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REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

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APPENDIX/ANNEXURE

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- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
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CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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APPRAISAL OF INFLUENCE OF MAJOR EXOGENOUS FACTORS ON VOLUME OF LENDING BY DEPOSIT MONEY BANKS IN NIGERIA (1990 -2011)

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ABSTRACT

The study is an ex-post facto research work which was carried out to appraise the influence of major exogenous factors on the aggregate volume of lending by the Deposit Money Banks in Nigeria from 1990 to 2011 based on statistical data from Central Bank of Nigeria. Multiple Regression Analysis was employed to test the relationship between aggregate volume of loans & advances (VLA) as dependent variable and independent variables such as lending rate (LRt), liquidity ratio (LR) and cash reserve ratio (CRR), and volume of deposits (VD). The result of the test revealed that LRt, LR, and CRR have significant positive impact on volume of loans and advances (VLA) of Nigerian DMBs within the period under review. Conversely, VD appears to have insignificant and negative impact on VLA. It is recommended that the CBN should be using the regulatory variables (LRt, LR, CRR and VD) in such a way that will enhance robust volume of lending by the DMBs to enhance the growth of the Nigerian economy.

KEYWORDS

Appraisal, Exogenous Factors, Volume of Lending, Deposit Money Banks, Structure of Lending, Multiple Regression Analysis.

1.0 INTRODUCTION

Banking operations thrive on financial intermediation with twin preoccupations of sourcing for funds and lending of such funds to the productive sector and public sectors of the economy. In the process of financial intermediation, therefore, the DMBs source for their funds through deposits from customers while on the other hand, they lend such funds out to members of the public which include corporate bodies, government at various levels, institutions, and individuals (Jhingan, 2008).

Financial intermediation in the banking industry all over the world revolves around a tripod of sourcing for funds from depositors, lending of such funds to customers, and managing inherent risks of operations. Therefore, the operations of DMBs involve maintaining a delicate balance between meeting the demands of depositors and lending their funds to customers. Hence the fragile nature of operations of money deposit banks necessitates the regulations and intervention of their supervisory authorities. The deposit money banks are regulated more by banking supervisory authorities (apex banks, deposit insurance institutions, etc) and less by their boards of directors. Therefore, lending aspect of banking operations is subject to the actions of both regulatory authorities and the boards of directors of deposit money banks.

By large and large, the lending behaviour of DMBs is influenced by certain factors which are both exogenous and endogenous to their operations. Some of these influencing factors on lending behaviour of these banks are, therefore, established by their directors while others arise from the regulatory actions of apex banks, deposit insurance institutions, and other regulatory authorities in the financial sector of the economy.

The implication is that some of the factors or determinants of lending by deposit money banks are subject to the whims and caprices of their directors. And since the other determinants that influence lending by these banks are exogenous, they are not subject to their control and manipulation because they are normally formulated and imposed by regulatory authorities for implementation in any given economy.

While there are many empirical studies on the determinants of lending behaviour of deposit money banks in advanced economies, there has been only a few studies on the lending behaviour of deposit money banks in developing economies such as Nigeria. Particularly in Nigeria, the only empirical studies on the lending behaviour of the deposit money banks include: Osayameh's (1991) work on lending and credit administration model for commercial banks; Adedoyin and Sobodun (1996) in their study on commercial banks' lending activities in the country; Ajayi (2007) in his study investigates some major determinants of loans and advances in the Nigerian financial system; Olokoyo's (2011) work on determinants of commercial banks' lending behavior in the country; and Olusanya, Oyebo and Ohadebere. (2012) in their study on determinants of lending behaviour of commercial banks: evidence from nigeria, a co-integration analysis (1975-2010).

However, none of such studies is able to consider those factors that were not included in the regreesion analysis but also influence the DMBs in their lending behaviour generally in Nigeria. Therefore, this paper is an attempt to investigate in holistic terms the determinants of lending behaviour of deposit money banks in the country.

1.1 OBJECTIVE OF THE STUDY

The main objective of the study is to investigate the major exogenous factors that influence lending behaviour of deposit money banks in the country, drawing from the past studies on such a subject matter. The study also investigates the structure of lending of deposit money banks in Nigeria with the period under review (1980-2011)

1.2 METHODOLOGY

An ex-post facto research design (quantitative research design) was employed in carrying out this study. The data that have been used for the study were analyzed and interpreted using relevant statistical package based on statistical formulations. The data for the study have been generated from Statistical Bulletin published by the Central Bank of Nigeria. The test which made use of regression analysis was based on Eview7 package.

2.0 LITERATURE REVIEW

2.1 EMPIRICAL REVIEW

A lot of studies have been carried out in attempts to determine the significant influencing factors on lending behviour of deposit money banks in Nigeria in particular and around the world generally. Since there are varied studies on the lending behaviour of banks, it is only pertinent that some cursory scrutiny on such studies is considered in terms of highlighting the influencing factors on bank lending and inherent gaps in such studies.

Ajayi (2007) investigates some major determinants of loans and advances in the Nigerian financial system. He uses explanatory variables such as liquidity ratio, capital base, bank deposit and lending rates to determine their effect on loans and advances. The study discovers that a relationship exists between dependent variable (loans and advances) and independent variables of total deposit, capital base, liquidity ratio, and lending rate. The gap in this study lies in the fact that the independent factors as used for the study such as total deposit, capital base, liquidity ratio, and lending rate to investigate their relationship with dependent variable (bank loans and advances) are very few and far between.

