Empirical Analysis of Counterparty Risk and Exchange Rate Risk Management on the Performance of Deposit Money Banks in Nigeria (2009-2013)

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The study investigated the effect of counterparty risk and exchange rate risk on the profitability of deposit money banks in Nigeria. Profit before tax was measured as a function of non-performing loans; seven banks were selected on a cross-sectional basis for five years. Secondary data were used and an auto-regression conditional model was used to measure risk. The result revealed that counterparty risk and exchange rate risk have significant effect on bank performance- profitability. Accordingly, stringent but non-static credit policy and prudent exchange rate management to enhance economy were suggested.

INTRODUCTION

In recent years, counterparty risk (CR) and exchange rate risk (ERR) have emerged as the most important factors driving financial markets and contributing to the global credit crisis. The Central Bank of every nation periodically prescribes how much credit deposit money banks operating within its borders should allocate the various sectors of the economy. Allocating these scarce funds according to the prudential guideline of the apex bank and at the same time providing succor for as many prospective borrowers as possible with the objective of increasing net returns is a major challenge for these economic intermediators. Given the constraints, choice must be made among competing users of fund in order to maximize bank profitability, liquidity and solvency.

Prior to the monetary approach emphasis of the 1970s, it was common to emphasize international trade flows as primary determinants of exchange rates. This was due, in part, to the fact that governments maintained tight restrictions on international flows of financial capital. The role of exchange rate changes in eliminating international trade imbalances suggests countries with current trade surpluses are expected to have an appreciating currency, whereas countries with trade deficits should have depreciating currencies. Economists have responded to such real-world events by devising several alternative views of

exchange rate determination. These theories place a much greater emphasis on the role of the exchange rate as one of many prices in the worldwide market for financial assets.

It is a widely held view that exchange rate movements should affect corporate expected cash flows and stock returns, by causing changes in the home currency value of foreign currency denominated revenues (cost) and the terms of competition for multinationals and firms with international activities (importers and exporters). In general, however, if purchasing power parity (PPP) is violated exposure to exchange rate is not limited to firms with direct foreign trade activities. The growing emphasis on exchange risk management, the extensive use of foreign currency derivatives and other hedging instruments by corporations to protect their foreign currency dominated cash flow from unexpected exchange rate movement, implies that the market value of the firm is sensitive to exchange rate uncertainty which is unpredictable and probabilistic in nature, Aremu et al (2010).

In 2009, Nigerian banking industry suffered a historic retrogressive trend in both profitability and capitalization. Just three out of twenty four banks declared profit, eight banks were said to be in grave situation due to capital inadequacy and risk asset depletion; the capital market slumped by seventy percent (70%) and most banks had to recapitalize to meet the CBN regulatory directive of 25 billion ordinary shareholders fund (CBN, 2010). In June 2004, a new accord on capital management was proposed by the Basle committee on bank supervision and its focus was to establish an international standard on banking regulations- about how much capital banks need to reserve in order to cover credit and operation risk (BIS, 2004). Following this guide, in 2005, the central bank of Nigeria (CBN) raised the capital requirement for banks to twenty-five billion naira (25 billion) from 2 billion naira (N2 billion). In addition, a series of amendments was made to prudential guidelines. This new improvement or exercise by the CBN brought about significant decrease in the number of deposit money banks from eighty eight to twenty five consequent upon failure of banks to meet the capital requirement. In 2009, a new governor of CBN was appointed. At inception, Mallam Lamido Sanusi, the new CBN governor, ordered a thorough stress-test for all deposit money banks. At the end, the CBN had to inject N620 billion to rescue eight troubled banks. Five others were given ultimatum to recapitalize (CBN, 2010). The sector became unstable, many employees including the banks' chief executive officers and managers lost their jobs. Investors lost their funds and some of the executive directors and managing directors were arrested and charged to court for giving loans without due process. Also, identified was the exercise of predatory debtor in the banking system whose modus operandi involves the abandonment of their debts obligations in some banks only to contract new debts in other banks (Nawaz et al 2012).

CR involves the risk of a particular bank and the borrower's portfolio risk. CR management determines the effectiveness of a deposit money bank. The range of customers and volume of credit transactions have drastically increased recently. Hence, the need to establish full fledged risk management and management of retail and small business credit risk (Lapteva, 2009). Ozturk (2007) defines risk management as the process by which managers satisfy the risk taking needs by identifying key risk, obtaining consistent, understandable, operational risk measures, choosing which risk to reduce and which to increase and by what means , and establishing procedures to monitor the resulting risk position.

