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THE IMPACT OF FINANCIAL DEEPENING AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

The study examines the effect of financial deepening on the economic growth of Nigeria. The model built for the study proxy gross domestic product as the endogenous variable measuring economic growth as a function of Financial Deepening, ratio of credit to private sector, inflation, and exchange rate proxy as the exogenous variables. Annual time series data was gathered from the Central Bank of Nigeria Statistical bulletin from 1980 to 2010. The econometric techniques of Ordinary Least Square (OLS), Augmented Dickey-Fuller (ADF) Unit Root test and the Co integrated test were employed in the empirical analysis. The Ordinary Least Square (OLS) result shows that a positive relationship exist between Financial deepening and Economic Growth variables the cointegration test result reveals that there is a long run relationship between financial deepening and economic growth. The study recommends that to sustain the existing relationship between economic growth and financial sector development, there is need to adequately deepen the financial system through innovations, adequate and effective regulation and supervision, efficient mobilization of funds and making such funds available for productive investment, and improved services.

Key Words: Financial Deepenings, Money Supply, Economic Growth, Consumer Price
Index and Exchange Rate

1.1 Introduction

In general, economic growth cannot be achieved without the combined role of labour, investment and financial deepening. The writings of Gurley and Shaw (1955, 1956, 1967) and Goldsmith (1958, 1969) stress the role of bank and non-bank financial intermediaries in the savings and investment process, where narrow or broad money forms a part of a wide spectrum of financial assets in the portfolio of wealth-holders. Indeed, financial deepening is a factor of economic growth. Financial deepening simply put, can be viewed as the increase in the stock or supply of financial assets in an economy (World Bank 1989). The sum of all the measures of the widest range of financial assets such as broad money, liabilities of non-bank financial intermediaries, treasury bills, value of shares in the stock market, money market funds and so on gives us the approximate size of financial deepening. But due to inadequate data on measures of financial assets in a developing country like Nigeria, there is a limitation in the measure of financial deepening.

The extent of financial development in Nigeria is very low given its financial system's limitation in resource mobilization. This repression is characterised by inappropriate real finance policy and various administrative controls over the financial system. One of the prominent features of Nigeria's growth drive is the conscious development of the financial sector. In the early seventies, the financial system was highly regulated with the government holding controlling shares in most of the banks, interest rates were capped, ceilings were imposed on the growth of credit, credit rationing was practised as well as compulsory credit allocations to preferred sectors through credit guidelines; foreign exchange controls were exercised (Ndekwa 1998). In 1986, financial liberalization was a major component of the Structural Adjustment Programme (SAP) which led to the de-control of foreign exchange market, deregulation of interest rate in 1987 and deregulation of entry into the financial services industry, brought some positive improvement in financial institutions and financial instruments were recorded (Ndekwa, 1998).

There is a majority agreement that for resources to be efficiently allocated and for an economy to be exploited to its full growth potential, there must be the existence of a well-functioning financial sector. The essence of emphasis on the development of the Nigerian financial sector is in the theory of financial repression which posits that efficient utilization of resources via a highly organized, developed and liberal financial system enhances economic

growth (McKinnon, 1973; Shaw, 1973), (supply-led theory of finance-growth nexus), this implies that development of the financial sector leads to economic growth as supply of capital will enhance growth. High financial deepening is affiliated with developed economies because the financial sector in such countries has had significant growth and improvement which has given way for development of the whole economy. However, there is less agreement on how and to what extent finance affects economic growth. There are mixed feelings about the importance of deepening of the financial system, while some argue that it facilitates the efficiency of the financial system (Gromb and Vayanos; 2010, Anad and Subrahmanyam; 2008), others have also argued that it is passive in nature and serves as a conduit through which monetary policy is effected (Benstom and Smith. Jr; 1975) and contracts, not available in the financial market, are implemented (Holmstrom and Tirole; 1998).

The impact of financial deepening on the growth of an economy generated a heated debate. While some studies opined that financial development drives economic growth, which is classified as the supply-led hypothesis. Others have argued that economic growth drives financial development, this is classified as the demand-led hypothesis which states that economic growth leads to the demand for capital. Robinson (1952) argues that where enterprise leads, finance simply follows, suggesting that its economic development which creates demand for financial services, not vice versa (demand-led theory of finance-growth nexus). Moreover, Lucas (1988) has argued that economists “badly overstress” the importance of the financial system on economic growth. This view can be backed up given the rapid growth in Asian economies despite a domestic financial sector and such economy could not be regarded as developed (Shan, et al, 2001). However, there are studies, which have argued that a bi-directional causality exists between financial deepening and economic growth (Odhiambo; 2011). These arguments stress the need for empirical analysis on the country’s economy itself and not globally, in order to determine the nature of such relationship in that country.

