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Original Research Article

## **Risk Management and Performance of Nigerian Deposit Money Banks**

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### **Abstract**

*This study examined the effect of Risk Management (Interest rate risk and Exchange rate risk) on the performance of selected Nigerian Deposit Money Banks from 2008 -2017. The study employed secondary data which were obtained from the audited annual financial records of the banks. Purposive sampling was used to select a sample size of 15 banks listed on the Nigerian Stock Exchange. The data were analysed using content analyses, percentages and fixed-effect model. The results showed a negative significant relationship between interest rate risk and the performance of the Nigerian Deposit Money Banks and a positive but insignificant relationship between exchange rate risk and the performance of the Nigerian Deposit Money Banks. Consequently, the study recommends that Nigerian Deposit Money Banks holistically review their interest-bearing assets and liabilities, especially, the loan assets portfolio. The modalities for advancing credits to customers should also be reviewed to accommodate the changing economic realities in the country, as evidenced by the economic recession of 2016 and the current inflationary trend.*

**Keywords:** Risk Management, Exchange Rate Risk, Interest Rate Risk, Performance, Nigerian Deposit Money Banks

### ***JEL Classification Code: M41***

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## INTRODUCTION

Risks are part of business operations since firms cannot operate without taking risks. The level of risks taken up by any business venture determines its level of performance. Thus, by the rule of thumb, the higher the risk levels, the higher the gains from the venture (Fadun, 2013). Hence, risk is a driver of strategic decisions, which may be a cause of uncertainty in an organisation or may simply be embedded in the activities of the organisation (Dabari & Saidin, 2015). Banks' performance is being affected by macro-economic fluctuations in economic growth rate, inflation rate, interest rate, and increases in money supply (Abdrahamane, Xi, Alpha & Kargbo, 2017).

Generally, banks are subject to different types and levels of risks as they carry on their business operations. The risks faced by banks are principally divided into two, namely: the financial and non-financial risks. One of the major problems confronted by many organisations, especially those who have their shares quoted on the Stock Exchange where their value is a function of prevailing market conditions, is the financial risk (Kassi, Rathnayake, Louembe & Ding, 2019). Interest and exchange rate risks constitute significant components of the financial risks types. These risks are essential because investors cannot eliminate them through portfolio diversification (Kassi *et al* 2019). These are the risks an institution faces as a result of movements in market prices in relation to changes in interest rates, foreign exchange rates, and prices of equity and commodity (Muriithi, Muturi & Waweru 2016). The exchange and

Interest rate risks have the likelihood of leading to significant losses that can occur regularly in economies that are volatile and consequently can lead to the total collapse of such economies (Muriithi et al., 2016). However, some banks can show more resilience to risks and better adjustment than the others (Olamide, Uwalomwa & Ranti, 2015; Oluwagbemiga, Isaiah & Esiemogie 2016; Muriithi et al., 2016; Kassi, Rathnayake, Pierre & Ding, 2019), hence the difficulty in predicting the overall effects of a company's exposure to risks. In response to the global financial crises of 2008, which crippled the performance and existence of various financial institutions and corporate organisations, the government of different countries came up with different strategies to rescue and forestall a re-occurrence of such magnitude of the financial tragedy in their various domain (Hawkins & Mihaljek, 2001; Otieno, Nyagol & Onditi, 2016a; Otieno, Nyagol & Onditi, 2016b).

