

An Evaluation of Fraud and Deposit Money Banks' Profitability in Nigeria: (2009-2018)

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ABSTRACT

This work evaluates Fraud and Profitability of Deposit Money Banks (DMB's) in Nigeria for ten years (2009-2018); with the specific objective of assessing whether the rate at which fraud occurs, the number of persons involved in fraud, the amount targeted in fraud and the loss that the banks incurred to fraud has significant impact on Profitability for the period. Using Regression Analysis on historical data from Nigeria Deposit Insurance Corporation (NDIC) Reports, we found out that there exists a strong positive correlation between DMB's Fraud and Profitability at more than 90%; and judging by our data analytics at 5% level of significance, the frequency of fraud, fraud amount and monies that could not be recovered from fraud proved to assert strong influence on the profitability of DMB's in Nigeria with only Fraud Involvement proving insignificant. To mitigate fraud, we recommend that banks create fraud policies that are robust enough to prevent fraud perpetrators from committing fraud and a Whistleblowing System (WBS) that guarantees protection for a Whistle Blower.

Keywords: *Fraud, Profit, Profitability, Deposit Money Banks, Performance.*

INTRODUCTION:

Background to the Study:

Albrecht, Albrecht, & Albrecht (2008) define Fraud as a representation about a material point which is false and intentionally or recklessly so; and is believed and acted upon by a victim to the victim's damage. Fraud prevention effort requires that all fraud measures need to be tested and monitored; meaning that all companies need to have an external auditor that will test for strength or weakness of internal control systems; and give a qualified or unqualified report. According to (Ajayi, Ajayi, Enimola & Orugun 2019), profit and profitability are not the same things. They stressed that profitability does not mean profit before or after tax of DMB's but the plausibility of them making a profit, and; is identified by profitability ratio analytics. One amongst such profitability ratio is Return on Equity (ROE). ROE is also known as return on net worth-it simply projects how many naira or kobo that DMB's generates on each naira or kobo of shareholders fund. ROE is sorted out by fractioning Net Income by Shareholders Equity. The interplay between fraud and profitability is what encapsulates discussions in this research effort. (www.Investinganswers.com).

Statement of the Problem:

Fraud is inimical to profit (ability). The rate at which fraud occur, the number of persons involved in fraud, the amount upon which fraud was attempted and the amount lost to the fraud are factors that are case/issue sensitive. The Whistle-Blowing System (WBS)/Customer Help Desk exists because there could be (an) instance(es) where persons assumed or recognized that fraud was occurring but are scared to present information or did not know how to divulge it. A problem is why WBS fails; they do because of a lack of anonymity/protection, poor corporate culture, absence of clear-cut policy guides on fraud, and lack of awareness of the existence of a WBS. The Whistle Blower needs protection; once unprotected, and it is discovered that action might not be taken on a Whistle Blower's Report (WBR), especially when it relates to the management team, the likelihood of dealing with fraud red flags on time will be compromised.

Research Questions:

For Deposit Money Banks (DMB's) in Nigeria (2009-2018); what is the effect of Fraud Frequency on their Profitability, Fraud Involvement on Profitability, Fraud Loss on Profitability, and Fraud Amount on Profitability? And to wrap things up; can we say that, Fraud have significant effect on the Profitability of DMB's in Nigeria?

OBJECTIVES OF THE STUDY:

The general objective of this study is to assess fraud viz-a-viz Deposit Money Banks (DMB's) Profitability in Nigeria. The specific objective of the study seeks to measure the effect of Fraud Frequency (FF), Fraud Involvement (FI), Fraud Amount (FA) and Fraud Loss on Return on Equity of DMB's in Nigeria from 2009-2018.

Research Hypotheses:

Ho₁: Fraud Frequency does not have a significant effect on the Profitability of Nigeria's DMB's

Ho₂: Fraud Involvement does not have a significant effect on the Profitability of Nigeria's DMB's

Ho₃: Fraud Loss does not have a significant effect on the Profitability of Nigeria's DMB's

Ho₄: Fraud Amount does not have a significant effect on the Profitability of Nigeria's DMB's

Ho₅: Fraud does not have a significant effect on the Profitability of Nigeria's DMB's

Scope of the Study:

Profitability in this research is projected in the context of ROE while fraud is explained in the context of the frequency of occurrence, the number of persons involved, the amount involved in the fraud and the amount lost to the fraud. The study covers ten years (2009-2018).