This study appraises the CR management policies on profitability of deposit money banks with a view to finding the causes and consequence of poor credit management, bad debts and risky policies in banks. The significant role played by the foreign exchange market on the exchange rate translation is very critical to banks' performance and to a great extent determines the impact of the risk on bank performance. Below are some related challenges that give rise to poor risk management in deposit money banks: (i) Granting loans to dubious customers who, invariably, do not pay back; (ii) Giving out loans by directors without due process; (iii) Poor currency risk management on banks' performance; (iv) Poor portfolio management; (v) Inadequate attention to government policy and challenging business environment; and (vi) Weak adoption of measures to address the problem of foreign exchange risk.

The broad objective of the study is to evaluate CR and ERR management on profitability and other forms of performance of deposit money banks in Nigeria. This objective is further broken down into the following specific objectives: (i) To examine the effect of non-performing loans on profitability of deposit money banks in Nigeria; (ii) To assess the impact of exchange rate risk on banks' performance in Nigeria;

(iii) to examine the effect on impairment charges on credit losses on profitability of deposit money banks in Nigeria.

Therefore, this study will analyze different lapses that accompany risk management in banks and their effect on profit generation by the latter. and what will be noted by deposit money banks when it comes to counterparty risk management in order to bring about profitability by avoiding the dangers of non-performing loans, impairment losses as well as following due procedure in addressing currency risk by the CBN in granting credit facilities as well as repayment of this credit. The study period under consideration is five years (2009-2013).

LITERATURE REVIEW AND THEORETICAL FRAME WORK

CR is the exposure faced by banks when a borrower (customer) defaults in honouring debt obligations on due date or at maturity. This risk, also referred to as Credit risk (CDR), is capable of putting the bank in distress if not properly managed. CR management maximizes bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable limit in order to provide framework for understanding the impact of CDR management on banks' profitability (Kargi, 2011).

Demirguc-Kunt and Huzinga (1999) suggest a two-fold credit risk management. The main source of CR includes, limited institutional capacity, inappropriate credit policies, volatile interest rates, poor management, inappropriate laws, low capital and liquidity levels, direct lending, massive licensing of banks, poor loan underwriting, laxity in credit assessment, poor lending practices, government interference and inadequate supervision by the central bank (Kithinji, 2010).

According to Mordi (2006), the existence of many parallel markets side by side with the officially recognized institutions, are usually responsible for the rise in exchange rate misalignment, most especially in developing countries. We posit that exchange rate risk can be seen from a relational viewpoint. A foreign branch/subsidiary converts its cash flows from the domicile currency to home currency by translating them at expected future exchange rates. In an era of rapid and discontinuous changes, actual exchange rates might differ significantly from expectations. The difference between the expected cash flows and actual cash flows emanating from exchange rate movements (ERM) is termed exchange rate risk. Even between major currencies substantial exchange rate movements (SERM) may be experienced over relatively short periods of time (Holliwell, 1997). SERM can alter the statement of financial position of a business if its assets or liabilities are domiciled in a currency other than that in which it prepares its accounts ('translation' or 'statement of financial position' risk), and may affect the statement of comprehensive income if the impact is on income or expenditure ('trading' or 'transaction' risk) (Holliwell, 1997: 281). There might also be longer-term strategic ('economic') consequences for the value of the business concern if for example, rates of exchange settle at levels which fundamentally alter the concern's competitiveness in international markets (Holliwell, 1997: 281). According to Akinsulire (2008), exchange rate movement can result in a change in the value of the firm. The extent of this change is a measure of concomitant economic risk. More so, Shapiro (1996) said there are three main types of exchange rate risk: namely transaction risk, translation risk and economic risk. The Transaction risk is basically a form of cash flow risk and it deals with the effect of exchange rate movements on transactional account exposure related to receivables (Export contract), payables (Import contracts) or repatriation of dividends. Jhinghan (2003) states that, the demand for a country's currency is an important determinant of the exchange rate. An increase in bank credit risk gradually leads to liquidity and solvency problems. Credit risk may increase if the bank lends to borrowers it does not have adequate knowledge about.