The efficient management of the financial sector is very important in any economy because the sector fuels economies' activities. Attention is being drawn to Deposit Money Banks' management and operations as a result of their import to modern economies (Akinkunmi, 2017). Deposit Money Banks are a major player in Nigerian financial institutions. They help mobilise funds from areas of surplus as evident in savings, to areas of deficit, in the form of credits. The difference between interest rate income from credits and interest rate expense from savings is referred to as interest rate spread in an economy (Kalsoom & Khurshid, 2016). A major determinant of

banks' profitability in many economies has been identified as the interest rate (Aboagye, Akoena, Antiwi-Asare & Gockel, 2008). Therefore, interest rate risk is a principal aspect of the risks that banks in Nigeria face. Interest rate risk is the effect that changes in interest rate would have on the earnings and net asset values of organisations in the future (Vincent & Allain, 2013). Hence, the management of interest rate risk is of utmost importance to the continued existence or going-concern of business organisations, especially banks. The exchange rate also plays a crucial role in the financial performance of organisations. It directly impacts the general price level, resource allocation, and decisions to invest in companies and the profitability of organisations (Ehimare, 2011; Okika, Francis & Greg, 2018; Moyo & Tursoy, 2020). Fluctuations in a firm's value occasioned by the exchange rate dynamics are referred to as exchange rate risk (Madura, 1989). It is the possibility of a direct or indirect loss in assets and liabilities, cash flows, net profit, and consequently, the firm's market value as a result of movement in exchange rate. Commercial banks particularly are exposed to this risk when foreign currency move in an unfavourable direction. Extant literature has established three variants of exchange rate exposures. These are: Transaction, economic and translation exposures. However, these economic and transaction exposures have been established to adversely affect commercial banks (Offiong, Riman & Akpan, 2016). Unmitigated mild exchange risk can lead to a decrease in banks' profit in the short run, while unfavourable movements in the exchange rate of large magnitude could lead to failure and eventual collapse. Consequently, this has led to an increase in the interest in banks' foreign exchange

exposure by both the central and individual banks. This increasing interest in the foreign exchange exposure of banks is because of the devastating effect it could have on risk management (Wong, Wong & Leung, 2008).

The aftermaths of the global financial crises have continued to expose banks to a high degree of risks. The increase in risks might be a threat to the performance of banks. Consequently, banks devise various strategies or practices in managing these risks. However, there is a dearth of studies focusing on interest and exchange rate risk management and performance of deposit money banks in Nigeria. Hence, this study analyses the effect of interest rate and exchange rate risks management on Nigerian Deposit Money Banks' performance.

## **2. LITERATURE REVIEW**

The place of the banking industry in any economy cannot be over-emphasised. It is the primary lender to businesses at various level. The nature of banks makes them vulnerable to a lot of internal and external challenges (Aruwa & Musa, 2014). The rate of bank failure in Nigeria is of utmost concern to the stakeholders because the performance of those banks ultimately affects them. The uninterrupted effectiveness of the operations of banks serve the overall interest of stakeholders. However, the business of banking, by its nature is one that is embedded in many risks. Risks though superficially, undesirable, inherently can positively impact a business if managed well. Aruwa and Musa (2014) and Valipour and Vahed (2017) submit that the inability of banks to take risk or take too little risk might disrupt the growth of the economy, while

uncontrolled risk-taking can serve as a threat to the stability of the economy.

Consequently, the onus rests on financial regulatory bodies and the government to issue regulations maintain stability in banks' performance. Effective and efficient management of banks' risks is rewarding to them both in the short and long run. Extant literature had proved a positive relationship between acceptable risk management practices and financial performance improvement (Oluwagbemiga, Isaiah & Esiemogie, 2016; Wisdom, Muideen & Akindele, 2018).

An identified major driver of banks' failure is interest rate risk. Ngalawa and Ngare (2014) reported that researchers and supervisors hitherto had concentrated their interest in operational and credit risk, but of recent, there is a developing interest in interest rate risk. This developing interest in interest rate risk is because interest rate risk serves as a threat to financial system stability. The risk of interest rate is part and parcel of banking operations, and it is central to its performance. Therefore, the need arises for interest rate risk to be maintained at a level that can be adjudged prudent (The Basel Committee on Banking Supervision, 2004). The management of interest rate is very important to banks' financial and economic health because it aims to keep interest rate risk at its barest minimum. The management of interest rate risk involves the timely identification, measurement, monitoring and control of exposure to interest rate risk (Kolapo & Fapetu, 2015).