Limitation of the Study:

Profitability in this study is limited to the average ROE of Deposit Money Banks and her fraud report as detailed in year-on-year NDIC Reports.

Operational Definition of Terms:

Fraud Frequency	- The rate at which fraud occurs
Fraud Amount	- The amount involved per reported fraud
Fraud Loss	-The amount unrecovered owing to the fact that fraud had occurred
Fraud Involvement	- The number of persons involved in a fraud
Profitability	- The ability to generate profit

REVIEW OF RELATED LITERATURE:**Conceptual Framework:**

It is a well-established fact that before fraud can take place there must be an item worth stealing; a potential perpetrator willing to steal; and an opportunity for the crime to take place (Ogunleye, 2010). Nwankwo (2013), stressed that Fraud is a deliberate act that causes a business or economy to suffer damages, often in the form of monetary losses. All fraud perpetrators are trust violators (Albrecht,

Albrecht, & Albrecht 2008). Projecting a false representation is a fraud. Ogunleye, (2010), affirmed that fraud impact adversely on the assets of the bank and can be committed by (but not limited to): bank employees, bank staffs (at whatever capacity) and bank vendors. According to the Black's Law Dictionary as cited in (Ogunleye 2010); fraud is a perversion of truth. This oftentimes is done in intentionality to gain undue advantage. According to (Fakunle 2006; Ojeaga, Ikpefan & Odejimi 2014), Bank Management Fraud is the act of manipulation of records and account by management staff in pursuant of self-interest. There are aids to fraud which can be trailed to an institution and societal lapses. This is reflected in poor monitoring and evaluation owing to frail institutional structures by regulatory agencies, poor wages and societal decadence (Adewunmi, 1986; Cahill, Chen & Lambert 2002; Ojeaga, Ikpefan & Odejimi 2014).

Empirical Review:

Ojeaga, Ikpefan, & Odejimi (2014), investigates factors that incite fraud in the banking sector in Nigeria, on times series for fraud obtained from CBN data from 1998 to 2010 using regression estimation method. It was found that high bank deposit was primarily responsible for a high-rise fraudulent occurrence in the Nigerian banking sector particularly management fraud, some other factors that were also jointly responsible for these occurrences include high-interest rates, low commercial bank lending and poor oversight function by the Central Bank and other financial regulatory agencies.

Oloidi & Ajinaja (2014), examine the causes, types, detection, and prevention of frauds and forgeries in Nigeria's banking sector. A questionnaire was designed to collect data from 81 bank branches in South Western Nigeria by ranking causes, types, detection, and prevention order of viciousness with findings that the major factor in play was the problem of an effective internal control system and enforcement of strict adherence. It was recommended that banks should install an effective internal control system and enforce strict compliance with control measures.

Adeusi, Kolapo, & Aluko (2014), examined the factors that influence the profitability of commercial banks in Nigeria based on data gathered from 2000 to 2013 on fourteen banks using time series and cross-sectional data analysis. Profitability is measured with Return on Assets (RoA) while capital adequacy ratio; asset quality; management efficiency; liquidity ratio; inflation; and economic growth are all explanatory variable. The findings revealed that management efficiency, asset quality, and economic growth proved significant as determinant of commercial banks' profitability.

Ani, Ugwunta, Ezeudu, & Ugwuanyi (2012), did an in-depth investigation of the determinants of the profitability of Deposit Money Banks in Nigeria with data set that is made up of 147 bank-level observations over ten years from 2001 to 2010 in respect of 15 banks. Data were obtained from the annual reports and accounts of the sampled banks. Multiple regression analysis was used to estimate the coefficients. Major outcomes of the analysis include that increase in size (higher total assets) may not necessarily lead to higher profits due to diseconomies of scale; higher capital-assets ratio and loans and advances contribute strongly to bank profitability. Overall, the paper suggests bank size, capital and asset composition as the major endogenous determinants of bank profitability in Nigeria.