In a recent study on determinants of commercial banks' lending behavior in Nigeria, Olokoyo (2011) utilizes explanatory variables such as volume of deposits, investment portfolio, interest rate, cash reserve requirement, liquidity ratio, foreign exchange and gross domestic product to determine their influence on

commercial banks' lending. The findings of the study reveal that all these explanatory variables do affect, in varying degree, the lending behaviour of money deposit banks in the country. The study reveals that explanatory variables such as volume of deposit, investment portfolio, foreign exchange, and gross domestic product in particular play significant role in influencing the lending behavour of deposit money banks in the country. However, a major gap in the study is the neglect of the relationship factors (Chodechai, 2004), monetary authorities' guidelines and collateral securities which play important role in lending decisions of commercial banks in the country.

Adedoyin and Sobodun (1996) lay emphasis only on intermediation activities of deposit money banks. They posit that lending is undoubtedly the heart of banking business, and therefore, the administration of lending requires bank management to employ skill and dexterity in policy formulation and application that would guarantee reasonable income and adequate liquidity while ensuring safety of bank's funds. Furthermore, Adedoyin and Sobodun (1996) posit that commercial banking in Nigeria has gone through an era of impressive profitability arising from huge deposits and varied investment opportunities but characterized by high competition. The gap in this study is that the banking era of the 1990s in the country has been swept away by widespread distress and failure in the industry to the extent that only a few deposit money banks are in operations these days.

Usman (1999), posits that the factors that affect commercial banks' lending behaviour depend on the choice of certain policy instruments in their banking operations. Such policy instruments (Usman, 1999) include a rigidly administered interest rate structure, directed credit, unremunerated reserve requirements and stabilizing liquidity control measures like the stabilization securities. Furthermore, Usman (1999) observes that "a major regulation affecting commercial banks' lending in Nigeria is the restriction on the amount of interest banks are allowed to pay on deposits which in turn affects their efforts to attract reasonable volume of deposits and the interests they charge on their loans and advances. However, the study does not consider holistically the factors that influence the behaviour of bank lending generally except a few factors such as interest rate structure, directed credit, reserve requirements and liquidity control measures (e.g., stabilization securities, which he highlighted).

Osayameh (1991) opines that the increasing trend in bad debts and absence of basic business/corporate advisory services in most Nigerian commercial banks, are indicative of an apparent lack of use of effective lending and credit administration techniques in these banks. Furthermore, Osayameh (1991) observes that since 1980s interest rates for both deposits and loans are being heavily regulated and therefore, the money deposit banks should pay adequate attention to lending and credit administration given the fact that lending constitutes the single most important source of their earnings. Moreso, in the study, Osayameh (1991) posits that the present volume and complexity of transaction in bank lending and credit administration in the country call for the use of scientific techniques such as operations research to aid their lending and credit administration. In this study, the researcher does not identifying explicitly the factors that influence lending behaviour in money deposit banks in the country other than mere making allusion to regulation and interest rate.

Chizea (1994) posits that there are certain aspects of fiscal and monetary policies which affect the lending behaviour of commercial banks with emphasis on the interest rate regime. Furthermore, Chizea (1994) observes that the low interest rates being required by commercial banks to be charged on agricultural loans serve as disincentive because of the effect of inflation. The gap inherent in this treatise is the emphasis on interest rate as the only factor affecting bank lending behaviour in agricultural financing.

Ewert and Schenk (1998) observe that big companies that provide more collateral sends some signals to convince banks that they are less risky customers, with the hope type of securing lower interest rates. This is not the case with high risky companies that are required to comply with provision of collaterals and restrictive covenants, and yet are still charged higher interest rates on loan facilities. The shortcomings in this study include; consideration of interest rate as the only factor affecting bank lending behavior, and the fact that the study is based on German economy.

Chodechai (2004) investigates factors that affect interest rates, degree of lending volume and collateral setting in the loan decision of banks. The emphasis of the study is on mainly on the influence of interest rates on lending behaviour of banks to the neglect of other significant factors that affect the behaviour of commercial banks in lending generally. Furthermore, the study is based on a distinct economic clime with peculiar regulatory framework and banking practices which are different from what obtains in Nigeria's banking industry. However, this study is based in the context of what obtains in another economy.

Olusanya, Oyebo, and Ohadebere (2012) observe that there is positive relationship between Loan and advances and Volume of deposits, annual average exchange rate of the naira to dollar, Gross domestic product at current market price and cash reserve requirement ratio except Investment portfolio and Interest rate (lending rate) that have a negative relationship. And that there is a long run relationship between Loan and advances and all the explanatory variables in their model, which is indicative that commercial banks also influence their lending behaviour.

Some previous empirical studies provide evidence of a causal relationship between the size of bank capital and the extent of banking sector credit (Fadare, 2010). Bernanke and Lown (1991) observe that the size of bank capital has a positive and significant effect on bank lending.