Papaloannou (2006) and Isaac (2015) maintained that the management of exchange rate risk is an essential part of foreign exchange exposure decisions to be taken by organisations. Understanding the

agents of the economy and the possession of skills to handle the aftermaths of the implication is required for currency risk management (Barton, Shenkir & Walker, 2002). Banks' profits and returns sensitivity greatly influences exchange rates and interest rates risks (Saunders & Swary, 1986, cited in Isaac, 2015).

Recently, the Nigerian currency (naira) has continued to depreciate when compared with the American Dollar. Some financial and economic analysts have associated this with the nation's foreign exchange reserve decline the continuous reduction in the price of oil in the global market. In the same vein, the aftermaths of the global economic crises led to some unscrupulous activities by banks; where they have to sell Central Bank of Nigeria bought foreign currencies to operators in the shadow market unofficial rates. These led to fluctuations, misalignment and instability of exchange rates.

To ascertain the risk level and investigate the relationship between performance and risk management among quoted Ghanaian banks using panel regression, Jaiye (2009) found that the banks have high-risk indexes and that risk management had a positive relationship with ROE.

Evident losses from banks' aggressive lending practices point to the failure to manage risk, apart from apparent weak internal control, deficient managerial disposition and other operational inefficiencies (Andrea, 2010). In addition, Beasley, Landes and Thomson (2010) have expressed profound worry over non-compliance which has culminated in the dissatisfactory state of ERM implementation in most organisations, despite its importance.

In Turkey, Önder and Ergin (2012) reported a negative relationship between profitability and ERM implementation among companies in the Istanbul Stock Exchange, with the key factors being leverage and company size.

To investigate the effect of risk management on Banks performance in Nigeria, Olamide, Uwalomwa and Ranti (2015) used ordinary least square (OLS) regression to test the hypotheses with data generated from the annual reports of banks listed on the Nigeria stock exchange. The findings of this study showed a negative non-significant relationship between risk management and the performance of banks. This finding implies that the performance of listed banks in Nigeria did not respond appreciably to the efforts invested in risk management. Nonetheless, in their work on the effect of market risk on 43 commercial banks' financial performance in Kenya, Muriithi et al. (2016) used financial leverage, interest rate, and foreign exchange exposures to capture market risk and return on equity for performance. The study employed the use of secondary data and panel data methodology using the fixed and random effect and the GMM for years 2005-2014. It was found that financial leverage, interest rate and foreign exchange risk have a negative and significant relationship with bank profitability. Similarly, Oluwagbemiga, Isaiah, and Esiemogie (2016) studied the relationship between risk management practices and financial performance of Nigerian listed banks and found that risk management practices had a statistically significant impact on the financial performance of banks. This study, unlike Muriithi et al. (2016), relied on both primary and secondary data.

Wisdom, Muideen, and Akindele (2018), examined the impact that credit and

liquidity risk management have on the performance of deposit money banks in Nigeria using panel data and other econometric techniques. The study found that there exists a positive relationship between risk management and the financial performance of deposit money banks in Nigeria. Also, in a survey of 304 small and Medium Scale Enterprises (SMEs) in Pakistan using a structured questionnaire, Yang, Ishtiaq, and Anwar (2018) were interested in the moderating role of competitive advantage and financial literacy. In this regard, Yang et al. (2018) found that ERM practices had a significant impact on the competitive advantage of SMEs performance, with a partial or semi-mediation of the relation between ERM practices and SMEs performance by competitive advantage as well as the significant moderation of the relation between ERM practice and competitive advantage by financial literacy. In addition, Kassi, Rathnayake, Pierre and Ding

(2019) examined 31 non-financial companies on the Casablanca Stock Exchange between 2000-2016 the fixed and random effect, difference and system GMM models. It was found that market risk indicators had a negative and significant influence on companies' performance. The authors employed return on asset (ROA), return on equity (ROI) and profit margin to measure performance, whereas the market risk was assessed by the degree of leverage, book to market ratio, and gearing ratio.

