



## BANKING, SHAREHOLDERS' EQUITY RETURNS AND CORRUPTION PERCEPTION IN NIGERIA

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### ABSTRACT

The research examined how CPI affects the return on equity of the shareholders of DMBs in Nigeria from 1996 to 2022 using the Error Correction technique. The ECM outputs indicate that CPI, total deposits of DMBs, and NPLs of DMBs significantly impede the ROE of banks in the country. Consequently, the study concludes that corruption perception is a negative significant determinant of the return on equity of DMBs in Nigeria. The study affirms the "sand-the-wheel hypothesis," which posits that corruption impedes corporate and economic performance. Based on these findings, the study recommends the need for the apex regulator, the Central Bank of Nigeria (CBN) and anti-corruption agencies to ensure strict enforcement of existing legal frameworks in combating corruption in the country. The study also recommends the need to institute internal control measures to cover gaps and combat corrupt practices before they arise. This will help ensure transparency and a more conducive business climate, promote confidence, and help boost the performance of DMBs in Nigeria.

**Key words:** Returns on equity, Banks, Corruption, Nigeria

**JEL:** G2, G21

### INTRODUCTION

A nation's economic advancement is contingent upon a robust financial system, in which a sound banking system is pivotal. An efficient banking system bolsters economic development and diminishes poverty, whereas an ineffective one can impede progress (Nzotta, 2014). The global economic adversities encountered in the twenty-first century have impacted nearly every sector, notably the financial domain, specifically banking. In the last two decades alone, 465 banks in the United States have ceased operations. Nigerian banks also encountered challenges in the wake of the recessions between 2016 and 2018, resulting in the mergers and acquisitions (M&A) that occurred (Kano et al., 2020). From the inception of AMCON in 2009 to the recent intervention in Skye Bank, the CBN has demonstrated proactive efforts in bolstering the financial sector. The CBN have not achieved the desired outcomes due to the prevalence of NPLs and breaches in lending protocols, and regulatory standards, often attributable to unethical conduct. Records indicate that DMBs have ₦1.4 trillion non-performing loans (NPLs) in their books. This accounts for about 9 per cent of total loan accounts to the entire economy and about 40 per cent (₦577 billion) of the NPLs are from the extractive industry.

However, it is not only the DMBs that are affected by the high degree of credit defaults. The effect



of NPLs spans the gaunt of economic activities in both the micro and macro economy. Thus, DMBs over the years employs a risk-averse approach to their lending operations due to their diminished asset quality, prioritizing debt recovery efforts. This poses challenges for borrowers seeking new credit. Many Nigerian individuals and small businesses encounter difficulties in accessing affordable loans, particularly when banks exercise caution due to a significant number of defaulted loans. This phenomenon is partly linked to the escalating levels of corruption in emerging economies, surpassing those in developed nations. Such issues are exacerbated by the weakening of formal institutions, leading to discrepancies between formal and informal systems (Escandon-Barbosa et al., 2019).

Corruption within the banking sector can stem from various sources, such as entities offering bribes to politicians (e.g., circumventing loan approval processes to secure loans) or banks engaging in bribery with politicians to gain leniency in regulatory matters. Bank executives could also use their influence by passing their lending policies and giving credit facilities to non-performing businesses and phantom contractors. These could cause an upsurge in NPLs cases, the lending operations of DMBs, and economic growth. However, it must be noted that not all corrupt practices or cases of bribery may invariably lead to NPLs (Kereke & Kurotamunobaraomi, 2016). For instance, a contractor who is in dire need of funds to complete his project could induce the lending banker to speedily credit his loan account without recourse to the credit guidelines of the bank. This sped up the finishing of the project. Mauro (1995) called this “speed money”. According to him, speed money enhances successful project completion. This is corroborated by the “greasing the wheel” theory which posits that in places with weak institutions and slow bureaucracy, corrupt practices tend to speed up transactions and enhance corporate productivity (Asaad & Marane, 2020). Some extant studies affirm this theory to be true (Babajide et al., 2020; Khan, Chaudhary, & Arshad, 2020). Conversely, extant literature and theorists posit that corruption is endemic, and impedes progress, and corporate growth (Park, 2012; Yakubu, 2019; Ojeka et al., 2019).