2.2 CONCEPTUAL CLARIFICATION

Bank lending is inherently ingrained in financial intermediation. The commercial banks which otherwise are called deposit money banks operate on financial intermediation. These banks usually source for funds through deposits from customers while they lend such funds out to corporate bodies, government at various levels, institutions, and individuals. Lending of funds (Nwankwo, 2000; Olokoyo, 2011) constitutes the largest single income-earning asset in the portfolio of most deposit money banks generally. Therefore, banks deploy huge resources to manage the quality of their loan portfolio. This is justifiably imperative when considered in line with the fact that practice of credit management and administration impacts significantly on magnitude and diversification of banks' loans.

The practice of lending by deposit money banks essentially constitutes the pivot of their operations and business. This is the more reason which informs their deployment of considerable expertise and deftness on the part of the bank management teams on lending administration and management. Basically deposit money banks are normally irreversibly committed to honour the constant demands of the depositors. This explains the reason why they are under operational obligations to determine appropriate avenues where deposit funds could be placed to generate reasonable returns while striving to maintain liquidity through pragmatic lending policies (Adedoyin and Sobodun, 1996).

Goldfield and Chandler (1980) succinctly observe that commercial banks usually pay more attention to liquidity because of the high turnover of their debt liabilities. Furthermore, the practice is that a large quantum of the periodic payments by a bank is normally met from current gross receipt of funds in the normal course of the banking business. The ability of money deposit banks to ensure their liquidity and survival while contributing towards promoting growth and development of the economy depends on their effective handling of lending operations. This explains why transactions on loans and advances are carried out with trust and confidence devoid of lending risks. The required safe and sound bank lending practices involves taking into cognizance the regulatory requirements and the internally entrenched factors affecting loans and advances (John, 1993).

Similarly, Ituwe (1983) contends that a bank's ability to grant loans and advances is curtailed by the quantum of cash in its vault. The demands by depositors in terms of withdrawals from their deposits have to be met instantaneously. Money deposit banks, therefore, typically maintain reasonable quantity of cash to meet their customers' demands, which implies that these banks cannot afford to grant loans and advances in excess of the available cash liquidity. This is where liquidity in banking operations also affects the lending behaviour of deposit money banks.

Generally, monetary policy also affects bank assets which do arise because of their lending (loans) as well as banks' liabilities (deposits). The implication of operations of monetary policy is that besides shifting the supply of deposits it also shifts the supply of bank loans.

2.3 CONCEPTUAL FRAMEWORK OF THE STUDY

There are many theories which seek to explain the behaviour of money deposit banks in their lending activities in various economies around the world. For the purpose of this study, the theory that is considered relevant is the loan pricing theory.

The loan pricing theory posits that banks cannot always set high interest rates by trying to earn maximum interest income. Banks should consider the problems of adverse selection and moral hazard since it is very difficult to forecast the borrower type at the start of the banking relationship (Stiglitz and Weiss, 1981). If banks set interest rates too high, they may induce adverse selection problems because high-risk borrowers are willing to accept these high rates. Once these borrowers receive the loans, they may develop moral hazard behaviour or so-called borrower moral hazard since they are likely to take on highly risky projects or investments (Chodecai, 2004). From the reasoning of Stiglitz and Weiss (1981), it is usual that in some cases we may not find that the interest rate set by banks is commensurate with the risk of the borrowers.

3.0 FINDINGS AND DISCUSSION OF RESULTS

The multiple regression formulated for the study has the general equation for ECM and Co-integration test is as follows:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \ldots + \beta_n x_{nt} + U_t \text{ and } \Delta y_t = \beta_1 + \beta_2 \Delta X_{1t} + \ldots + \beta_n \Delta X_{nt} + \delta u_{t-1} + \varepsilon_{t\ldots} \tag{1}$$

Y_t = the dependent variable

β_0 = the intercept term

β_1 = the regression coefficient,

X_t = a set of explanatory variables,

μ_t = the error term.

Therefore, in re-specifying the model above to capture the objective of our study, we have:.

$$LOA = F(LR_t, VD, LR, CR) \ldots \tag{2}$$

Where LOA is the volume of loan and advance, LRt is lending rate, VD is volume of deposit, LR is the liquidity ratio and CRR is the cash reserve ratio. Appendix 1 is the data used for the study as generated from the apex bank's statistical publication.

Dependent Variable: LOA
Method: Least Squares
Date: 05/10/13   Time: 01:50
Sample: 1990 2011
Included observations: 22

TABLE I

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	116512.14	4206783.	2.769625	0.0000
VD	-12.37942	44.64283	-0.277299	0.7849
LRt	310048.9	137373.8	-2.256973	0.0000
LR	2476.521	80150.05	-0.030899	0.9757
CRR	402260.9	265206.9	-1.516781	0.0004
R-squared	0.967041	Mean dependent var		2231216.
Adjusted R-squared	0.865168	S.D. dependent var		3162232.
S.E. of regression	2312609.	Akaike info criterion		32.34237
Sum squared resid	9.09E+13	Schwarz criterion		32.59033
Log likelihood	-350.7660	Hannan-Quinn criter.		32.40078
F-statistic	15.566175	Durbin-Watson stat		1.800224
Prob(F-statistic)	0.000000			

From the result of the test (Table I above), there is a negative/inverse relationship between volume of deposit (VD) and volume of loans and advances (VLA), that is, 1unit increase in volume of deposit (VD) will lead to -12.37942 units decrease in volume of loans and advances, which implies that as volume of deposit (VD) increases overtime, the volume of loans and advances and vice versa.