Nwankwo (2013), evaluated the impact of fraud on the performance of commercial banks in Nigeria. He also sought to ascertain the relationship between bank ATM Fraud, Forged Cheque, Clearing Cheque Fraud and bank performance using regression analysis. The outcome of the research revealed that there is a significant impact of fraud on the performance of commercial banks in Nigeria. The implication of this is that if the level of fraud in the commercial banks if not reduce to the barest minimum, may not allow commercial banks to perform well and contribute significantly to the growth of Nigeria's economy. Nwankwo recommends that there is an urgent need for effective monitoring of bank fraud through the use of ATM to allow for the growth of Nigeria's commercial banks' performance.

Akinwumi, Michael & Raymond (2017), researched four Deposit Money Banks in Nigeria between 2007 and 2016, using Pearson correlation co-efficient technique. The empirical results revealed that there is a statistically significant relationship between banks' liquidity, return on asset and return on equity. However, the relationship is not all that statistically significant when the return on asset was used as a proxy for profitability. It was suggested that the banks should evaluate and redesign their liquidity management strategy so that it will optimize returns to shareholders' equity and also optimize the use of the assets. The study showed that good management and control of factors

influencing the liquidity of commercial banks in the country could improve the financial performance of banks.

Adetoso & Akinselure (2016), examine fraud control and fraud prevention in selected Nigerian commercial banks in Nigeria. The methodology used was based on primary data, which were gotten through one hundred and fifty (150 questionnaire to selected respondents. This data was then analyzed using statistical tools such as; Ordinary least square, Durbin Watson and P-value in EViews, which were also used for the interpretation of the hypotheses in this study. The result of the analysis shows that there was a significant relationship between fraud control and fraud prevention because their proxies considered in the study such as; Management control, internal audit, and whistleblowing showed a P-values of 0.0004 and 0.0001, which were lower than the 5% critical value specified in E-views for this analysis. Based on this result, the study concludes and recommends among other things, that Management policies must be able to strengthen both fraud control and fraud prevention of commercial banks based on the sample study since the proxies of both variables have a significant effect on each other.

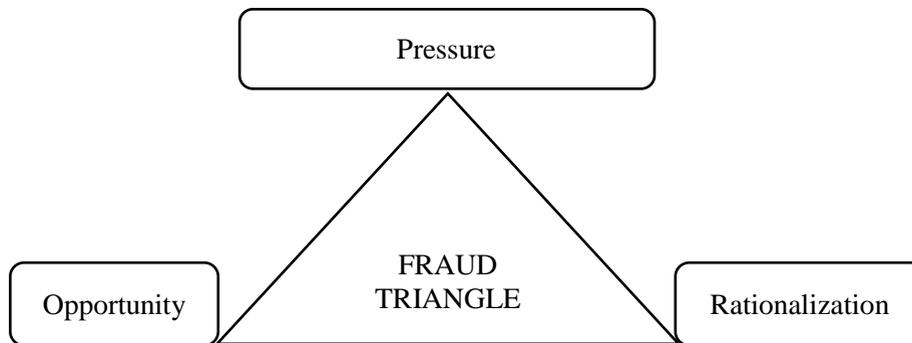
Gap in Literature:

Some literature on fraud used the total deposit as a proxy for the performance of Banks but nothing should explain performance in this regard than profit/profitability since these Banks are profit-driven. Proxies like Net Interest Margin, Return on Asset, Return on Equity among other profitability ratios should be used to proxy profitability while Profit Before/After Tax should be used to proxy profit. However, a blend of these parameters can be used as a dependent variable proxy for measuring fraud against performance. This work used ROE as a proxy for profitability as not many literatures examined it that way.

