



ASSESSMENT OF RELATIONSHIP BETWEEN EXCHANGE RATE FLUCTUATIONS AND PERFORMANCE OF COMMERCIAL BANKS IN MAIDUGURI, BORNO STATE, NIGERIA

¹Babagana Ali, ²Modu Alhaji Modu and ³Bello Mohammed Bello

^{1&3}Department of Banking and Finance, School of Management Science, Ramat Polytechnic
Maiduguri Borno State Nigeria

²Abadam Local Education Authority, Abadam Local government Borno State Nigeria

Abstract: This study assesses the relationship between exchange rate fluctuations and performance of commercial banks in Maiduguri, Borno state Nigeria. The main objective of the study was to assess the relationship between exchange rate fluctuations and performance of commercial banks in Maiduguri, Borno state Nigeria. The study collected primary data, the population of study consists of two hundred and twenty respondents from some selected banks includes; GT Bank, FCMB, UBA, Access Bank and First Bank. While the sample size was one hundred and forty-two respondents from selected banks, and probability sampling technique were used specifically stratified sampling was adopted. The instruments of data collection were structured questionnaire with five Likert styles while the method of data analysis includes simple percentages and Analysis of Variance (ANOVA) were used to test the formulated hypothesis, the study covers the period of five years ranging from 2015 to 2020. The finding of the study shows that, there is in-significance relationship between exchange rate fluctuations and performance of banks in terms of profitability and liquidity, while the study shows that exchange rate fluctuations has positive effect in the sales volume of commercial banks. The study recommended that banks should diversify and expand their investment to different sector of the economy not only restricted to the foreign exchange transaction and also Government should adequately put measures to safeguard the value of the domestic currency in order to reduce the level of exchange rate fluctuations.

Keywords: Commercial Banks, Exchange Rate, Fluctuation, and Performance

INTRODUCTION

Exchange rate is the rate at which the currency of a country is exchanged for the currency of another country. A country must be able to know the quantity of her currency that will be needed to pay for goods and services demanded from other countries and the medium to determine this is called an exchange rate. Exchange rate is the value of unit of foreign currency against domestic currency (Bradly & Moles, 2002). Exchange rate fluctuations is the system determine by version of floating exchange rate system in which the price of currency is increases

or decreases and is primarily controlled by demand and supply of that currency. Exchange rate are constantly fluctuating as a result of several economic factors like inflation rate, aggregate demand and supply, persistent devaluation of local currencies are the main causes of fluctuations. Posthuma (2013), performance of banks is considered as the ability to operate effectively and efficiently, generate profit, survives and react to the opportunities and threats in the business environment. And it is no doubt bank institution rank among an essential organization that rendering require effective and efficient services, and expected to achieve its desire goals and objectives. Performance of commercial banks also indicates the process of measuring, analyzing the organization policies and operations in terms of monetary value. These results are reflected in the bank profitability, liquidity or leverage, and sales volume, evaluating the financial performance of banks allows decision makers to examine the outcome of banks strategies and activities in objective of monetary terms (Padachi, 2006). The primary motives of any organization is profit maximization therefore, profitability of banks is very crucial aspect concerning the performance of banks, it's the relationship between profit and capital, in fact, profit is the measure of gain, and profitability is the relation of this gain to the bank asset. Profit is necessary for a bank to survive; it has to pay interest to depositors.it has to pay corporate tax. It has to pay dividend to shareholders. Profitability of banks can be measured to evaluate the bank's profit with respect to a given level of sales, a certain level of assets, or the owner's investment. Return on Assets (ROA) and Return on Equity (ROE) are two widely used ratio to evaluate banks performance. Profitability ratio measure how efficiently a bank uses its assets and capital to generate a profit.

Research gap

Exchange rate fluctuation affects the performance of banking industry positively and negatively. Most of developing economies countries like Nigeria faces the problem of foreign exchange rate fluctuations. Nigeria's over reliance in mono-product economy i.e. oil and gas sector has affected major macro-economic variables for that reasons, exchange rate movement in Nigeria has been variables with period of rapid depreciation of domestic currency, which adversely affect the country's economic. This has been the exchange rate against the USD to increase as high as possible, making it difficult for the banks to predict the future rate with precision. So, there is sufficient studies in relation to the topic under consideration. Therefore, study looks at relationship between exchange rate fluctuations and performance of commercial banks in Maiduguri Metropolis.