However, it is known from the result as shown above that there is a direct/positive relationship between lending rate (LRt) and volume of loans and advances (VLA), that is, 1 unit increase in volume of loans and advances (VLA) will lead to 310048.9 unit increase in lending rate (LRt)

Furthermore, it is also seen that there is a direct/positive relationship between liquidity ratio (LR) and volume of loans and advances (VLA), which implies that 1 unit increase in the volume of loans and advances (VLA) will lead to 2476.521 unit increases in liquidity ratio (LR). Also, there is a direct relationship between cash reserve ratio (CRR) and volume of loans and advances (VLA), which implies that 1 unit increase in volume of loans and advances (VLA) will lead to 402260.9 unit increase in cash reserve ratio (CRR).

However, the t statistic for volume of deposit is not statistically significant using 5% level of significance. It implies that 5% level of significance is 1.96 which is the tabulated value and the calculated value is -0.277299. Therefore, 1.96 > -0.27729 then acceptable the null hypothesis and reject the alternative hypothesis, then we conclude that the parameter volume of deposit (VD) is not statistically significant at 5% level of significance. The implication of this is all the parameters are not good explanatory variables for loans and advances.

Furthermore, the F statistic calculated is 15.566275 and using 5% level of significance, F tabulated value is 2.442. Since F calculated is greater than F tabulated, we reject the null hypothesis and accept the alternative hypothesis and conclude that the overall parameter is statistically significant.

Date: 05/10/13   Time: 01:42
Sample (adjusted): 1992 2011
Included observations: 20 after adjustments
Trend assumption: Linear deterministic trend
Series: LOA VD LR LQR RESQ
Lags interval (in first differences): 1 to 1

TABLE II: UNRESTRICTED COINTEGRATION RANK TEST (TRACE)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.778192	69.72125	63.81889	0.0000
At most 1*	0.536186	47.60236	33.85613	0.0003
At most 2*	0.488569	29.23691	18.79707	0.0005
At most 3*	0.212859	15.826041	8.49471	0.0000
At most 4*	0.001953	3.639092	0.841466	0.0000

The trace test indicates a co-integration at 5% level of significance (0.05) and the Table II above revealed that null hypothesis of co-integration is rejected. This implies that the long-run test revealed co-integration relationship among variables that were included except only one variable. Therefore, we deduced that there is long-run relationship between volume of loans and advances and its explanatory variables (LRt, LR, and VD) except cash reserve ratio (CRR) that has no long-run relationship with the dependent variable (volume of loans and advances)

TABLE III: UNRESTRICTED COINTEGRATION RANK TEST (MAXIMUM EIGENVALUE)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.778192	33.11889	30.87687	0.0000
At most 1*	0.536186	27.36545	15.58434	0.0008
At most 2*	0.488569	21.41087	13.13162	0.0002
At most 3*	0.212859	14.786949	4.26460	0.0000
At most 4*	0.001953	3.239092	0.841466	0.0000

Max-eigenvalue test indicates no cointegration at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

TABLE IV: UNRESTRICTED COINTEGRATING COEFFICIENTS (normalized by b'*S11*b=I):

VLA	VD	LRt	LR	CRR
2.51E-07	-8.07E-05	0.218839	-0.198523	0.742492
-1.72E-07	-9.77E-05	-0.172419	0.168608	-0.244312
-8.49E-08	3.27E-05	0.411565	0.052563	-0.545454
4.57E-07	9.06E-06	0.281802	0.144064	-0.168509
-2.84E-07	2.25E-05	0.022279	0.047795	-0.012361

The result of the above test from Tables III and IV(Maximum Eigen Value) reveals that all the explanatory variables except cash reserve ratio (CRR0 has long-run relationship with the dependent variable (volume of loans and advances) at 5% level of significance.

TABLE V: UNRESTRICTED ADJUSTMENT COEFFICIENTS (alpha)

D(VLA)	61377.52	60659.41	-44962.82	-84538.92	-20286.22
D(VD)	11166.03	5302.401	2653.425	639.2220	28.41468
D(LRt)	-1.500583	1.583249	-1.090790	-0.621155	0.054097
D(LR)	2.753486	-2.893073	-0.655878	-1.761016	-0.056330
D(CRRR)	-0.270366	0.046504	0.452462	-0.411769	0.031163
1 Cointegrating Equation(s):	Log likelihood	-643.6512			
Normalized cointegrating coefficients (standard error in parentheses)					
LOA	VD	LRt	LR	CRR	
1.000000	-321.5608	871719.6	-790793.0	2957636.	
	(78.0926)	(295413.)	(178100.)	(538366.)	
Adjustment coefficients (standard error in parentheses)					
D(VLA)	0.015408				
	(0.03526)				
D(VD)	0.002803				
	(0.00071)				
D(LRt)	-3.77E-07				
	(2.3E-07)				
D(QR)	6.91E-07				
	(4.1E-07)				
D(CRR)	-6.79E-08				
	(9.2E-08)				
2 Cointegrating Equation(s):	Log likelihood	-635.9684			
Normalized cointegrating coefficients (standard error in parentheses)					
VLA	VD	LRt	LR	CRR	
1.000000	0.000000	919303.9	-859602.0	2402784.	
		(316219.)	(198845.)	(545769.)	
0.000000	1.000000	147.9789	-213.9844	-1725.496	
		(867.756)	(545.664)	(1497.68)	