Theoretical Framework:

Cressey Fraud Theory:

Figure 1: Fraud Triangle

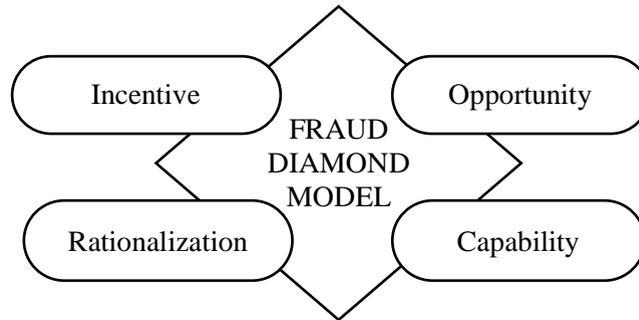


Source: Kassem & Higson (2012)

Every fraud transcends three factors were a non-shareable financial problem, opportunity to commit the trust violation, and rationalization by the trust violator (Kassem & Higson, 2012). As regards non-shareable financial problem, Cressey stated that: “[p]ersons become trust violators when they conceive of themselves as having incurred financial obligations which are considered as non-socially sanctionable and which, consequently, must be satisfied by a private or secret means” (Cressey, 1950). Cressey emphasized that window for perpetration of fraud is opened when fraudsters sees a hole via which fraud can be committed are damn sure that they will not be caught. (Kassem & Higson, 2012). As per rationalization, Cressey believed that most fraudsters are new to it; most times they do not have former criminal record but are pressured to commit fraud and would like to use personal expediences to justify (Kassem & Higson, 2012).

Wolfe and Hermanson Fraud Theory:

Figure 2: Fraud Diamond

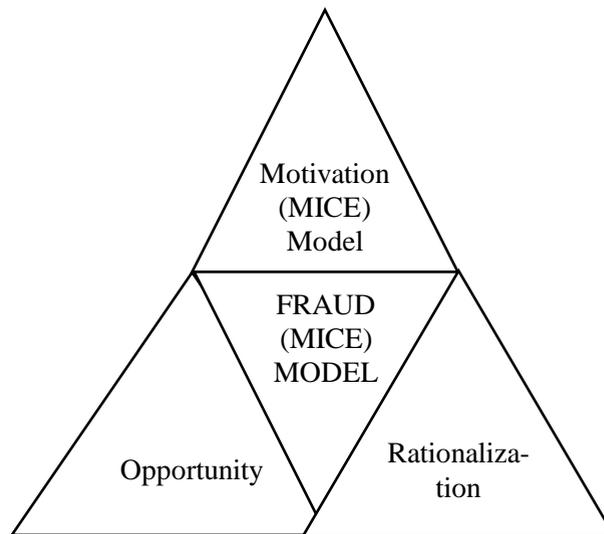


Source: Author (2019)

In 2004, Wolfe and Hermanson introduced the “Fraud Diamond Model” Wolfe and Hermanson believed many frauds would not ordinarily have occurred without the right person that possesses the right capabilities for implementing the details of the fraud. They put forward four observable signals to fraud which transcends; authoritative position/function within the organization, capacity to understand and exploit accounting systems and internal control weaknesses, confidence that she/he will not be detected when and if fraud is perpetuated and capability to deal with the stress created within a seemingly good person when she commits bad acts.

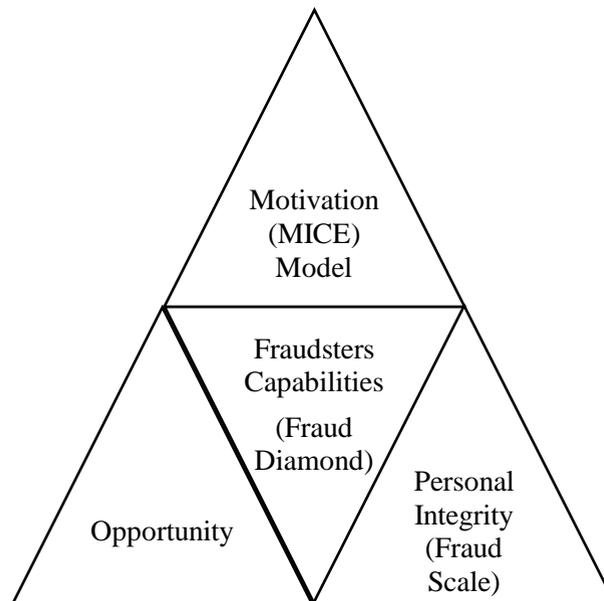
Kranacher, Riley & Wells Fraud Theory:

Figure 3: Fraud MICE Model



Source: Kassem & Higson (2012)

“MICE” model was proposed by Kranacher, Riley & Wells 2010 as cited in (Kassem & Higson, 2012). Here, motivation is the inducements of fraud committers, and it is wrapped in Money, Ideology, Coercion and Ego. Motivation wrapped in MICE is what replaces the pressure angle of Cressey’s Fraud Triangle Model; thus, before fraudsters commit fraud, there must be a motivation that is induced by MICE and an opportunity that makes the perpetrator to rationalize that by committing the act, the likelihood of being caught is slim or not there at all (Kassem & Higson, 2012). Also, (Dorminey, Fleming, Kranacher & Riley 2012) argued that two sides of the fraud triangle, pressure, and rationalization, cannot be easily observed; thus, the model cannot solve the fraud problem alone.

Kassem and Higson's New Fraud Triangle Model:**Figure 4: New Fraud Triangle Model**

Source: Kassem & Higson (2012)

According to the New Fraud Triangle Model as presented by (Kassem & Higson 2012), the fraudsters capability is central to any fraud occurrence. They opined that for fraud to occur, there must be an incentive/inducement/motivator in the form of MICE and an opportunity aided by a weak control system; and a ready perpetrator whose personal integrity has been compromised (Kassem & Higson). Obviously, all fraud theories explained in this work takes their bearing from Cressey's Fraud Triangle Model, but, the New Fraud Triangle Model is upheld for this work as it centres on fraudsters capabilities.

METHODOLOGY:**Research Design:**

The data used are secondary and is quantitative by design as it requires rigorous data analysis.

Population of the Study:

The population of this study is based on the Fraud Frequency, Fraud Involvement, Fraud Loss, Fraud Amount and Return on Equity estimates of all Deposit Money Banks in Nigeria.

Sample Size and Sampling Techniques:

The sampling technique used in this work is purposive as it covers 10 years (2009 - 18).

Source and Method of Data Collection:

All data used in the analysis are secondary and are sourced from NDIC Annual Reports (2009-2018).

Technique of Data Analysis:

This study adopted the Regression Analysis using E-Views 9.

Description of Research Variable:

The Independent Variables (IV)-otherwise known as a predictor variable in this research are Fraud Frequency, Fraud Involvement, Fraud Loss and Fraud Amount of DMB's. The Dependent Variable (DV) of this work is ROE of Nigeria's DMB's

Model Specification:

$$ROE = \beta_0 + \beta_1 FF + \beta_2 FI + \beta_3 FL + \beta_4 FA + \mu_i \text{-----Research Model}$$

Where: ROE -Return on Equity
 FF -Fraud Frequency
 FI -Fraud Involvement
 FL -Fraud Loss
 FA -Fraud Amount
 μ_i -Error Term

DATA PRESENTATION AND ANALYSES:

Data Presentation:

Table 4.1: Hereunder is the data set for this research effort.

Year	Roe (%)	Fraud Frequency	Fraud Involvement	Fraud Amount (N In Billion)	Fraud Loss (N In Billion)
2009	-64.72	1,764	656	41.27	7.55
2010	162.98	1,532	357	21.29	11.68
2011	-0.28	2,352	498	28.4	4.07
2012	22.2	3,380	531	18.05	4.16
2013	19.14	3,756	682	21.8	5.76
2014	20.34	10,621	465	25.61	6.19
2015	19.78	12,279	425	18.02	3.17
2016	12.56	16,751	231	8.68	2.4
2017	4.7	26,182	320	12.01	2.4
2018	9.73	37,817	899	38.93	15.15

Source: NDIC Report (2009-2018)

Data Analyses:

Table 4.2: Descriptive Statistics

	ROE	Fraud Frequency (FF)	Fraud Involvement (FI)	Fraud Loss (FL)	Fraud Amount (FA)
Mean	20.64300	11643.40	506.4000	6.252323	23.40489
Median	15.85000	7188.500	481.5000	4.956500	21.54321
Maximum	162.9800	37817.00	899.0000	15.15000	41.26550
Minimum	-64.72000	1532.000	231.0000	2.396000	8.683000
Std. Dev.	56.20257	12204.89	196.9987	4.201786	10.54717
Skewness	1.482191	1.113264	0.581855	1.109880	0.457281
Kurtosis	5.739208	3.063646	2.681634	3.054170	2.254930
Jarque-Bera	6.787842	2.067283	0.606490	2.054278	0.579814
Probability	0.033577	0.355709	0.738418	0.358030	0.748333
Sum	206.4300	116434.0	5064.000	62.52323	234.0489
Sum Sq. Dev.	28428.56	1.34E+09	349276.4	158.8950	1001.186
Observations	10	10	10	10	10

Source: E-views 9

Table 2 above shows that for Nigeria’s deposit Money Banks (DMB’s) during the period, Return on Equity (ROE) had a mean value of 20.64% with minimum and maximum rates at -64.72% and 162.98% respectively, and the standard deviation of 56.20% which is high thus not far away from the mean, suggesting that ROE do not exhibits a considerable clustering around the mean. Similarly, the mean of Fraud Frequencies (FF) stood at 11,643 occurrences over the period investigated with minimum and maximum occurrences of 1,532 and 37,817 respectively. A standard deviation of 12,205 occurrences which is high suggests that FF does not indicates a considerable clustering around the mean.

Fraud Involvement (FI) mean as reported, comprises of 506 persons with a minimum and maximum of 231 persons and 899 persons respectively, with a standard deviation (S.D.) of 197 persons. This is lesser than the mean, and it suggests that the number of reported FI’s do exhibits a considerable skewness around the mean. Meaning that there are no persons involved in fraud in banks that are not impressively reported. Also, Fraud Amount (FA) average in bank stood at ₦23.40489 billion (₦ 23,404,890,000) for periods investigated, with a minimum and maximum FA of ₦8.683000 billion (₦8, 683,000,000) and ₦41.26550 (₦41,265,500,000) respectively and having a standard deviation of ₦10.54717 billion (₦10,547,170,000) which is less than the mean which is suggests that the FA of DMB’s in Nigeria from 20019-18 is skewed around the mean. As for Fraud Loss (the amount lost to fraud), the mean value stood at ₦6.252323 billion (₦6,252,323,000); the minimum value for the period is ₦2.396000 billion (₦2,396,000,000); with maximum value at ₦15.15000 billion (₦15,150,000,000); and a standard deviation of 4.201786 billion (₦4,201,786,000). The standard deviation is lesser than the mean which affirmed that for the period (2009-2018), Fraud Loss (FL) does exhibits considerable clustering around the mean. Moreover, (Peck, Olsen, & Devore 2008), posits that; the clustering confirm if there is deviance from normality in data set, the statistics were between the ranges of (-3 and +3) which in itself suggest that the data emanated from a normally distributed series. In reinforcing this, the Jarque-Bera Statistics (J.B.S.) for normality test was not significant for all variables at 5%, thereby affirming that the distribution of the series is normal (Studenmund, 2000).

Durbin Watson (D.W.) Test:

For D.W. test, values in the range of 1.50 to 2.50 are relatively normal. What would be a cause for concern is value outside this range. According to (Field, 2009), values less than 1 or more than 3 are a definite cause for concern. Since DW Stat. is 2.4875 is between the range, it means the model is verified not to have autocorrelation and can be said to have satisfied the no serial correlation assumption.

Serial Correlation Test:

Table: 4.3

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	13.90033	Prob. F(2,3)	0.0304
Obs*R-squared	9.025995	Prob. Chi-Square(2)	0.0110
Test Equation:			
Dependent Variable: RESID			
Method: Least Squares			
Date: 09/04/19 Time: 10:56			
Sample: 2009 2018			
Included observations: 10			
Presample missing value lagged residuals set to zero.			