Theoretical Literature

Commercial banking plays a dominant role in commercial lending (Allen & Gale, 2004). Deposit money banks routinely perform investment banking activities in many countries by providing new debt to their customers (Gande, 2008). The credit creation process works smoothly when funds are transferred from ultimate savers to borrowers (Bernanke, 1993). There are many potential sources of risk, including liquidity risk, credit risk, interest rate risk, market risk, foreign exchange risk and political risks

(Campbell, 2007). However, CR is the biggest risk faced by banks and other financial intermediaries (Gray, Cassidy, & RBA., 1997). The credit risk's indicators include the level of non- performing loans, problem loans or provision for loan losses (Jimenez & Saurina, 2006). In Mordi (2006), the existence of many parallel markets side by side with the officially recognized institutions, are usually responsible for the rise in exchange rate misalignment, most especially in developing countries. Madura (1989) posits that the exchange rate risk relates to the effect of unexpected exchange rate changes on the value of the bank.

Several relevant theories reviewed include Purchasing Power Theory, Credit Risk Theories, Currency Base Theory, Monetary Approach, The Portfolio Balance Model, The Flexible-Price Monetary Theory, and The Asset Approach among others. Succinctly, Currency Base Theory remains the underpinning theory on which this research work stands.

Currency Base Theory-This theory, posited by Aliber in 1971, was described by Sharan (2012: 224).The currency base theory is based on imperfect foreign exchange and capital market. He postulates that internalization of firm can best be explained in terms of the relative strength of different currencies, such as firms from a strong country and firms from a weak country. In a weak currency country, the income stream is fraught with greater exchange risk and as a result, the income of a strong-currency firm country firm is capitalized at a higher rate, implying that such a firm is to acquire a large segment of income generation in the weak currency country corporate sector.

Empirical Literature

CR is a serious threat to the performance of banks; therefore various researchers have examined the impact of credit risk on banks in varying dimensions.

Kargi (2011) evaluated the impact of counter party risk on the profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from the annual reports and accounts of sampled banks from 2004-2008 and analyzed using descriptive, correlation and regression techniques. The findings revealed that credit risk management has a significant impact on the profitability of Nigerian banks. It concluded that banks profitability is inversely influenced by the levels of loans and advances, non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress.

Epure and Lafuente (2012) examined bank performance in the presence of risk for Costa-Rican banking industry during 1998-2007. The results showed that performance improvements follow regulatory changes and that risk explains differences in banks and non-performing loans negatively affect efficiency and return on assets while the capital adequacy ratio has a positive impact on the net interest margin.

Kithinji (2010) assessed the effect of credit risk management on the profitability of deposit money banks in Kenya. Data on the amount of credit, level of non-performing loans and profits were collected for the period 2004 to 2008. The findings revealed that the bulk of the profits of deposit money banks are not influenced by the amount of credit and non-performing loans, therefore suggesting that other variables other than credit and non-performing loans impact on profits. Chen and Pan (2012) examined the credit risk efficiency of 34 Taiwanese deposit money banks over the period 2005-2008. Their study used financial ratios to assess the credit risk and was analyzed using Data Envelopment Analysis (DEA). The credit risk parameters were credit risk technical efficiency (CR-TE), credit risk allocative efficiency (CR-AE), and credit risk cost efficiency (CR-CE). The results indicated that only one bank is efficient in all types of efficiencies over the evaluated periods. Overall, the DEA results show relatively low average efficiency levels in CR-TE, CR-AE and CR-CE in 2008.

Felix and Claudine (2008) investigated the relationship between bank performance and credit risk management. It could be inferred from their findings that return on equity (ROE) and return on assets (ROA) both measuring profitability were inversely related to the ratio of non-performing loan to total loan of financial institutions thereby leading to a decline in profitability. Ahmad and Ariff (2007) examined the key determinants of credit risk of deposit money banks on emerging economy banking systems compared with the developed economies. The study found that regulation is important for

banking systems that offer multi-products and services; management quality is critical in the cases of loan-dominant banks in emerging economies.

Al-Khouri (2011) assessed the impact of bank's specific risk characteristics, and the overall banking environment on the performance of 43 deposit money banks operating in 6 of the Gulf Cooperation Council (GCC) countries over the period 1998-2008. Using fixed effect regression analysis, results showed that credit risk, liquidity risk and capital risk are the major factors that affect bank performance when profitability is measured by return on assets while the only risk that affects profitability when measured by return on equity is liquidity risk. Ben-Naceur and Omran (2008) in attempt to examine the influence of bank regulations, concentration, financial and institutional development on deposit money banks' margin and profitability in Middle East and North Africa (MENA) countries from 1989-2005 found that bank capitalization and credit risk have positive and significant impact on banks' net interest margin, cost efficiency and profitability.