Akinselure and Akinola (2019), in their study on the impact of credit management on the performance of deposit money banks in Nigeria using secondary data of 13 banks, return on assets and equity for profitability and multiple regression for analysis of generated data, found that credit

management is significantly related to the profitability of the selected banks. However, this position was negated with Ndubuisi and Amedu (2018) findings on investigation of the relationship between credit risk management and performance of Fidelity Bank Plc between 2010-2016 using the Pearson Coefficient. The study found an insignificant relationship between the two variables in the bank under study. The difference in these two studies' findings could be accounted for by the number of banks involved in each study.

Oduro, Asiedu, and Gadzo (2019) investigated the factors that determine banks' credit risk level and their consequent effect on organisations' financial performance using the financial data of banks listed on the Ghana Stock Exchange between 2003-2017. Through the use of a two-stage least square (2SLS), the study found that operating efficiency, capital adequacy, net interest margin and profitability had an inverse relationship with credit risk while the financing gap and the bank size positively affect credit risk.

### 3. METHODOLOGY

The study employed secondary data which were obtained from the audited annual financial records of the sampled banks. Fifteen (15) banks were purposely selected from the population of 22 banks listed on the Nigerian Stock Exchange. Data

collected were analysed using content analysis, percentages, and a fixed-effect model.

In order to achieve the objective of the study, the model estimated was adopted from the work of Kommunuri, Narayan, Wheaton and Jandug (2016) specified as:

$$FP_{it} = f(FS_{it}, RM_{it}, LEV_{it}, AGE_{it}, AI_{it}, CS_{it}) \quad (1)$$

where  $FP$  represents financial performance of banks;  $FS$  represents the firm size;  $RM$  is risk management;  $LEV$  is the leverage;  $AGE$  stands for the firm's age;  $AI$  is audit independence; and  $CS$  represents compliance with standards in preparing a financial report.

The explicit form of equation (1) is given as;

$$FP_{it} = \chi_i + \beta_i FS_{it} + \kappa_i RM_{it} + \nu_i LEV_{it} + \varpi_i AGE_{it} + \phi_i AI_{it} + \kappa_i CS_{it} + \mu_i \quad (2)$$

Where  $\chi$  is the constant parameter while,  $\beta$ ,  $\kappa$ ,  $\nu$ ,  $\varpi$ ,  $\phi$  and  $\kappa$  are intercepts of the included variables;  $\mu$  is the random error term for the model;  $i$  stands for the individual bank examined while  $t$  denotes the time span under investigation.

In this study, the variables used are specified in Table 1 alongside their measurement.

Measurement of Variables

**Table 1: Variable Description and Operationalisation**

Variable	Measurement	Source	Position of Variable	Previous Studies
Risk Management (RM)	Risk Management includes; Exchange Rate Risk and Interest Rate Risk. Interest rate risk is taken as the net market value of the Banks' assets and liability while Exchange rate risk is the banks' investments in foreign currencies.	Financial Reports of Banks 2008 to 2017	Independent	Beasley et al., (2010); Njogo (2012); Ayodele & Alabi (2014)
Firm Size (FS)	Log of Total Assets	Financial Reports of Banks 2008 to 2017	Control	Şenol & Karaca (2017); Yang, <i>et al</i> (2018)
Audit Independence (AI)	Log of Audit Fee	Financial Reports of Banks from 2008 to 2017	Control	Beasley et al. (2005); Desender (2011)
Age (AGE)	Number of years of the bank from the incorporation date	Financial Reports of Banks from 2008 to 2017	Control	Gordon, Loeb & Tseng (2009); Şenol & Karaca (2017); Yang, <i>et al.</i> , (2018)
Compliance with Standard (CS)	$\frac{\text{Audit Fees}}{\text{Total Assets}}$	Financial Reports of Banks from 2008 to 2017	Control	Paape & Spekle, (2011)
LEV	$\frac{\text{Total Liabilities}}{\text{Total Assets}}$	Financial Reports of Banks from 2008 to 2017	Control	Önder & Ergin, (2012); Şenol & Karaca (2017)
Firm Performance	$\frac{\text{Net Profit}}{\text{Total Assets}}$	Financial Reports of Banks from 2008 to 2017	Dependent	Gordon, Loeb & Tseng (2009); Şenol & Karaca (2017); Yang, <i>et al</i> (2018)