Objectives of the Study

The main objective of the study to assess the relationship between exchange rate fluctuations and performance of commercial banks in Maiduguri Metropolis. However, the specific objectives are to:

1. Examine the effect of exchange rate fluctuations on the profitability of commercial banks.
11. Assess the effect of exchange rate fluctuations on the liquidity of commercial banks

Research Questions

1. To what extent does exchange rate fluctuations have effect on the profitability of commercial banks?
11. What is the effect of exchange rate fluctuations on the liquidity of commercial banks?

H01: There is no significance relationship between exchange rate fluctuations and profitability of commercial banks.

H02: There is no significance relationship between exchange rate fluctuations and the liquidity of commercial banks.

Significance and Scope of the Study

The results of this study will be most significant to the following groups and these groups are: stakeholders, policy makers, students and researchers and interested public, as well as Government. The management staff of the banking organization will use the research findings to assist them to formulate policies that will ensure proper management, for future academicians and researchers, the findings of this study would be important in providing material for their reference besides suggesting areas for further research. Future scholars would find this study important because it would identify areas for further studies which future scholars can study. The findings of this study will also be of immersed benefits to interested members of public, the research will enable them to understand the complication of foreign exchange market. Government use the findings of this studies to implement policies and tackling problem of exchange rate fluctuations in the economy. This research is limited to some selected banks in Maiduguri Metropolis, Borno State. The study covers only the effects of exchange rate fluctuations on the profitability of commercial banks, liquidity and sale volume of commercial banks as dependent variables. While the exchange rate fluctuations as independent variables. The study covers only the period of 2015 to 2020.

LITERATURE REVIEW

Exchange rate refers to the value of one currency (the domestic currency) in relation to another (foreign currency). It can also be defining as the price at which one unit of a country's domestic currency exchanges for any other country's currency. Osiegbu & Onuorah (2012), posit that exchange rate plays a key role in international economic transactions because no nation can remain in isolation due to varying factor endowment. Movements in the exchange rate have ripple effects on other economic variables such as interest rate, inflation rate, import, export, output, etc. Exchange rate has been defined as the price of one currency in terms of another (Mordi, 2006). Exchange rate is the price at which one country exchanges its currency for other currencies. The increase or decrease of real exchange rate indicates strength and weakness of currency in relation to foreign currency and it is a standard for illustrating the competitiveness of domestic industries in the world market. Ibekwe & Obiageli (2021), examined the exchange rate and performance of deposit money Bank in Nigeria, and the specific objectives is to determine the effect of nominal exchange rate on the performance of deposits money in Nigeria, examined the effect of real exchange rate on performance of deposit many banks in Nigeria, and effect of interest rate on performance of deposit money bank in Nigeria. The population comprises all deposits money

banks in Nigeria, period covers from 1987 to 2019. Secondary data was collected from CBN annual report, Nigeria Deposit Insurance Corporation annual report, Nigeria Bureau of Statistics, Econometrics techniques involving Augmented Dickey Fuller tests for Unit Roots, Granger cointegration Analyses and the Vector Autoregression Estimates was used to analyzed data as model of testing hypothesis. The study shows that exchange rate has adverse effect on the performance of deposits money banks in Nigeria and has not helped to improve the rate of investment in Nigeria within the period under study. Adetayo (2013), examined management of foreign exchange risks in a selected commercial bank, in a selected commercial bank, in Nigeria. The study sought to determine how the risk involved in foreign exchange can be effectively managed, by determining the following specific objectives: to determine the various exchange risks which the treasurer of the selected bank is exposed to in its foreign exchange transaction; to investigate how these risks can be effectively managed and to identify risk and exposure management techniques required for treasury management. The selected firm used for this study was a Commercial Bank of International Standard, located in Lagos business center of Nigeria. The study exploited both the primary and secondary sources of information. The primary source comprised of a structured questionnaire, to elicit pertinent responses from the respondents. A non-parametric measure based on chi square statistics was employed to test the hypothesis and determine if there is any association between foreign exchange trading and risk management issues. Technique was to be effective in minimizing foreign exchange risk. Ayodele (2014), evaluated empirically the impact of exchange rate on the Nigerian economy. The study investigated how economic induces such as exchange rate and inflation rate affects changes in Gross Domestic Product (GDP) in Nigeria.