Apart from the introduction, section 2 deals with the review of existing literature. Section 3 focuses on the research methodology applied for the purpose of the analysis. Section 4 presents the data and analysis of findings of the research involving the interpretation of tests and estimation models while section 5 concludes and make policy recommendations.

2.0 Literature Review

With relation to financial deepening, as noted by several economists, financial intermediation is seen as the extent to which financial institutions (banks) bring deficit spending units and surplus spending units together. Such a joining of spending units is likely to result in more deepening of the financial system (Goldsmith, 1969; Ghani, 1992; Greenwood and Jovanovic, 1990). The result to this effect is that there will be more investment in the economy through the financial system. In his contribution in particular, Goldsmith (1969) observes that the financial superstructure of an economy “accelerates economic performance to the extent that it facilitates the migration of funds to the best user, i.e., to the place in the economic system where the funds yield the highest social return”.

In theory, theoretical disagreements do exist about the role of financial systems in economic growth. Some economists see the role as minor or negligible while others see it as significant. Robinson (1952), for example, argues that the financial system does not spur economic growth; rather the financial system simply responds to development in the real sector. In contrast, Goldsmith (1969), McKinnon (1973), Levine and Zervos (1996), and others emphasize the positive role of financial systems in economic growth. In particular, King and Levine (1993) and DeGregorio and Guidotti (1995) show convincingly that measures of banking development are strongly correlated with economic growth. In addition, they share the view that a well functioning financial system is critical to sustained economic growth. From the literature on financial deepening, including particularly the works of McKinnon (1973) and Shaw (1973) basically for extending formal theoretical analysis of the relationship between growth and financial deepening to developing countries, two major propositions have emerged. One, that growth of real money balances augurs well for economic growth, and two, that the growth of an economy depends, in part, on the degree of financial development or financial intermediation.

Ang (2007) examines to what extent financial development contributes to output expansion in Malaysia, during the period 1960-2003. Using augmented neoclassical growth framework to provide an evaluation of the impact of financial sector development on economic development and the ARDL bounds procedure, he found that aggregate output and its determinants are co integrated in the long-run, suggesting that financial development, private capital stocks and the

labor force exert a positive impact on economic development whereas the accumulation of public capital appears to curtail output expansion in the long.

Guiso, et al (2002) examine individual regions of Italy and find that local financial development enhances the probability that an individual starts a business, increases industrial competition, and promotes the growth of firms. Aside from the effect of financial sector development on growth at the macro level, some studies have examined the relationship between financial sector development and growth at the microeconomic level. Rajau and Zingales (1998) show that industrial sectors that are relatively more in need of external finance develop more disproportionately faster in countries with more developed financial markets.

Beck and Levine (2002) alluded to this finding through the use of different measures of financial development while Wurgler (2000) rationalizes the finding by showing that countries with a higher level of financial development increase investment more in growing industries and decrease investment more in declining industries than financially underdeveloped economies. DeGregorio and Guidotti (1995) find evidence for a negative relationship between financial development and growth in twelve Latin American countries during the period from 1950 to 1985.

Empirical studies on Nigerian finance-growth dynamics are not only limited in number but restricted in scope in terms of the measure of financial development.

Ndebbio (2004), using an ordinary least square regression framework on financial deepening, economic growth and development of sub-Saharan African countries. The study used two financial deepening variables namely the degree of financial intermediation measured by M2 as ratio to GDP, and the growth rate of per capita real money balances. The study finds that a developed financial sector spurs overall high but sustainable growth of an economy and that financial sector development weakly affect per capita growth of output. He attributed the result to shallow finance and the absence of well-functioning capital markets. The finding of Nnanna (2004) was more disturbing. He, also using ordinary least square regression technique, concluded that financial sector development did not significantly affect per capita growth of output. Similarly, Nzotta and Okereke (2009), based on two stages least analytical framework for a period starting from 1986 to 2007, concluded that financial deepening did not support economic growth in Nigeria. Adam (1998) examines how efficient the financial intermediation process has been in Nigeria's growth performance. The study employed the 2SLS approach. The empirical

results show that financial intermediation process is sub-optimal and caused by high lending rate, high inflation rate, low per capita income, and poor branch networking. Azege (2004) examines the empirical relationship between the level of development by financial intermediaries and growth. The study employed data on aggregate deposit money bank credit over time and gross domestic product to establish that a moderate positive relationship exist between financial deepening and economic growth. He concludes that the development of financial intermediary institutions in Nigeria is fundamental for overall economic growth. However, Afangideh (2009), using threestage least square estimation technique on a data spanning 1970 to 2005, found that a developed financial system alleviates growth financing constraints by increasing bank credit and investment activities with resultant rise in output.