Also, many scholars have conducted empirical research in order to examine factors that influence the movement of the exchange rate risk. Hsing (2006) empirically found that short-term real exchange rate has positive effect on exchange rate and broad money supply, while country risk and the expected rate of inflation have negative impact on exchange rate and on the performance of the banks. It follows therefore that the respective national authority would need to avoid fiscal indiscipline in order to prevent the exchange rate from real appreciation since it will significantly influence the country's export from declining. Annofe (2005) investigated the variables that affect exchange rate movement in Sweden, United Kingdom and Japan against the US dollar for the period 1995 to 2004. The result indicated that interest rate differential is statistically significant in explaining changes in exchange rate in the three countries, while, interest rate has negative effect on exchange rate in Sweden and the United Kingdom. However, the influence of money supply, industrial production and inflation differential on exchange rate varies between the countries.

Odedokun (1997) studied a group of macroeconomic policies, such as devaluation on real exchange rate movement. The empirical study revealed that public sector fiscal deficits, growth of domestic credit, domestic consumption, GDP ratio, government consumption, private consumption, improvement in terms of trade income per capital and black market exchange rate premium lead to real exchange rate appreciation. On the contrary, devaluation, investment-GDP ratio, consumer-wholesale price ratio in trade and economic growth in industrialized economies, result in real exchange rate depreciation. Based on studies by Hsieh (1982), Marston (1987), Edison and Wouland (1987), there is an indication that productivity differential leads to exchange rate appreciation.

Imeddrine and Christopher (2003) analyzed the main determinants of the real exchange rate in the Middle East and North African countries. The findings indicated that output per capital, government expenditure, real interest rate differentials, and the degree of openness of the economy influence the real exchange rate. Beatrice (2001) employed a co-integration technique to investigate the long- run determination of the real exchange rate for import and exports and of the internal real exchange rate in Zambia. The result showed that real exchange rate for import is affected by terms of trade and government share. Moreover terms of trade, central bank reserves and trade taxes have long-run impact on the real exchange rate for exports. It was also revealed that terms of trade, investment share and the rate of growth of real GDP have long-run effect on the internal real exchange rate, while foreign aid and openness in dealings (financial/economic liberalization), all have short-run inflation on the real exchange rate indices.

David Faulkner and Konstantin Makrelor (2008) used the single Engle granger techniques to examine the drivers of the manufacturing equilibrium exchange rate over the period of 1995 to 2006 in South Africa. The author's results showed that unit labour cost, productivity, government expenditure and openness are the main drivers of the manufacturing exchange rate. (Chowdhury, 1999) observed that nominal devaluation plays an important role in the real exchange rate determination. Similarly, empirical evidence suggests that net capital flow, foreign aid, trade retraction and macroeconomic policies lead to real exchange rate appreciation in Papua Guinea (Chowdhury, 1999).

Frankel (2007) analyzed that real exchange rate is positively related to terms of trade, real interest differential and lagged real exchange rate. However, capita account liberalization, risk premium and per capital income have effect on real exchange rate. Patel and Srivastata (1997), identified that investment – GDP ratio, overall fiscal deficit and nominal exchange rate have effect on real exchange rate in India. In Angola, (Takaendesa, 2006 cited on p.32 in Onaja, J.E. (20150)) confirms that terms of trade, real interest rate differential, domestic credit, openness and technology progress have long- term impact on real exchange rate. In all, terms of trade, domestic credit and economic systems and financial liberalization all have significant influence on real exchange in the short – run, while terms of trade and the domestic credit have both short – run and long – run effect on real exchange rate according to Takaendesa.

RESEARCH METHODOLOGY

The area of study is on the appraisal of Counter party risk and Exchange rate risk on performance of deposit money banks in Nigeria, using Seven different deposit money banks which are; Zenith Bank Plc, First City Monument Bank Plc (FCMB), Guaranty Trust Bank Plc (GTB), WEMA Bank Plc, First Bank Nigeria Plc, Sterling Bank Plc and United Bank for Africa (UBA) Plc. The simple random sampling technique is used to select seven out of population of twenty four that are quoted on the Nigerian stock exchange market. Only secondary data were used for the purpose of this research and the use of seven Banks Financial Report in Nigeria from year 2009-2013.