RESEARCH METHODOLOGY

The population of the study is made up of entire skilled staff of the selected commercial banks in Maiduguri which is divided into 40 from Guarantee Trust Bank (GT Bank), 48 from First City Monumental Bank (FCMB), 50 from United Bank of Africa (UBA), 38 from Access Bank, while 44 from First Bank of Nigeria. Thus, 220 skilled employees of the five selected commercial banks constitute the population. For the purpose of this study only primary data was been gathered, the primary source of data was collected from 220 employees of the commercial banks under consideration, through structured questionnaire administration to the respondents. For the purpose of this study Taro Yamane's formula was used to select the sample size based on the total population collected from the Banks under consideration. The method of data collection was survey method through structured questionnaire administered to the sample selected, and available data method extracted from specific data required from annual report of commercial banks under study.

DATA ANALYSIS AND RESULTS

Test of Hypothesis one (1)

Ho1: There is no significance relationship between exchange rate fluctuations and profitability of commercial banks.

ANOVA Computation Table

Categories of Exchange Rate	SD	AG	UD	SD	DA	Total
1	63	44	5	3	7	122
2	75	36	10	1	0	122
3	45	49	22	2	4	122
4	60	30	14	8	10	122
Total	243	154	51	14	21	488

Applying the formula to the above computation data we have;

Computation of SST

$$SS_T = 63^2 + 44^2 + 5^2 + 3^2 + 7^2 + 75^2 + 36^2 + 10^2 + 1^2 + 0^2 + 45^2 + 49^2 + 22^2 + 2^2 + 4^2 + 60^2 + 30^2 + 14^2 + 8^2 + 10^2 - (488^2/20)$$

$$SST = 22800 - (488^2/20)$$

$$SST = 20364 - 11907.2$$

$$SST = 10892.8$$

Computations of SSB and SSW

$$SS_s = 122/4 + 122/4 + 122/4 + 122/4 - 488^2/20 \quad SS_s = 3721 + 3721 + 3721 + 3721 - 11907.2$$

$$SS_s = 14884 - 11907.2$$

$$SS_s = 2976.8 \quad SS_w = SST - SS_s$$

$$SS_w = 10892.8 - 2976.8$$

$$SS_w = 7916$$

Computation of degree of freedom **Dfn=4 - 1 dfo= 3**

$$dfw = N - t \quad dfw = 20 - 4$$

$$dfw = 16$$

$$dfr = N - 1$$

$$dfr = 20 - 1$$

$$dfr = 19.$$

Computation of MSB and MSW

$$MSs = SSs/dfo \quad s = 2976.8/3 \quad MSs = 992.27$$

$$MSw = SSw/dfw \quad MSw = 7916/16 \quad MSw = 494.75$$

$$F\text{- Ratio} = MS \text{ Between} / MS \text{ within} = 992.27/494.75$$

ANOVA Summary Table

Sources	SS	Df	MS	F- Ratio	Remark
Between	2976.8	3	992.27		
				2.01	Accept
Within	7916	16	494.75		
Total	10892.8	19			

Source: Researchers Computation

We accept **H01** because 2.01; 3.24. We have statistically significant evidence at $\alpha=0.05$ to show that, the null hypothesis which states that there is no significance relationship between exchange rate fluctuations and profitability of commercial bank is accepted. Thus, exchange rate fluctuations have no significant effect on profitability of commercial banks.

Test of Hypothesis Two (2)

H02: there is no significance relationship between exchange rate fluctuations and liquidity of commercial banks

ANOVA Computation Table

Categories of Exchange Rate	SD	AG	UD	SD	DA	Total
1	40	34	17	20	11	122
2	58	30	16	6	12	122
3	52	40	10	15	5	122
4	80	30	12	0	0	122
Total	230	134	55	41	28	488

Applying the formula to the above computation data we have;