Adjustment coefficients (standard error in parentheses)				
D(VLA)	0.004985	-10.88032		
	(0.04242)	(17.6689)		
D(VD)	0.001892	-1.419354		
	(0.00074)	(0.30762)		
D(LRt)	-6.49E-07	-3.35E-05		
	(2.5E-07)	(0.00010)		
D(LR)	1.19E-06	6.03E-05		
	(4.3E-07)	(0.00018)		
D(CRR)	-7.59E-08	1.73E-05		
	(1.1E-07)	(4.6E-05)		
3 Cointegrating Equation(s):	Log likelihood	-629.2630		
Normalized cointegrating coefficients (standard error in parentheses)				
VLA	VD	LRt	LR	CRR
1.000000	0.000000	0.000000	-834093.6	2943317.
			(247960.)	(658648.)
0.000000	1.000000	0.000000	-209.8783	-1638.487
			(548.856)	(1457.91)
0.000000	0.000000	1.000000	-0.027747	-0.587981
			(0.17945)	(0.47666)
Adjustment coefficients (standard error in parentheses)				
D(VLA)	0.008804	-12.34843	-15532.20	
	(0.04386)	(18.1729)	(69017.2)	
D(VD)	0.001667	-1.332715	2621.383	
	(0.00073)	(0.30271)	(1149.65)	
D(LRt)	-5.56E-07	-6.91E-05	-1.050299	
	(2.4E-07)	(9.9E-05)	(0.37413)	
D(LR)	1.24E-06	3.89E-05	0.831453	
	(4.5E-07)	(0.00019)	(0.70347)	
D(CRR)	-1.14E-07	3.21E-05	0.119033	
	(1.1E-07)	(4.5E-05)	(0.17055)	
4 Cointegrating Equation(s):	Log likelihood	-626.8695		
Normalized cointegrating coefficients (standard error in parentheses)				
VLA	VD	LRt	LR	CRR
1.000000	0.000000	0.000000	0.000000	864691.3
				(326494.)
0.000000	1.000000	0.000000	0.000000	-2161.521
				(612.371)
0.000000	0.000000	1.000000	0.000000	-0.657130
				(0.20853)
0.000000	0.000000	0.000000	1.000000	-2.492078
				(0.40280)
djustment coefficients (standard error in parentheses)				
D(VLA)	-0.029841	-13.11440	-39355.41	-16499.57
	(0.07605)	(17.9549)	(78200.7)	(41371.0)
D(VD)	0.001959	-1.326924	2801.516	-1091.121
	(0.00128)	(0.30255)	(1317.71)	(697.115)
D(LRt)	-8.40E-07	-7.48E-05	-1.225341	0.418027
	(4.1E-07)	(9.6E-05)	(0.41868)	(0.22149)
D(LR)	4.39E-07	2.30E-05	0.335196	-1.322600
	(7.4E-07)	(0.00017)	(0.75902)	(0.40155)
D(CRR)	-3.03E-07	2.83E-05	0.002996	0.025976
	(1.8E-07)	(4.2E-05)	(0.18488)	(0.09781)