The above discussions highlight the lack of consensus in extant studies. This is further complicated by the ambiguous theoretical foundations of the subject. Therefore, additional empirical research is essential to deepen the understanding of how corruption affects the corporate profitability of DMBs in Nigeria.

## LITERATURE REVIEW

Babajide et al (2020) study found that deposits accumulated from fraud and corrupt individuals bear a substantial role in corporate performance of DMBs in Nigeria. According to the study, the benefits of funds accumulated from dishonest means are momentary and that it bears no significance in the future. The EMC estimate further posited CPI hurt the NIM of DMBs in the country. The study relied on data from 1993 to 2017 to draw its inferences.

Ali et al (2020) empirically studied the impact of corrupt practices on financial distress and the performance of DMBs across 38 countries over 17 years using a panel regression technique. To capture the occurrence of financial crises and stable periods, the study used employed dummy variables. The analysis informed the authors to draw the conclusion that NIM contribute progressively to financial volatility. This indicates that as the NIM increases, the likelihood of experiencing a banking crisis also increases. Furthermore, the findings highlighted that the NIM significantly influenced the instability of DMBs when compared to pro-cyclicality measures. This



means that NIM is a more critical determinant of financial stability than other factors.

The study by Yakubu (2019) using the GMM estimation technique to study the behaviour of corrupt activities on the profit-making prospects of 11 DMBs in Ghana. The author found that CPI and the proportion of cost/income impedes profit-making prospects DMBs in the country. The author further held that aside from NIM, ROA and ROE were definitely influence on the asset size of banks and inflation. The findings also indicate that MPR and the ratios of liquidity and capital adequacy could have mixed effects on DMB's profit levels in Ghana.

Badullahewage (2019) examined how dishonesty and fraudulent practices affects the cost of doing business transactions in Sri Lanka with non-parametric statistical tools. Primary data were collected through questionnaires from a sample of 50 respondents from Colombo in Sri Lanka. The study revealed that loan officers engaged in unethical and corrupt practices and that these practices significantly increased the cost of transactions in the country. To combat, this DBMs and regulators need to put in place control measures to curb high transaction costs in Sri Lanka.

Park (2012) concluded from his empirical study that corrupt practices and tendencies increases the likelihood of financial instability and impedes economic development. Thus, the study posits that CPI raise credit non-performance and causes a decline in output growth. According to the study, when loans are misallocated to inefficient endeavours, it tends to cause an increase in NPLs and a decline in GDP growth. These findings highlight the importance of combating corruption to promote sustainable economic growth. The study made these conclusions based on an analysis of data from 2002 to 2004.

In a study of 135 firms in Nigeria, Ojeka et al (2019) employed GMM technique on data from 2013 to 2017 draw the conclusion that dishonest and fraudulent practices severely impede the profitability of the firms (proxied by ROA and Tobin's Q) in the country. This implies that when companies engage in corrupt practices, it hampers their ability to generate profits and create value for shareholders.

## METHODOLOGY

The study employed a regression research design to empirically study how CPI affects the return on equity (ROE) of DMBs in Nigeria. To achieve this, the study collated secondary data on ROE, and NPLs from Nigeria's deposit insurance agency. It further collated data from the renowned international agency on corruption data and the CBN data repository for TDO (total deposit accounts of DMBs). The data gathered spans from 1996 to 2022. The study adopted the error correction technique to estimate the data.

The functional model is expressed as follows;

$$ROE_t = f(CPI_t, TDO_t, NPL_t) \quad (1)$$

This model is further specified econometrically as follows;

$$ROE_t = \alpha_0 + \alpha_1 CPI_t + \alpha_2 TDO_t + \alpha_3 NPL_t + \varepsilon_{1t} \quad (2)$$

Where; ROE = Return on equity, CPI = Corruption perception index, NPL = Nonperforming Loan & TD = Total deposit.