2.1.4 Measures of Financial Deepening

Since financial deepening means an increase in the supply of financial assets in the economy, it is important to develop some measures of the widest range of financial assets, including money. This will involve identifying these financial assets, determining their measures and summing them up. The sum total of all the financial assets is one broad measure that represents financial deepening. The range of financial assets to be considered in this study includes broad money (M2), credit to private sector (CPS), liabilities of non-bank financial assets (NB), treasury bills (TB), value of shares (VS) and money market fund (MMF). The sum of these financial assets can thus approximate one of the widest measures of financial deepening. The summing up of these financial assets to represent a broad measure of financial deepening is not a problem, but the availability of data for some of them is. Because of the narrow and underdeveloped capital market in Nigeria, data on value of shares (VS) and money market funds (MMF) in particular are not available. It is equally difficult to get consistent annual data on all financial assets except broad money (M2). Broad money (M2) and credit to private sector (CPS) are the most acceptable measures of financial deepening in Nigeria.

If data had been available on these financial assets, the degree of financial intermediation, which is an important part of financial deepening, would be the sum of the measures of these financial assets, thus: $(M2 + CPS + TB + NB + VS + MMF)/Y$, Y representing GDP. The financial deepening based on such an identity is unlikely to capture the country's depth because of its narrow and shallow capital market. Thus, the market capitalization as a percentage of GDP in

Nigeria has been seen to be quite low compared with much higher percentages in advanced economies (Nyong, 1996). This may be because many companies in Nigeria are not quoted on the stock exchange. A situation in existence, where funds from the capital market in the 1970s formed a negligible 5% of total capital investment (Alili, 1984). In view of the lack of information, this study uses broad money (M2) and credit to private sector (CPS) as a proxy for the measure of financial deepening. Given the empirical/scientific work of Jao (1976), Fry (1978) and Ogun (1986), however, financial deepening is represented by two variables: the degree of financial intermediation measured, in our case $M2/Y$, and the net credit to private sector given by CPS/Y .