The result of Table V above indicates that after adjustment all the parameters have long-run relationship with the adjusted variable (volume of loans and advances). Note that cash reserve ratio is now co-integrated with the volume of loans and advances after using the log-likelihood analysis. In conclusion, there is a long-run relationship between the determinants of lending behavior of DMBs and the volume of loans and advances by the banks. while standard error and the values of t-statistic have been shown.
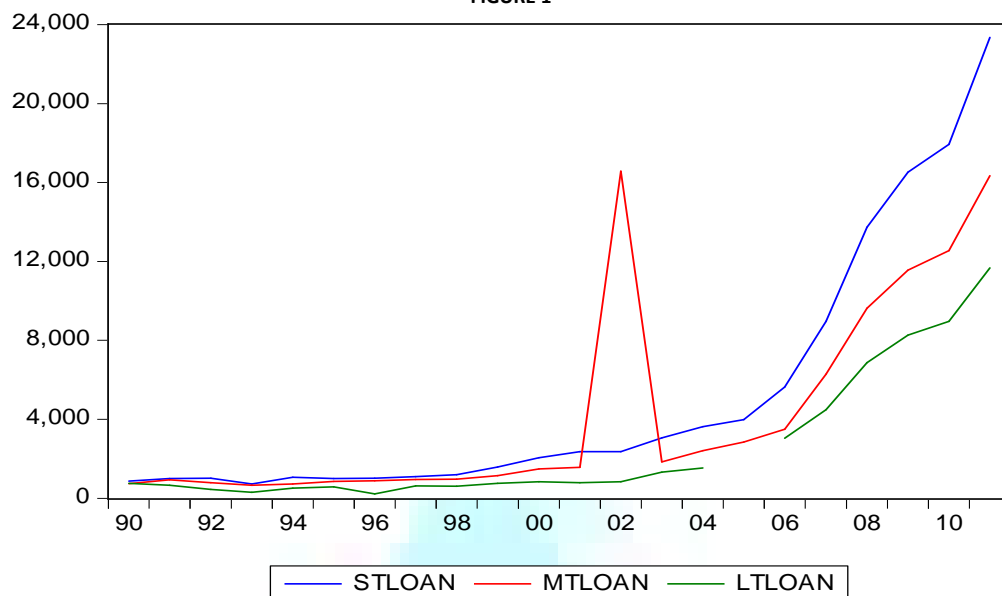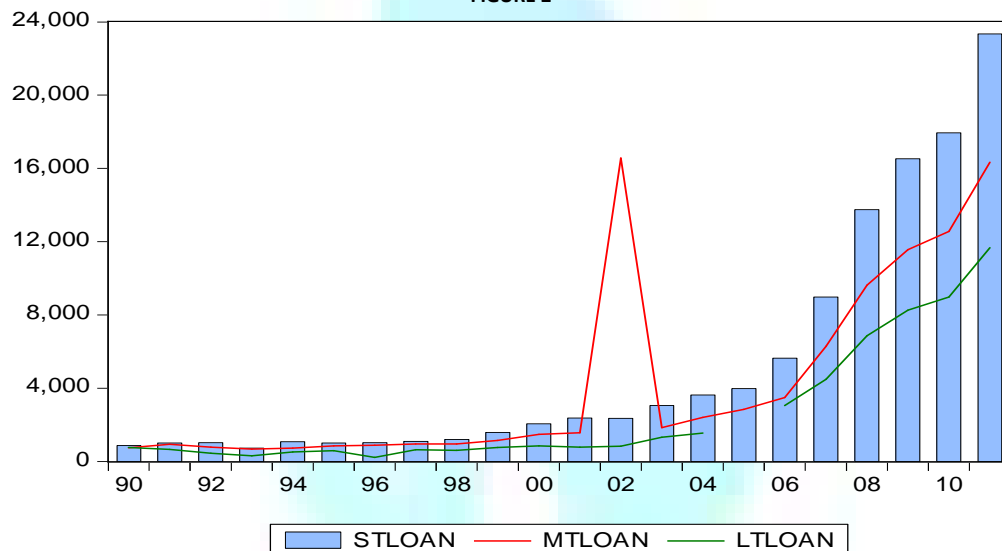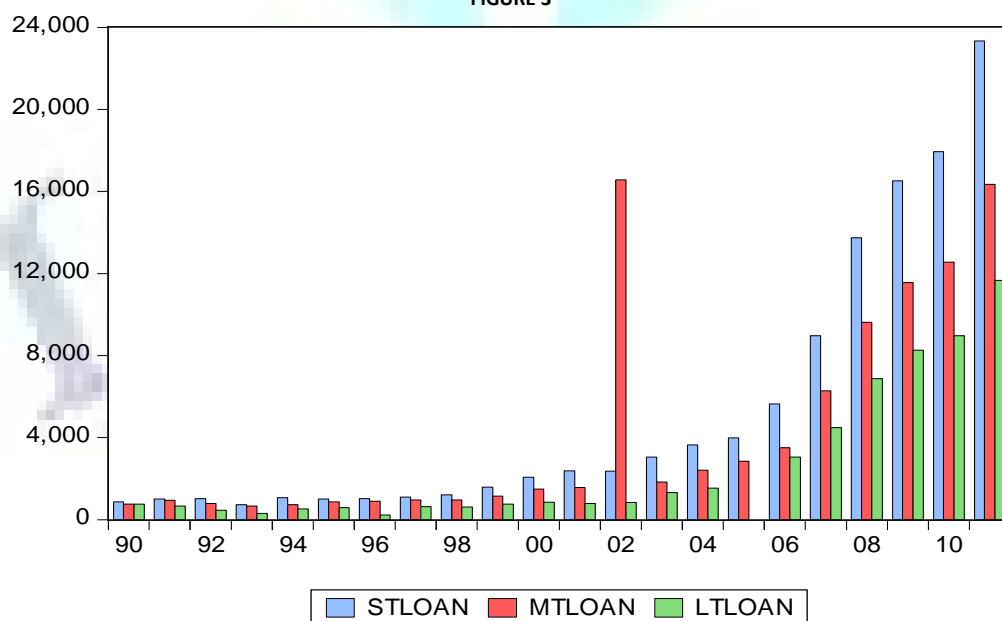
FIGURE 1

FIGURE 2

FIGURE 3

The result of the study from Figures I to III also showed that the structure that the proportionate volumes of short-term lending by deposit money banks to the economy during the period under review (1990 – 2011) are greater than the loans and advances granted on the bases of medium-term and long-term to the

economy. It was only during the year 2002 that the volume of loans and advances on medium-term basis astronomically outstrips the volumes of lending on both short-term and long-term bases as depicted by Figure 3 above.

CONCLUSION & RECOMMENDTAION

This study focuses on the determinants of lending behaviour of deposit money banks in Nigeria. In basic terms, the lending capacity of deposit banks is affected by factors such as volume of deposit, lending or interest rate, cash reserve ratio, and liquidity ratio, among others.