## DATA ANALYSIS, RESULTS AND DISCUSSIONS

### Econometric results

Table 1: ADF Unit Root Test Results

Variables	ADF Statistics	Test 95% value	Critical	P-values	Remarks
ROEODMB	-6.805108	-3.752946		0.0000	Stationary
NIMODMB	-5.475028	-3.752946		0.0002	Stationary
CPI	-6.238743	-3.752946		0.0000	Stationary
TDODMB	-3.781578	-3.769597		0.0097	Stationary
NPLODMB	-5.056203	-3.752946		0.0005	Stationary

Table 1 shows that at first difference, all variables became stationary. This is confirmed by their ADF values exceeding the critical thresholds and each of their probability values being below 0.05. This indicates the need for conducting co-integration tests.

Table 2: Johansen Cointegration Results

#### Unrestricted Cointegration Rank Test (Trace)

Hypothesized	No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *		0.973468	159.3744	95.75366	0.0000
At most 1 *		0.748483	75.89800	69.81889	0.0151
At most 2		0.555269	44.15236	47.85613	0.1068
At most 3		0.487819	25.51580	29.79707	0.1438
At most 4		0.349534	10.12702	15.49471	0.2711
At most 5		0.010187	0.235492	3.841466	0.6275

#### Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *		0.973468	83.47637	40.07757	0.0000
At most 1		0.748483	31.74564	33.87687	0.0879
At most 2		0.555269	18.63657	27.58434	0.4431
At most 3		0.487819	15.38878	21.13162	0.2626
At most 4		0.349534	9.891531	14.26460	0.2191
At most 5		0.010187	0.235492	3.841466	0.6275

Table 2 indicates the existence of two long-run relationships in the model by the trace test. Conversely, the Maximum Eigen value test results showed that the number of the long-run relationships in the model to be one. The existences of long-run co-integrating relationships give sufficient grounds for the use of the error correction technique to correct the long-run divergence in the model.

Table 3: ROE Lag Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-146.8492	NA	7224.575	14.55706	14.85550	14.62183
1	-137.0346	14.95549	4214.038	14.00330	14.50069	14.11124
		14.21532				
2	-126.3731	*	2312.478	13.36887	14.06522	13.51999
			1809.022	13.05800	13.95330	13.25230
3	-119.1090	8.301848	*	*	*	*
4	-116.5223	2.463561	2316.715	13.19260	14.28686	13.43008

Table 3 presents varied outcomes. Aside from the sequential modified LR test statistic indicating 2 lags, all the other criteria indicate 3 lags. Consequently, this study employs 3 lags for this model.

Table 4: ECM Test Results of the effect of CPI on ROE

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	101.0535	25.40342	3.977948	0.0041
CPI	-3.192196	1.310763	-2.435372	0.0409
D(CPI(-2))	5.434599	1.702569	3.192000	0.0128
D(CPI(-3))	1.861778	1.557227	1.195572	0.2661
NPL	-3.157149	0.595668	-5.300178	0.0007
D(NPL(-1))	2.953290	0.471211	6.267448	0.0002
D(NPL(-2))	0.621417	0.433973	1.431925	0.1901
D(NPL(-3))	1.718109	0.449760	3.820061	0.0051
TDO	0.000930	0.001638	0.568140	0.5855
D(TDO(-1))	0.018048	0.007109	2.538877	0.0348
D(TDO(-2))	-0.008011	0.007338	-1.091718	0.3067
ECM(-1)	-0.792160	0.274594	-2.884837	0.0204
R <sup>2</sup>	0.929137	DW stat		1.708189
Adj R <sup>2</sup>	0.831700			
Fisher's stat	9.535757			
Prob(F-stat)	0.001844			

Table 4 indicates that the CPI tremendously impedes the ROE of DMBs in Nigeria. This means that upsurges in bribery, fraud and dishonesty practices spur the likelihood of a decline in the ROE of deposit-taking institutions in the country. The findings specifically reported the likely magnitude of decline as 3.912 in ROE. According to Fisher's statistics, the likelihood of a decline in the ROE of deposit-taking institutions is substantial. This is because the probability value of the student's t-test (0.04) is less than the acceptable threshold of 0.05.