**4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS**

**Table 2: Descriptive Analysis**

	RMERR	RMIRR	CS	AGE	FS	AI	ACI	FP	LEV
Mean	141 Million	229 Million	0.00	39.63	1.31 Trillion	164 Million	8.29	681 Million	0.84
Median	111 Million	123 Million	0.00	26.00	911 Billion	120 Million	0	12.96 Million	0.86
Maximum	1.6 Billion	3.94 Billion	0.09	123.00	6.86 Trillion	1.07 Billion	60	65.7 Billion	8.83
Minimum	254 Million	198 Million	0.00	2.00	1.33 Billion	20 Million	0	82.551 Million	0.31
Standard Deviation	216 Million	454 Million	0.01	31.33	1.25 Trillion	139 Million	10.18	5.99 Billion	0.70
Skewness	3.14	5.72	7.84	1.29	1.82	3.59	1.30	10.09	9.81
Kurtosis	20.52	45.67	62.50	3.69	6.94	20.70	6.26	107.52	113.98
Jarque-Bera	1574.17	8211.41	20352.28	44.36	166	1961.08	106.82	62326.27	79387.91
Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Observations	109	101	129	150	138	129	148	132	150

Source: Researchers' Compilation, 2019

The descriptive statistics of the variables under investigation are presented in Table 2. The table shows the minimum, maximum and mean values of the study variables, including the standard deviation and the Skewness, Kurtosis and the Jarque-Bera value and probability. It was noted that all

variables are positively skewed, and as such, not normally distributed. However, in the case of Kurtosis, no value shows a normal distribution as presented in the column for Kurtosis. This was confirmed by the Jarque-Bera statistics and its associated probabilities

**Table 3: Correlation Analysis**

	RMERR	RMIRR	FS	AI	FP	LEV	CS	AGE
RMERR	1							
RMIRR	0.22	1						
FS	0.54	0.40	1					
AI	0	0	1	1				
FP	-0.01	-0.09	0.29	-0.02	1			
LEV	-0.06	0.03	0.16	0.14	0.03	1		
CS	-0.05	-0.05	-0.19	-0.06	-0.02	0	1	
AGE	0.08	-0.17	0.07	-0.11	-0.05	0	0	1

Source: Researchers' Compilation, 2019

Table 3 shows the correlation coefficients among the variables of concern. The result revealed that all the variables either positively or negatively correlated with each

other below 30% except for ERR and IRR, which correlates positively with FS by 54% and 40%, respectively.