The regression result reveals that about 96% of the systematic variation in the dependent variable is explained by the four (4) independent variables such as LR, VD, RESQ and LQR. The F-staistic is significant at the 5% level showing that there is a linear relationship between LOA and the four (4) independent variables used for the regression. The result revealed that volume of deposit (VD), lending rate (LR), liquidity ratio (LQR) and cash reserve ratio (RESQ) are the main determinants of lending behaviour of deposit money banks in Nigeria. The implication of this is that a change in these variables will have a great change in banks' loans and advances to the economy.

Conclusively, the short-term lending of deposit money banks, as discovered from the study, has been on the increase throughout the period under review due to increase in short-term deposits except in 2002 when there is enormous increase in medium-term lending. However, the volume of short-term loans continues to dominate the lending portfolio of these banks from 2003 till 2011. This means that a reasonable number of bank customers were favoured for loans and advances which were granted to them for use for a reasonable number of months far beyond a period of one year within the period under review.

Based on the findings of this study, the it is recommended that the Central Bank of Nigeria should be using the regulatory variables (monetary policy rate, cash reserve ratio, and liquidity ratio) in such a way that will enhance robust volume of lending by such banks in order to grow the economy.

REFERENCES

1. Adebisi, O. (1994). "Nigerian Banking System and Policy", *Central Bank of Nigeria Economic and Financial Review*, 32(3), pp. 31-34.
2. Adedoyin, O. and Sobodun, B. (1996). "Commercial Banks Lending Activities in Nigeria", *Nigerian Financial Review*, 9(3), pp. 36 – 37.
3. Ajayi, S. A. (2007). "Major Determinants of Loans and Advances in the Nigerian Financial System", *Nigerian Journal of Banking and Financial Issues*, 5, pp. 13-14.
4. Bernanke, B. S. and Lown, C. S. (1991). The Credit Crunch, *Brookings Papers on Economic Activity*, No. 2, pages 205-248.
5. Carletti, E., Cerasi, V. and Daltung, S. (2006). "Multiple-Bank Lending: Diversification and Free-riding in Monitoring, *Working Paper*, Department of Statistics: Universita degli Studi di Milano-Bicocca,.
6. Chizea, B. (1993, Sept- Dec.). "Commercial Banks and Recent Challenges", *The Nigerian Banker,* pp 16-18.
7. Chizea, B. (1994), *Finance for Farming: A Guide to the Lending Banker*; Lagos: Institute of Banker, Nigeria.
8. Chodechai, S. (2004). *Determinants of Bank Lending in Thailand: An Empirical Examination for the years 1992 – 1996*, Unpublished Thesis.
9. Degryse H., Masschelein, N. and Mitchell, J. (2004). "SMEs and Bank Lending Relationships: the Impact of Mergers", *National Bank of Belgium Working Paper, No. 46.*
10. Dickey, D. A. and Fuller, W. A. (1979). "Distribution of the Estimators for Autoregressive Time Series with a Unit Root", *Journal of the American Statistical Association*, 74, pp.427-431, doi:10.2307/2286348. Retrieved on 21 February, 2013. (http://dx.doi.org/10.2307/2286348).
11. Ewert, R. and Schenk, G. (1998). Determinants of Bank Lending Performance, *Working Paper*, Center for Financial Studies, University of Frankfurt.
12. Ewert, R., Szczesmy, A. and Schenk, G. (2000). "Determinants of Bank Lending Performance in Germany" *Schmalenbach Business Review* (SBR), 52, pp. 344 – 362.
13. Ezekiel, E.S. (1997). *The Elements of Banking*, Lagos: Africa Publication Ltd.
14. Fadare, S. O. (2010). Recent Banking Sector Reforms and Economic Growth in Nigeria, Middle Eastern Finance and Economics Journal, Issue 8. P.153. Retrieved on 21 February, 2013. (http://www.eurojournals.com/MEFE.htm)
15. Foluso, O. (1998). *The Practice of Banking*, Akure: Trudon publishers.
16. Godlewski C. J. and Ziane, Y. (2008). "How Many Banks Does it Take to Lend? Empirical Evidence from Europe, *Working Paper*, Laboratoire de Recherche en Gestion & Economie
17. Goldfield, M. and Chandler, L. (1986). *The Economics of Money and Banking*, 9th edition, New York: Harper and Row Publishers.
18. Hancock, D, Laing, A and Wilcox, J (1995). Bank capital shocks: dynamic effects on securities, loans, and capital, *Journal of Banking and Finance*. Vol. 19. PP. 661-677.
19. Idowu, K.O. (2005). "A Preliminary Investigation into the Causal Relationship between Exports and Economic Growth in Nigeria", CBN Economic and Financial Review, 43(3), pp 29-50
20. Ituwe, C.E. (1985). *Elements of Practical Banking*, Ibadan: University Press
21. Jessup, P. F. (1980). *Modern Bank Management*, New York: West Publishing Company.
22. Jhingan, M. L. (2008). *Money, Banking, International Trade and Public Finance*, 7th Edition, Delhi: Vrinda Publications (P) Ltd.
23. John, P.O. (1993). *A Practical Guide to Bank Lending and Administration*, Lagos: Du Prince and Pal.
24. Luckett, D. G. (1984). *Money and Banking*, Singapore: McGraw-Hill Book Co. International Edition.
25. Manove, M., Padilla, A. J. and Pagano, M. (2000). Collateral vs. Project Screening: A Model of Lazy Banks, *Paper Presented at the Seminar Competition among Banks: Good or Bad?* Institute für Kapitalmarketforschung, Johann Wolfgang Goethe-Universitate.
26. Nwankwo, G. O. (1990). *Prudential Regulation of Nigerian Banking*, Lagos: University of Lagos Press.
27. Nwankwo, G. O. (2000). "Organizing for Financial Risk Management"; *The Credit Administrator,* 2(2), pp.32-39
28. Ojo, J. A. T. (1999). "Roles and Failures of Financial Intermediation by Banks*", CBN Bullion*, 23(3), pp 10-12.
29. Olokoyo, F. O. (2011). Determinants of Commercial Banks' Lending Behavior in Nigeria, International Journal of Financial Research Vol. 2, No. 2; July, pp. 61-72. Retrieved on 21 February, 2013. (www.sciedu.ca/ijfr)
30. Oloyede, B. (1999). *Principles of Money and Banking*, Ado: Forthright Educational Publishers.
31. Olusanya, S.O., Oyebo, A. O. and Ohadebere, E.C. (2012). Determinants of Lending Behaviour Of Commercial Banks: Evidence From Nigeria, A Co-Integration Analysis (1975-2010), *IOSR Journal Of Humanities And Social Science (JHSS) ISSN: 2279-0837, ISBN: 2279-0845. Volume 5, Issue 5.* (http://iosrjournals.org/iosr-jhss/papers/Vol5-issue5/G0557180.pdf)
32. Ongena, S. and Smith, D. C. (2000). "What Determines the Number of Bank Relationships?: Cross Country Evidence", Journal of Financial Intermediation, 9, pp. 26-56, doi:10.1006/jfin.1999.0273. Retrieved on 21 February, 2013. (http://dx.doi.org/10.1006/jfin.1999.0273).
33. Osabuohien, E.S.C. (2007). "Trade Openness and Economic Performance of ECOWAS Members: Reflections from Ghana and Nigeria", *African Journal of Business and Economic Research*, 2(2 & 3), pp. 57-70
34. Osayameh, R. (1991). "Lending and Credit Administration Model for Commercial Banks", *Nigerian Financial Review*, 4(2), pp.55-60.
35. Osayameh, R. (1996). *Practice of Banking: Lending and Finance*, Vol. 2, Lagos: F.A. Publishers.
36. Padilla, A. J. and Pagano, M. (1997). "Endogenous Communication among Lenders and Entrepreneurial Incentives", *Review of Financial Studies*, 10, pp. 205-236, doi:10.1093/rfs/10.1.205. Retrieved on 21 February, 2013.
37. Soyinbo, A. and Sobodun, O. (1991). "A Multi-Objective Lending and Credit Administration Model for Commercial Banks,*" Nigerian Financial Review*, 4(2), pp.55-60.
38. Usman, S. (1999, Jan- March). "Bank Regulation and Supervision in Nigeria", *The Nigerian Banker*, pp 7-9.