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.27308	10.12545	2.298473	0.1051
FF	-0.000763	0.000312	-2.445120	0.0921
FI	0.117113	0.035585	3.291067	0.0460
FL	-2.806689	1.177409	-2.383784	0.0973
FA	-2.451061	0.732405	-3.346595	0.0442
RESID(-1)	-1.134707	0.253148	-4.482382	0.0207
RESID(-2)	-1.604295	0.324780	-4.939634	0.0159
R-squared	0.902599	Mean dependent var		-3.11E-14
Adjusted R-squared	0.707798	S.D. dependent var		16.51480
S.E. of regression	8.927188	Akaike info criterion		7.412107
Sum squared resid	239.0840	Schwarz criterion		7.623917
Log likelihood	-30.06054	Hannan-Quinn criter.		7.179753
F-statistic	4.633443	Durbin-Watson stat		2.487537
Prob(F-statistic)	0.117987			

Source: E-views 9 Output

From the Breusch-Godfrey (LM) test for Serial Correlation, the null hypothesis stating that there is no serial correlation was accepted, $F(2,3) = 0.0304$, $p > 0.05$ (Studenmund, 2000).

Constant Residual Error Test:

Table: 4.4

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.892596	Prob. F(4,5)	0.5307
Obs*R-squared	4.165956	Prob. Chi-Square(4)	0.3840
Scaled explained SS	0.730398	Prob. Chi-Square(4)	0.9475
Test Equation:			
Dependent Variable: RESID^2			
Method: Least Squares			
Date: 09/04/19 Time: 11:08			
Sample: 2009 2018			
Included observations: 10			

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	447.1829	296.9487	1.505926	0.1924
FF	0.003620	0.009645	0.375381	0.7228
FI	-1.185825	0.974116	-1.217334	0.2778

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FL	-42.98740	36.38333	-1.181514	0.2905
FA	26.72095	19.39406	1.377791	0.2267
R-squared	0.416596	Mean dependent var		245.4649
Adjusted R-squared	-0.050128	S.D. dependent var		306.4331
S.E. of regression	314.0196	Akaike info criterion		14.64364
Sum squared resid	493041.5	Schwarz criterion		14.79493
Log likelihood	-68.21820	Hannan-Quinn criter.		14.47767
F-statistic	0.892596	Durbin-Watson stat		2.871126
Prob(F-statistic)	0.530727			

Source: E-views 9 Output

To test for serial correlation of the error term, it is said to be satisfactory when the hypothesis of no constant residual error in the model is rejected.

The Breusch-Pagan-Godfrey test of heteroskedacity was conducted to test the serial correlation of the error term. The result of the analysis revealed the absence of heteroskedasticity, $F(4,5) = 0.5307$, $p > 0.05$ (Studenmund, 2000). This implies that the residual error is constant in the series.

Ordinary Least Square Regression Result:

Table: 4.5

Dependent Variable: ROE				
Observations: 10				
_VARIABLE	_COEFFICIENT	_STD. ERROR	_T-STATISTIC	_PROB.
C	97.90639	20.95243	4.672795	0.0055
FF	-0.002041	0.000681	-2.999581	0.0301
FI	-0.078050	0.068733	-1.135557	0.3076
FL	17.19041	2.567175	6.696236	0.0011
FA	-5.189156	1.368427	-3.792060	0.0127
R-squared	0.913656	Mean dependent var		20.64300
Adjusted R-squared	0.844580	S.D. dependent var		56.20257
S.E. of regression	22.15693	Akaike info criterion		9.341031
Sum squared resid	2454.649	Schwarz criterion		9.492323
Log likelihood	-41.70515	Hannan-Quinn criter.		9.175063
F-statistic	13.22690	Durbin-Watson stat		2.373690
Prob(F-statistic)	0.007195			

Source: E-views 9 Output

Table 4.6:
Explainer to Table 4.5

Factor	p-Value	Sig @ 5% (λ)	Finding	Decision on H_0
Fraud Frequency	0.03	0.05	p-Val.< λ	Reject
Fraud Involvement	0.31	0.05	p-Val.> λ	Accept
Fraud Loss	0.00	0.05	p-Val.< λ	Reject
Fraud Amount	0.01	0.05	p-Val.< λ	Reject
Fraud (Goodness-of-fit)	0.01	0.05	p-Val.< λ	Reject