The ECM results also signify that the volume of deposit accounts (TDO) of DMBs bears a direct measurable consequence on the ROE of banking institutions in the country. The findings specifically reported the positive consequence of TDO on ROE as 0.0009.

Furthermore, the coefficient of non-performing loans (NPLs) tremendously impedes the ROE of DMBs in Nigeria. This means that every upsurge in NPLs spur the likelihood of a decline in the ROE of deposit-taking institutions in the country. The effect of the decline on ROE is reported to be 3.157.

Fisher's statistic (9.535) signifies that the model is statistically significant, being that the probability value (0.001) is less than the acceptable threshold of 0.05. The DW statistic (1.708) further reported the absence of autocorrelation among the variables.

The ECM coefficient (-0.792160) portends that the model was not mis-specified. The model indicates that the relationship between the CPI and ROE adjusts quickly at the rate of 79 percent, with a large portion of the difference being corrected within a short period.

#### Discussion of findings

The negative correlation between corruption and the performance of DMBs in Nigeria suggests that corruption hampers the efficiency and effectiveness of money-taking in the country. This means that every increase in corrupt practices causes the likelihood of a decline in the ROE of DMBs in Nigeria. For instance, the findings specifically indicated that a surge in the CPI is associated with a 3.912-unit contraction in the ROE of DMBs. These findings support the notion that corruption creates an unfavorable business environment, characterized by bribery, embezzlement, and abuse of power. Such practices undermine trust in the banking sector, inhibit investment, and hinder economic growth. Therefore, efforts to reduce dishonest behaviours and improve transparency are crucial for DMBs in Nigeria.

The policy implications highlight the need for anti-corruption measures and regulatory interventions to combat corruption in deposit-taking institutions. Enhancing transparency, expanding good governance initiatives, and strengthening corporate responsibility mechanisms to help increase trust and confidence in banking operations in the country.

The findings further affirm the "sand-the-wheel hypothesis", which positions that bribery, fraud and dishonest behaviours impede progress and contract corporate growth. This is similar to the conclusions drawn by the following studies (Udeh & Ugwu, 2018; Yakubu, 2019; Abud, 2017), which held in their studies that corruption "sand the wheel of progress".

Furthermore, the contrasting findings by Yekini et al. (2020) suggest that corrupt practices are progress-inducing and thus "grease-the-wheel of progress" may be context-specific. Factors such as the institutional environment, legal framework, and degree of economic progress can dictate the nature and magnitude of this relationship and need to be considered in future appraisals.

#### CONCLUSION AND RECOMMENDATIONS

The study employs a regression research design, using secondary data from 1996 to 2022, to examine how CPI affects the return on equity (ROE) of deposit-taking institutions using the Error





Correction technique. The ECM results indicate that CPI tremendously shrinks the ROE of DMBs in Nigeria. Therefore, the study concludes that the CPI impedes the corporate performance (ROE) of DMBs in the country. This conclusion aligns with the "sand-the-wheel hypothesis," which implies that phenomenon has a detrimental consequence on growth and performance. In light of these results, the study recommends that regulatory bodies especially the CBN and anti-corruption institutions like the EFCC to enforce existing legal provisions more effectively to combat and reduce corruption in banking operations in Nigeria. These recommendations underline the significance of implementing measures to enhance transparency, accountability, and good governance in the banking sector. By prioritizing and tackling corruption, regulatory bodies and anti-corruption institutions can foster a more conducive business environment, promote trust in the banking sector, attract investment, and ultimately improve the performance of DMBs in Nigeria.

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