The variables are shown with their trend below

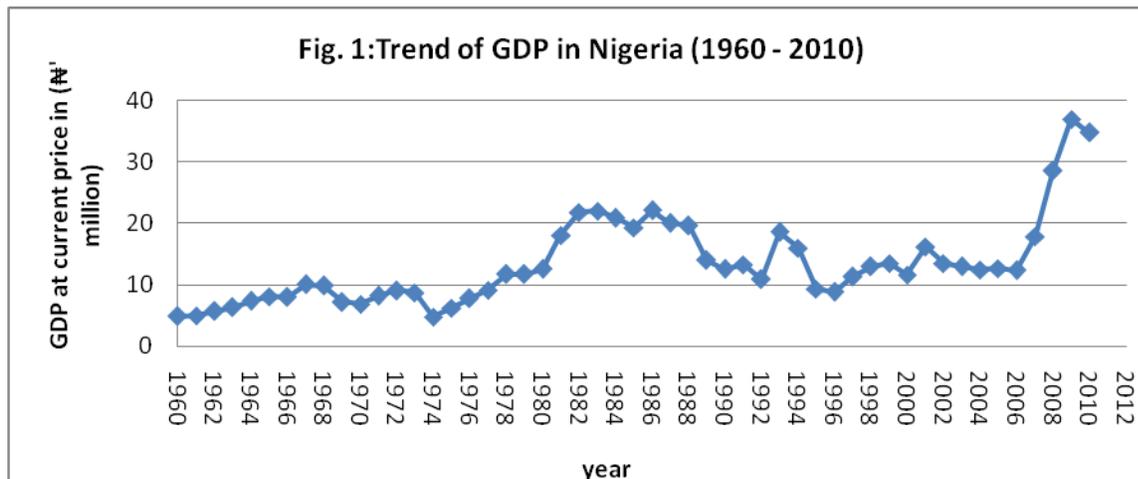
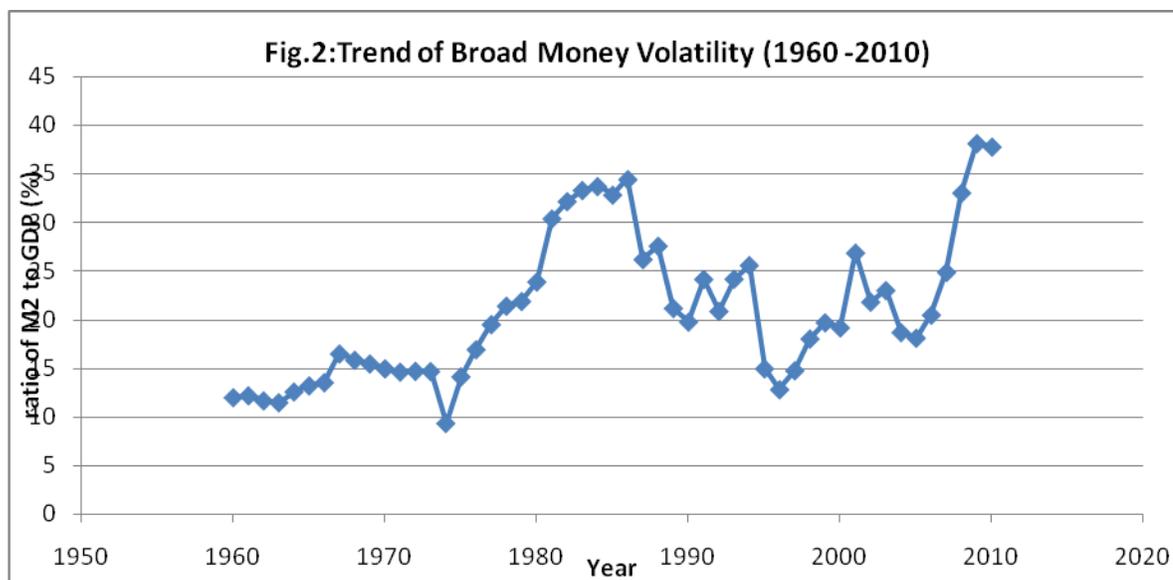


Figure 1 above shows the trend of GDP growth of the Nigerian economy from 1960 to 2010. Proven by the diagram, GDP rapidly increased during the oil boom era of the 1970's and declined in the early 1980's which can be attributed to the oil glut era but rose again by 1986 in which we experienced the advent of the Structural Adjustment Programme (SAP). Afterwards, there has been fluctuation in economic development. From the figure we can assert that economic growth has had a steady increase in the past few years, but diverged from this a little towards the end of the analysis.



The above diagram shows the trend of the ratio of broad money supply to GDP, representing broad money volatility between 1960 and 2010. The ratio was on the rise from the mid-70's till the late 80's, Nigeria witnessed increased money supply and GDP given its increased income from oil exports. Similar to the trend of GDP, broad money volatility has also increased steadily in recent years.