The variables for this research are made of independent variables such as the Counterparty risk and market risk with associated factors such as Non-performing loans, impairment loss, exchange rate, inflation rate and credit policy, while the dependent variable is bank performance with its associated factor like bank profitability (profit before tax). Each variable is measured by its associated proxy in order to determine the existing relationship. The Ordinary least-square method and the Durbin –Watson test were used to achieve the set objectives of the research.

Model Specification
Hypothesis One

Ho_1: *Non performing loans do not have any effect on bank's performance.*

$$\gamma = \beta + \beta 1x + \mu \tag{1}$$

Where Y is the dependent variable, which is Non performing loan and β is the constant, $\beta 1$ is the regression coefficient or multiplier of the independent variable, X is the independent variable, which represented by bank's performance, μ is the error term which represents other factors that may affect the model but are outside the scope of the model.

Hypothesis Two

Ho_2: *Exchange rate risk does not have effect on banks profitability*

$$\gamma = \beta + \beta 1x + \mu \tag{1}$$

Where Y is the dependent variable, which is the Exchange rate risk, and β Represent the constant of the model, $\beta 1$ Represent the regression coefficient of the independent variables, X is the dependent variable, which represented by banks performance, μ is the error term which represents other factors that may affect the model but are outside the scope of the model.

Hypothesis Three

> *Ho₃: Impairment on credit loan loss does not have effect on profitability of banks*

$$\gamma = \beta + \beta 1x + \mu \tag{1}$$

Where Y is the dependent variable, which is the Impairment charge, and β is the constant of the model, $\beta 1$ is the regression coefficient of the dependent variables, X is the independent variable, which represented by profitability of banks, μ is the error terms which represent other factors that may affect the model but are outside the Scope of the model.

DATA ANALYSIS AND RESULT DISCUSSION

Hypothesis one

> *Ho₁: Non performing loans do not have any effect on bank profitability.*

Dependent Variable: PBT
Method: Least Squares
Date: 06/06/15 Time: 11:13
Sample: 2009 2013
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.36E+08	25261654	5.379425	0.0126
NON PERFORMING	-0.712873	0.360369	-1.978174	0.1423
R-squared	0.866046	Mean dependent var		95122099
Adjusted R-squared	0.721394	S.D. dependent var		42938803
S.E. of regression	32661888	Akaike info criterion		37.73049
Sum squared resid	3.20E+15	Schwarz criterion		37.57427
Log likelihood	-92.32623	Hannan-Quinn criter.		37.31120
F-statistic	3.913171	Durbin-Watson stat		1.594535
Prob(F-statistic)	0.142310			

Source: Authors' Computation, 2015

Discussion of Result

The Ordinary least square analysis for hypothesis one above shows that there is significant relationship between the Non- performing loans and profitability, this is because the R-squared value is 87% which is higher than 50%, hence according to our decision rule above, the Null hypothesis is rejected. Furthermore the Durbin –Watson test also revealed that there is no problem of autocorrelation with our variables (this refers problem that could arise as result of time lag or possible uncertain future occurrence), because its value is not above 2.

Hypothesis Two

> *Ho₂. Exchange rate risk does not have effect on bank performance*

Dependent Variable: PBT
Method: Least Squares
Date: 06/06/15   Time: 11:14
Sample: 2009 2013
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.24E+08	16788380	7.364021	0.0052
EXCHANGE RATE	-60.17625	23.68244	-2.540965	0.0846

R-squared	0.882758	Mean dependent var	95122099
Adjusted R-squared	0.777011	S.D. dependent var	42938803
S.E. of regression	27926383	Akaike info criterion	37.41722
Sum squared resid	2.34E+15	Schwarz criterion	37.26099
Log likelihood	-91.54304	Hannan-Quinn criter.	36.99792
F-statistic	6.456501	Durbin-Watson stat	1.584456
Prob(F-statistic)	0.084608		

Source: Authors' Computation, 2015

Discussion of Result

The statistical analysis above reveals that there is significant relationship between exchange rate and performance of quoted banks. This is because the R-squared value is 88.27% which exceeds 50% in the above table, hence according to the decision rule above, the null hypothesis is rejected. Also the Durbin-Watson result, to a large extent, is in agreement with the decision rule. Hence, we can accept that there is no problem of autocorrelation in our variables

Hypothesis Three

Ho_3: *Impairment charges on credit loss do not have effect on bank profitability*