Source: Decision Rule as explained by (Gujarati & Potter 2009)

From the Ordinary Least Square Result in Table 3, we can see that there exists a significantly negative relationship between Fraud Frequency (FF), and Return on Equity (ROE) of DMB's t -Stat. $(-2.999581, -0.002041) = 0.0301$, p -value < 0.05. This infers that a unit rise in Fraud Frequency will cause a lessening in ROE of DMBs. Still, the degree of this lessening will be significant when compared to Total Equity. The result, therefore, rejects the null hypothesis of no significant impact of Fraud Frequency on the profitability of DMBs in Nigeria. Also, for Fraud Loss (FL) on ROE, DMB's t -Stat. $(6.6962, -17.19041) = 0.0011$, p -value < 0.05. This is the basis for which the hypothesis that FL does not impact significantly on ROE will be accepted. Likewise, Fraud Amount (FA) has a t -stat. $(-3.792060, -5.189156) = 0.012$; p -value < 0.05. This proves significant and prompts the rejection of the hypothesis that Fraud Amount (FA) does not impact significantly on the profitability of Deposit Money Banks (DMB's). In contrast; for Fraud Involvement (FI) on ROE: such that, DMB's t -Stat. $(-1.135557, -0.078050) = 0.3076$, p -value > 0.05. This is the basis for which the hypothesis that FA does not impact significantly on ROE will be accepted.

The coefficient of determination (R^2) of 0.914 implies that 91.4% of the variation in the dependent variable (ROE) is explicated by the independent variable (FF, FI, FL, and FA) while 8.6% were triggered by variables not included in the model. This affirms that the model is robust enough for quality decision modelling for fraud and profitability of Nigeria's Deposit Money Bank's for the period in focus (2009-2018). Similarly, the adjusted coefficient of determination \bar{R}^2 at 0.845 projects that 84.5% of the variation in the dependent variable is caused by variation in the independent variables while 15.5% of the variation in dependent variables is explained by other variables not captured in the model but explained by error term. The F -Stat. for the overall goodness-of-fit stood at $F(13, 22690) = 0.007195$, p -value > 0.05. Thus; one can posit that with the exemption of the intercept, it is not all the parameter in the model are statistically significant at 5% level.

DISCUSSION OF FINDINGS:

Our findings show that there exists a positive and significant relationship between Fraud and ROE during the period under focus. This study is in agreement with the works of (Nwankwo 2013; Adetoso & Akinselure 2016; Akinwumi Michael & Raymond (2017)). They all project the impact of Fraud on Profitability/Performance of Banks to be significant.

SUMMARY:

This research effort explores Fraud and Profitability of Deposit Money Bank's in Nigeria using secondary data for ten years (2009-2018).

CONCLUSION:

From our findings, the rate at which fraud occurs, the amount targeted when fraud is perpetrated and the actual loss incurred by DMB's owing to occurrence of fraud all prove significant meaning that they assert strong significant and positive influence on Profitability; while the number of persons involved in the fraud proves insignificant to profitability of DMB's during the period reviewed. On a wholistic note, our finding shows that during the period reviewed, fraud has a positive significant relationship with the profitability of DMB's in Nigeria.

RECOMMENDATIONS:

This paper hinges her recommendations on Internal Control Weakness Mitigation; continuous improvement in Bank Management Software, Whistleblowing System (WBS) and Sound Fraud Policy. Once the probability of success is higher than the probability of failure in fraud attempt-opportunity to perpetuate it is created; and if the perpetrator(s) succeeds, he/she/they become braver and braver. Mitigation of Internal Control Weakness (es) helps in reducing Fraud Amount (FA); since fraudsters are unrelenting, continuous investment and improvement in management software used by DMB's would aid the speed at which fraud is detected once committed. That way, Fraud Frequency (FF)/rate of occurrence of fraud, will reduce as the rationalization to commit fraud becomes less attractive. This will transcend in a reduction in Fraud Involvement (FI). A sound Whistleblowing System (WBS) and Fraud Policy (FP) would prevent fraud and also help in preventing the preventer from becoming complicit.

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