**Table 4: Unit Root Results**

Variables	Levin, Lin & Chu t*	Im, Pesaran and Shin W-stat	ADF - Fisher Chi-square	PP - Fisher Chi-square	Remark
ERR	-0.724 (0.235)	-0.912 (0.181)	28.978** (0.049)	42.939*** (0.001)	-
D(ERR)	-3.362*** (0.001)	-1.562* (0.059)	28.195** (0.030)	74.419*** (0.000)	I(1)
IRR	-1.176 (0.120)	-0.993 (0.161)	25.844 (0.103)	25.325 (0.116)	-
D(IRR)	-16.078*** (0.000)	-3.206** (0.001)	34.565** (0.001)	35.548*** (0.001)	I(1)
LFS	-7.762*** (0.000)	-0.508 (0.306)	35.360 (0.160)	37.607 (0.106)	-
D(LFS)	-6.424*** (0.000)	-2.852*** (0.002)	58.939*** (0.001)	106.292*** (0.000)	I(1)
LAI	-3.620*** (0.000)	0.801 (0.789)	22.508 (0.661)	39.084** (0.048)	-
D(LAI)	-8.49*** (0.000)	-3.026*** (0.001)	51.470*** (0.000)	87.740*** (0.000)	I(1)
LPF	-3.094*** (0.001)	-1.332* (0.092)	41.150** (0.030)	63.696*** (0.000)	I(0)
LEV	55.478 (1.000)	-2.019** (0.022)	51.119*** (0.010)	55.212*** (0.003)	I(0)
CS	-35.438*** (0.000)	-10.043*** (0.000)	87.122*** (0.000)	55.07*** (0.000)	I(0)
LAGE	-19.125*** (0.000)	-203.944*** (0.000)	285.990*** (0.000)	286.383*** (0.000)	I(0)

The figures in the bracket denote the probability value of the statistics while, \*\*\*, \*\*, \* represents 1%, 5% and 10% level of significance, respectively.

Table 4 presents the panel unit root test result of all the variables included in the study. Basically, Levin, Lin and Chu test was carried out and triangulated with tests such as Pesaran and Shin, ADF – Fisher and PP – Fisher. The decision to adjudge a variable as I(0) or I(1) depends on whether

three or all the four tests, claim that such variable is stationary at such level of the test. Once there are two tests that claim a variable is stationary as compared to the other two tests which claim the variable is not stationary, the conclusion is then drawn as inconclusive, hence, not stationary at the

integration level tested. Also, when only one test claims stationary for the tested variable, it is concluded that it is not stationary.

LEV, CS and LAGE are integrated at level I(0) while LERR, LIRR, LFS and LAI are integrated at the first difference, hence, I(1)

From the result, it is clear that the variables are integrated at order 0 and 1 that is, LPF,

**Table 5: Hausman Test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	26.772643	7	0.0004

Source: Author’s Computation, 2019

The effect of risk management practices (interest and exchange rates) on Nigerian Deposit Money Banks' performance was achieved by estimating the model drawn in equation (2), employing fixed and random effect techniques. The following independent variables were considered in this study: Log of Firm Size (LFS), Risk Management, Leverage (LEV), Log of Age (LAGE), Log of Audit Independence and Compliance with Standards (CS). However, to determine which of the models is to be used, the Hausman test was carried out, and the result is presented in Table 5. The test concludes that the fixed effect is a more appropriate model than the random effect. This was obtained through the result presented in the probability value (0.0004) of the Chi-Square statistics (26.773) of the Hausman test.

**Table 6: Effects of Risk Management on Performance in selected Nigerian Deposit Money Banks**

Dependent Variable: LFP

Variable	Pooled Effect	Random Effect	Fixed Effect
LFP	0.493*** (4.035) [0.000]	0.493*** (4.366) [0.000]	0.751*** (4.145) [0.000]
RMERR	0.107 (0.522) [0.603]	0.107 (0.564) [0.574]	0.118 (0.427) [0.670]
RMIRR	-0.210** (-2.526) [0.013]	-0.210*** (-2.733) [0.008]	-0.145 (-1.560) [0.123]
LEV	-0.264 (-0.612) [0.543]	-0.264 (-0.662) [0.510]	-0.764 (-1.400) [0.166]
LAGE	-0.136 (-1.266) [0.209]	-0.136 (-1.370) [0.174]	-0.014 (-0.013) [0.990]