Dependent Variable: Impairment
Method: Least Squares
Date: 06/10/15   Time: 09:20
Sample: 2009 2013
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	71549742	1.22E+08	0.585272	0.5995
PBT	-0.109357	1.191725	-0.091764	0.9327

R-squared	0.572799	Mean dependent var	61147485
Adjusted R-squared	0.429601	S.D. dependent var	88755488
S.E. of regression	1.02E+08	Akaike info criterion	40.01472
Sum squared resid	3.14E+16	Schwarz criterion	39.85850
Log likelihood	-98.03681	Hannan-Quinn criter.	39.59543
F-statistic	0.008421	Durbin-Watson stat	2.783823
Prob(F-statistic)	0.932670		

Source: Authors' Computation, 2015

Discussion of Result

The statistical analysis above shows that the relationship between the impairment charges on credit loss and profitability is significant, this is because the R-squared value computed is 57% which exceeds 50%. Hence according to the decision rule above, the null hypothesis is rejected. Therefore, we can conclude that there is, significant relationship between impairment charges on credit loss and profitability. The Durbin- Watson value still establishes that there is no problem of autocorrelation, because the result is still within the range of 2.

CONCLUSION, RECOMMENDATIONS AND POLICY IMPLICATIONS

Conclusion

Sound credit with exchange rate management requires a clear, well-articulated and accessible policy document which spells out the philosophy of lending and repayment. This will ensure that loan losses are reduced to the barest minimum via a programme which permits constant supervision of the projects being financed, easy identification of delinquent loans and instituting effective corrective measures. In conclusion, the results from hypotheses tested have confirmed that the following should be accepted: nonperforming loans have an inverse and negative relationship with profitability of deposit money banks in Nigeria; exchange rate risk has positive and direct effect on performance of deposit money banks in Nigeria; and impairment on loans has some effect on profitability of deposit money banks in Nigeria.

Recommendations

From the findings of this study, it is obvious that risk management cannot be ignored in bank intermediation processes for it is a major influence on deposit bank performance. Based on this study, the following recommendations are made: (i) appropriate information technology should be used in the achievement of a sound policy in risk management and good trading techniques; (ii) Credit policy should be defined, clearly stated and documented and in possession of staff in the credit department; (iii) a sound exchange rate policy should be formulated by the CBN as an effective measure of managing exchange rate risk; (iv) great care should be exercised when assessing the worthiness of loan customers; and (v) foreign exchange rate fluctuations or instability should be effectively managed, because failure to effectively manage same will result in an adverse effect, such that industrialists, investors, and major players even across national borders will be significantly constrained in their projected plan, revenue and cost as well as profit margin.

REFERENCES

Ahmad, N.H. & Ariff, M. (2007).Multi-country Study of Bank Credit Risk Determinants, *International Journal of Banking and Finance*, 5(1), 135-152.

Akinsulire, O. (2008). Financial Management, El-Toda Ventures Ltd., Lagos.

Al-khouri, R. (2011). Assessing the risk and performance of the GCC banking sector. *International journal of finance and economics*, ISSN 1450-2887, issue Pp65, 72-8.

Allen, F, & Gale, D. (2004). *Financial intermediaries and markets. Econometrica, 72(4), 1023-1061.*

Annofe, S. (2005) Assessing the Impact of Exchange Rate Risk on Performance of Financial Institutions. *Journal of Economic and Development Studies, 5(2), 8-2.*

Aremu, O., Suberu, J., & Oke, J 2010*: effective credit processing and administration as a panacea for Non-performing assets in the Nigeria Banking system. *Kre journal of Economics.* 1 (1), 53-56.

Beatrice, K. M. (2001). Long run and short- run determinants of the real exchange rate in Zambia. Working paper No 40.

Ben-Naceur, S. & Omran, M. (2008). The Effects of Bank Regulations, Competition and Financial Reforms on MENA Banks' Profitability, Economic Research Forum Working Paper No. 44.

Bernanke, B. (1993). Credit in the Macro economy. Quarterly Review - Federal Reserve Bank of New York,18, 50-50.

BIS (July, 2004). Implementation of Basel II: Practical Consideration. Basel Committee on Bank Supervision, BIS Publications

Campbell, A. (2007). *Bank insolvency and the problem of nonperforming loans*. *Journal of Banking Regulation, 9*(1), 25-45.