Computation of SST

$$SST = 40^2 + 34^2 + 17^2 + 20^2 + 11^2 + 58^2 + 30^2 + 16^2 + 6^2 + 12^2 + 52^2 + 40^2 + 10^2 + 15^2 + 5^2 + 80^2 + 30^2 + 12^2 + 0^2 + 0^2 - (488^2/20)$$

$$SST = 2202364 - (488^2/20)$$

$$SST = 20364 - 11907.2$$

$$SST = 8456.8$$

Computations of SSB and SSW

$$SSs = 122/4 + 122/4 + 122/4 + 122/4 - 488^2/20 \quad SSs = 3721 + 3721 + 3721 + 3721 - 11907.2$$

$$SSs = 14884 - 11907.2$$

$$SSs = 2976.8 \quad SSw = SST - SSs$$

$$SSw = 8456.8 - 2976.8$$

$$SSw = 5480$$

Computation of degree of freedom Dfo=4 - 1 dfo=3 dfw= N-t

$$dfw = 20 - 4$$

$$dfw = 16 \quad dfr = N - 1 \quad dfr = 20 - 1$$

$$dfr = 19$$

Computation of MSB and MSW

$$MSB = SSB/dfb \quad MSB = 2976.8/3 \quad MSB = 992.27$$

$$MSw = SSw/dfw \quad MSw = 5480/16 \quad MSw = 342.5$$

$$\mathbf{F-Ratio} = MS \text{ Between} / MS \text{ within} = 992.27/342.5 = 2.90$$

ANOVA Summary Table

Sources	SS	Df	MS	F- Ratio	Remark
Between	2976.8	3	992.27		
				2.90	Accept
Within	5480	16	342.5		
Total	8456.8	19			

Source: Researchers Computation

We accept **H02** because 2.90; < 3.24. We have statistically significant evidence at $\alpha=0.05$ to show that, the **null** hypothesis which states that there is no significance relationship between exchange rate fluctuations and liquidity of commercial bank is accepted. Thus, exchange rate fluctuations have no significant effect on liquidity of commercial banks.

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

All the data collected for the purpose of the study were analyzed using simple percentage, and Analysis of Variance (ANOVA). The first hypotheses reveal that the computed value 2.01 is less than the critical value which is 3.24; hence the alternate hypothesis (H1) is rejected and null hypothesis (H01) is accepted which is also same as in ANOVA analysis. Therefore, it is concluded that exchange rate fluctuations have no significant effect on profitability of commercial banks. The second hypothesis reveals that computed value 2.90 is less than the critical value 3.24 hence null hypothesis is accepted and alternate hypothesis is rejected which is also the same as in ANOVA analysis which States that exchange rate fluctuations has no significant effect on liquidity of commercial banks. It has been established, through the findings of this study, the exchange rate fluctuations have negative effect on the return on assets of banks as a measure of the profitability. On the one side, exchange rate fluctuations have also negative on the loan to

deposit ratio which is measure to liquidity. This implies that as Naira rate continues to depreciate in relation to US Dollar, the liquidity position is at risk which in turn reflect on the overall performance of bank. Our result is further in line with modern theory, which suggest that exchange rate fluctuations is determine by demand and supply of foreign currency and the level of local currency value against foreign currency. Therefore, it was concluded that the effect exchange rate fluctuations on banks performance is unpredictable and uncertain on the specific performance used in the present study. Bank managers should regularly analyze how nominal exchange rate affect their revenue from different stream, and avail appropriate strategy to reduce the magnitude of the adverse effect of exchange rate variation on their bank performance. High interest rate developed by the banks should be at acceptable level. This is to enable appreciable level of investment to exist within the economy and in turn stimulate economic growth. Regulatory authorities should focus on the composite effect of real exchange rate and ensure the availability of policy that enforce banks to analyze how their revenue from different sources are affected by real exchange rate develop strategy to reduce the adverse effect of real exchange rate on the performance of commercial banks.

Commercials banks are encouraged within the period of strong currency fluctuations to switch their trading options to the less volatile currency as a measure of hedging against currency risk.

Finally, the study suggests that since banking sector is a vital part of the Nigerian economy and has contributed immensely to the overall GDP, the federal Government of Nigeria should re-assess its foreign exchange policies to incorporate the strategies with the sole aim of appreciating/enhancing naira specifically discouraging importation of goods and granting pioneer status to companies who has micro and macro-economic benefits to the economy.

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