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APPENDIX I

YEAR	LOA	VD	LR	LQR	STLOAN	MTLOAN	LTLOAN	RESQ
1990	26000	8,360.00	27.7	44.3	875	749.9	765.1	2.9
1991	31306.2	10,580.70	20.8	38.6	998.5	943.2	654.3	2.9
1992	42735.8	4,612.20	31.2	29.1	1022.6	781.6	453.7	4.4
1993	65665.3	19,542.30	18.32	42.2	727	663.2	306.1	6
1994	66127.6	4,855.20	21	48.5	1066.6	731.1	516.1	5.7
1995	114668.9	8,807.10	20.8	33.1	996.5	852.7	585.6	5.8
1996	169437.1	12,442.00	20.86	43.1	1020.8	898.8	221.9	7.5
1997	385551	19,047.60	23.32	40.2	1091.9	954	632.2	7.8
1998	272895.5	18,513.80	21.34	46.8	1204.1	960.8	608.1	8.3
1999	322764.9	15,860.50	27.2	61	1574.2	1153.4	763.7	11.7
2000	508302.2	20,640.90	21.55	64.1	2068.7	1490.2	841.5	9.8
2001	796164.8	16,875.90	21.34	52.9	2376.8	1564.2	792.3	10.8
2002	954628.8	14,861.60	29.7	52.5	2354.7	16562.9	833.5	10.6
2003	1210033	20,551.80	22.47	50.9	3060.3	1841.9	1322.7	10
2004	1519243	64,490.00	20.62	50.5	3634	2401.6	1548.4	8.6
2005	1847823	18,461.90	19.47	50.2	3975.6	2839.3	2.453.8	9.7
2006	2524298	3,118.60	17.26	55.7	5635.1	3500	3048.2	7.4
2007	4813489	3,082.30	16.94	48.8	8975.6	6282.9	4487.8	3
2008	7799400	13,411.80	15.14	44.3	13738.4	9616.9	6869.2	1.3
2009	8912143	6,025.50	18.36	30.7	16515	11560.5	8257.5	2
2010	7706431	988.28	17.59	30.4	17942.2	12559.5	8971.1	1
2011	8997654	1,025.20	16	31.7	23343.9	16340.7	11672	1

Source: CBN Statistical Bulletin 2012

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