CBN, (2010). *Global financial meltdown and reforms in the Nigeria banking sector CBN Governor's speech, delivered at ATBU convocation*, Bauchi, on December 10, 2010.

Chen, K. & Pan, C. (2012). *An Empirical Study of Credit Risk Efficiency of Banking Industry* in Taiwansz, *Web Journal of Chinese Management Review, 15(1), 1-16.*

Chowdhury, M. (1999). The Determinants of Real Exchange Rate: Theory and Evidence from Papua New Guinea. Asia Pacific School of Economics and Management, Working Papers 99-2, Asia Pacific Press.

Demirguc-Kunt, A. & Huzinga, H. (1999). *Determinants of Commercial Bank Interest Margins and Profitability: Some International Evidence*, *The World Bank Economic Review, 13(2), 379-40.*

Epure, M. & Lafuente, I. (2012). *Monitoring Bank Performance in the Presence of Risk, Barcelona GSE Working Paper Series No.61.*

Faukner, D. & Makrelov, K. (2008). Determinants of the Equilibrium Exchange Rate for South Africa's Manufacturing Sector and Implications for Competition. Draft.

Felix, A.T & Claudine, T.N. (2008*). Bank Performance and Credit Risk Management, Unpublished Masters Dissertation in Financ*e, University of Skovde.

Frankel, J. (2007 Exchange Rate Regimes: Current Issues in Research and Policy, IMF Institute, Harvard University, May.

Gande, A. (2008). Deposit money banks in Investment Banking. In V. T. Anjan & W. A. B. Arnoud (Eds.), Handbook of Financial Intermediation and Banking (pp. 163-188). San Diego: Elsevier.

Gray, B., Cassidy, C., & RBA (1997). Credit risk in banking: proceedings of a conference at H.C. Coombs Centre for Financial Studies, 1-2 May 1997. [Melbourne?]: Reserve Bank of Australia, Bank Supervision Dept.

Greuning, H.V. & Bratanovic, S. B. (2009*). Analyzing Banking Risk: A Framework for Assessing Corporate Governance and Risk Management. 3rd Edition. The World Bank. Washington, USA*.

Holliwell, J. (1997) The financial Risk Manual – A Systematic Guide to Identifying And Managing Financial Risk, Pitman publishing, London.

Hsing, Yu, (2006). Determinants of Exchange Rate Fluctuations for Venezuela: Application of an Extended Mundell- Fleming Model, *Applied Econometrics and International Development, Euro-American Association of Economic Development, vol. 6 (!).*

Jimenez, G., & Saurina, J. (2006). Credit cycles, credit risk, and prudential regulation. International Journal of Central Banking, 2(2), 65-98.

Kargi, H.S. (2011). *Credit Risk and the Performance of Nigerian Banks, AhmaduBello University, Zaria.*

Kithinji, A.M. (2010). *Credit Risk Management and Profitability of Deposit money banks in Kenya, School of Business, University of Nairobi, Nairobi.*

Laptova, A. (2009) The Impact of Effective Credit management on the Profitability of Four Deposit Money banks. *Journal of Finance and Bank Management. 1 (2), 83-89.*

Modi, C. (2006) Overview of Exchange Rata Management in Nigeria from 1986 to date. *www.unn.edu.ng/publication/files/..../thesis-main%20body.pdf*

Navas A*.,* Awanz & Ahmed, B. (2012) Demographic Prediction of Learning Development and Use of Practices in HELS of KPK. *Journal of Applied Services, 1 (1) 58-69*

Onaja, J.E. (2015). A Dynamic Analysis of the Impact of Capital Flight change on Real Exchange Rate in Nigeria, IOSR Journal of Economics and Finance (IOSR- JEF) Vol. 6 Issue 1, Veii, (Jan.-Feb.) PP.31-35.

Ozturk, M & Aktan, B., (2007) The New Basel Capital Accord: In search of Excellence at Bank Risk Management ,Review of Social, Economic and Business Studies, Vol.7/8, 151-174.

Patel, U.R & Srivastava, P. (1997), The Real exchange Rate in India: Determinants and Targeting, Center for Economic Performance (London School of Economics) Working paper No. 323, January.

Shapiro, A.C. (199) *Multinational Financial Management, 5th ed. (Hoboken, New Jersey: Wiley).*

Sharan, V. (2012). *International Financial Management, 6*[th] *ed. PHI Learning Private Limited, NewDelhi.*