LAI	-0.172 (-1.008) [0.316]	-0.172 (-1.091) [0.278]	-0.232 (-1.158) [0.251]
CS	33.456*** (3.301) [0.001]	33.457*** (3.572) [0.001]	40.698*** (2.772) [0.007]
C	10.923*** (3.330) [0.001]	10.923*** (3.604) [0.001]	3.411 (0.554) [0.581]
R-squared	0.279	0.279	0.478
Adjusted R-squared	0.219	0.219	0.333
S.E. of regression	0.639	0.639	0.591
Sum squared resid	34.738	34.738	25.130
Log likelihood	-86.170		-71.114
Mean dependent var	18.617	18.617	18.617
S.D. dependent var	0.724	0.724	0.724
Akaike info criterion	2.025	-	1.981
Schwarz criterion	2.243	-	2.553
Hannan-Quinn criterion	2.113	-	2.212
F-statistic	4.696	4.696	3.301
Prob(F-statistic)	[0.000]	[0.000]	[0.000]
Jarque-Bera	10014.78	10014.78	3486.083
Prob (Jarque-Bera)	[0.000]	[0.000]	[0.000]

The values in () are the t-test values while the values in [] are the probability values of the t-test.

\*\*\*, \*\* and \* represents variables significant at 1%, 5% and 10%, respectively.

Source: Author's Computation, 2019

The diagnostics test of the fixed-effect model revealed that the variation in performance of Nigerian banks was explained by the included variables to the tune of 47.8%. Considering the degree of freedom for the model, only 33.3% of the variation in LFP was explained by the variables drawn from the model. Also, the test of joint significance reveals that all included variables explained the level of firm performance, as seen in the F-statistics (3.301) and its probability (0.000). However, the normality test of residuals presents that the residuals were not normally distributed, as revealed in the Jarque-Bera statistics value of 3486.083 with its significance level of 0.000. The average

level of the firm performance stood at 3.411%, but this was not statistically significant.

Further, when the size of the firm was increased by 1%, firm performance increased by 0.751%, and this shows a significant level of 1%. In like manner, a 0.01 unit increase in compliance with standards (CS) increases firm performance to an overwhelming tune of 40.7%, which shows a very high significant level of 1%. However, a percentage increase in variables such as LEV, LAGE, LAI produced a fall in the level of firm performance to the tune of 0.76%, 0.01% and 0.23%, respectively and

did not show a level of significance in explaining firm performance.

The two measures of risk management presented in the results also did show that they significantly affect the level of firm performance in the Nigerian Deposit Money Banks. It was revealed that exchange rate risk positively affected firm performance, while interest rate risk negatively affected firm performance. As presented in the result, a unit increase in exchange rate risk increased firm performance by 0.12%, while a percentage increase in interest rate risk produced a 0.14% reduction in firm performance.

Regarding the effect of risk management practices (interest and exchange rates) on the performance of the Nigerian Deposit Money Banks. The study found that the management of Exchange Rate Risks boosted their performance. Specifically, a unit increase in Exchange Rate Risk increased firm performance by 0.12% implying that the banks' proactive measures in responding to the exchange rate volatility enhanced the realisation of their set financial goals within the period under investigation. In addition, the study found that compliance with standards significantly enhanced the performance of the participating banks. This implies that adherence to operational guidelines invariably prepared a conducive business environment that resulted in high performance. This result is in contrast with the study of Olamide, Uwalomwa and Ranti (2015) where a negative but insignificant relationship was found between Risk Management Practices and Bank Performance. Nonetheless, responses to the Interest Rate Risks had an adverse effect on the performance of the selected money deposit banks during the ten-year period. In

specific terms, a percentage increase in Interest Rate Risks resulted in 0.14% reduction in the performance of selected commercial banks.

## 5. CONCLUSION

From the results obtained in this study, Exchange rate risk affects Nigerian Deposit Money Banks' performance positively but insignificantly. Notwithstanding, interest rate risk affects the Banks' performance negatively and significantly in the years under study. Consequently, it is recommended that Nigerian Deposit Money Banks holistically review their interest-bearing assets and liabilities, especially, the loan assets portfolio. The modalities for advancing credits to customers should also be reviewed to accommodate the changing economic realities in the country, as evidenced by the economic recession of 2016 and the current inflationary trend.

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