.000					
T1CAP	0.442	-0.003	1.000				
EFFIC	-0.124	0.013	-0.302	1.000			
EPS	0.183	-0.049	0.425	-0.332	1.000		
LIQ	0.239	-0.115	0.283	0.084	0.334	1.000	
CDEPO	0.193	0.043	0.168	-0.180	0.300	0.094	1.000

The results from Table II above shows that EFFIC was found to be negatively correlated with CAR, T1CAP, EPS and CDEPO while NPLR was negatively correlate with TICAP, EPS and LIQ. However, none of the variables examined by the study was highly correlated with any other variables at the 0.05 level of significance. This implies that the variables were sufficiently independent and lacked presence of multicollinearity that could jeopardize the reliability of the outcomes of the study.

Results of Regression Analysis

The regression analysis results show that the model has adjusted r-square of 0.7 which implies that the explanatory variables account for at least 70% behaviour of the CAR, a proxy for the soundness of the banks and the financial system. Theobserved constant coefficient was negative at -3592 however the calculated F-test of5.060 wasfound to be greater than the critical F-Test of 3.677 at 0.05 level of significance. This implies that the independent variables were collectively and significantlyimpactful on the CAR which is the proxy for the soundness of the banks and the financial system.

The coefficient of NPLR (asset quality), EFFIC (Management efficiency) LIQR (liquidity) were significant at coefficient of 0.5580, -0.6515 and -0.4653 respectively. While NPLR was positively and significantly correlated to the soundness of the banks and the financial system (CAR), the EFFIC and LIQ were found to be negatively correlated to the CAR. The quality of risk assets (loans and advances) created by the banks measured by the non-performing loan ratio (NPLR) with a regulatory threshold of maximum of 5% has a lot in determining their wellbeing. This is because the risk assets were created from depositors and investors' funds with a responsibility on the banks. If the loan default rates are high, the capacity of the banks to fulfill their obligations as expected would becomeuncertain.

In the same vein, liquidity (LIQR) which has a regulatory minimum threshold of 30% is not only necessary for the daily operations of the banks but to safeguard the interests of the depositors by ensuring their withdrawal demands are met as and when required. The observed negative coefficient of -0.6515 was found to be contrary to the findings ofIgbinosa and Naimo (2020). However, the studyconfirms the findings of Ahmed and Dogarawa (2021) in their study of financial soundness indicators and efficiency of listed deposit money banks in Nigeria which argued that the higher the liquidity ratio the likelihood for negative correlation with the banks' soundness. The observed negative correlation of EFFIC to the CARimplies that the manner in which the Management run their institutions affect the soundness of such institutions to the extent that high operating costs would impact negatively on the capacity of the institutions to withstand shocks.

The EPS and CDEPO were found to be positively but insignificant related to the banks' soundness at coefficient of 0.0740 and 0.0450 respectively. The T1CAP was found to have negative and insignificant influence on the banks' soundness at correlation coefficient of -0.1719 in conformity with the findings ofOgere, Peter and Inyang (2013).

The observed *P-value* was 0.007 < 0.05at level of significance which implies the model tested comprising of the elements of CAMELS influence the soundness of the banks and the financial system. Therefore, the null hypothesis should be rejected.

Conclusion

The study examined the influence of CAMELS which is a common model among regulators in examining the soundness of the banks and the financial system in their domain. The study adopted proxies for each of the components of the CAMELS. The study deployed ordinary least square regression analysis for the data analysis of the sampled banks. The study observed that only three of the independent variables (NPLR, EPS and CEDPO) were found to have positive influence on the soundness of the banks and the financial system while the rest (EFFIC, LIQ and T1CAP) were negative. The study further observed that three of the independent variables (NPLR, EFFIC andLIQ) have significantinfluence on the soundness of the banks while the rest (EPS, CDEPO and T1CAP)influence were insignificant.

The regulators should deemphasize the score placed on earnings in measuring the soundness of the banks. Rather, emphasis should be placed on asset quality, liquidity and management quality and efficiency as well as liquidity and capital adequacy in the measurements of the banks' soundnesswhich aligns with the position of Bastan, Mazraeh and Ahmadvand (-). There is also the need for the regulators to be proactive in their monitoring activities rather than depending on the historical performance review of the banks. The regulators should devise mechanism to project future trends for each of the measurement metrics to enable them take precautionary actions that would ensure financial stability and protect the interest of all the stakeholders.

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APPENDIX I

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.836763
R Square	0.700172
Adjusted R S	0.56179
Standard Er	0.175508
Observation	20

ANOVA

	df	*SS*	*MS*	*F*	*gnificance F*
Regression	6	0.9351237	0.15585	5.0597	0.00696
Residual	13	0.4004387	0.0308		
Total	19	1.3355624			

	Coefficients	*tandard Erro*	*t Stat*	*P-value*	*.ower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	-0.3592	0.7870	-0.4564	0.6556	-2.0593	1.3410	-2.0593	1.3410
NPLR	0.5580	0.6078	0.9180	0.3753	-0.7551	1.8710	-0.7551	1.8710
EFFIC	-0.6515	0.4512	-1.4441	0.1724	-1.6262	0.3231	-1.6262	0.3231
EPS	0.0740	0.1250	0.5922	0.5639	-0.1960	0.3440	-0.1960	0.3440
LIQ	-0.4653	0.3003	-1.5496	0.1452	-1.1140	0.1834	-1.1140	0.1834
CDEPO	0.0450	0.1323	0.3399	0.7393	-0.2409	0.3308	-0.2409	0.3308
TICAP	-0.1719	0.0438	-3.9249	0.0017	-0.2666	-0.0773	-0.2666	-0.0773