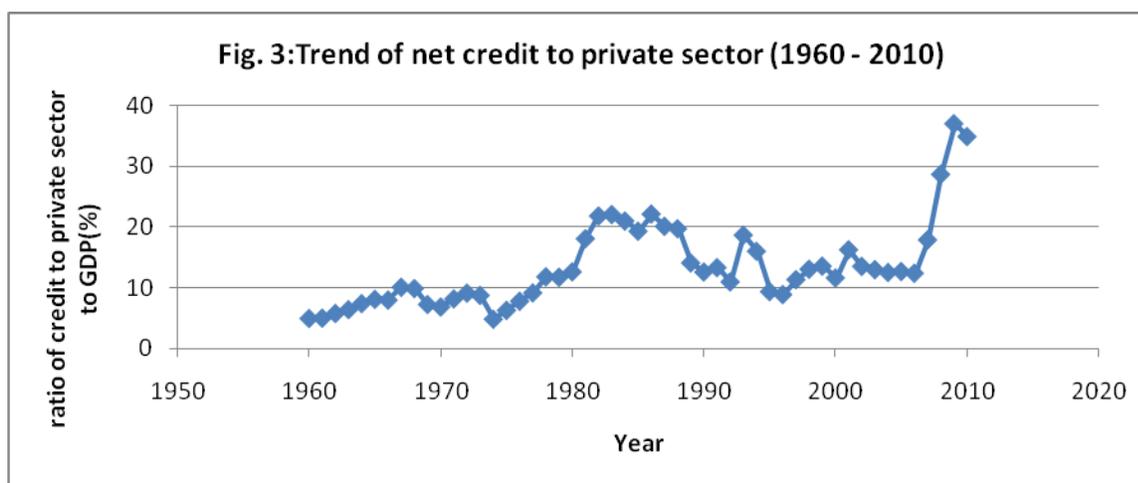
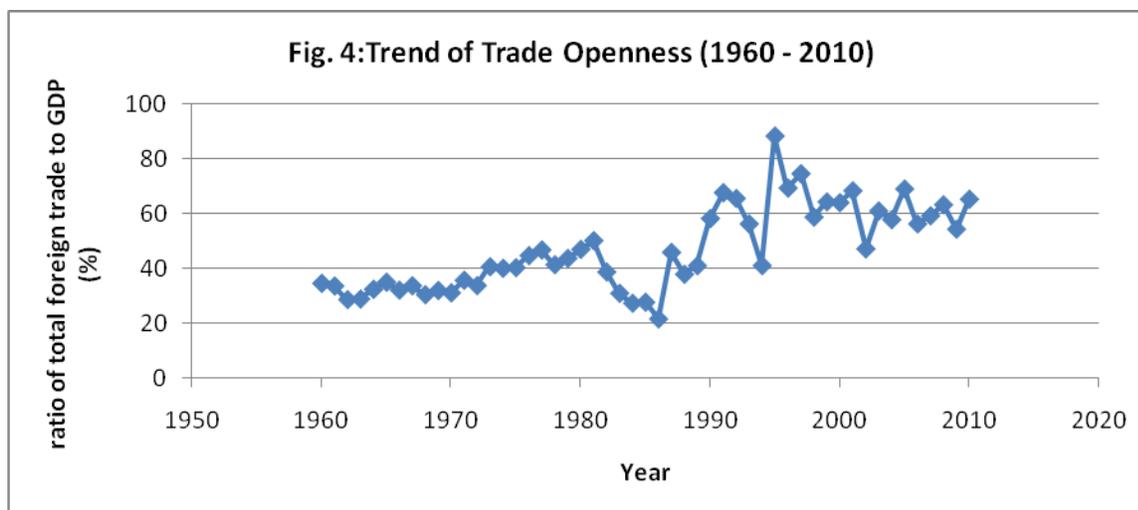
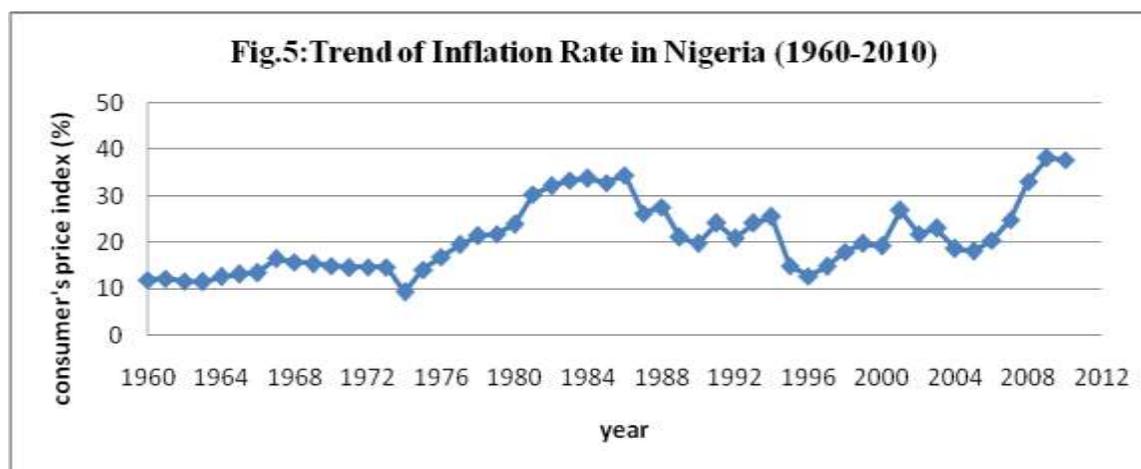


Fig. 3 depicts the ratio of credit to private sector to GDP for fifty-one years. Net credit to private sector was deparingly low from the 60's till the late 70's when it started showing some improvement. From our data in appendix 1, credit to private sector has increased smoothly since 1991, however, after being deflated by GDP, the trend shows that the ratio did not significantly increase until the early 2000's.

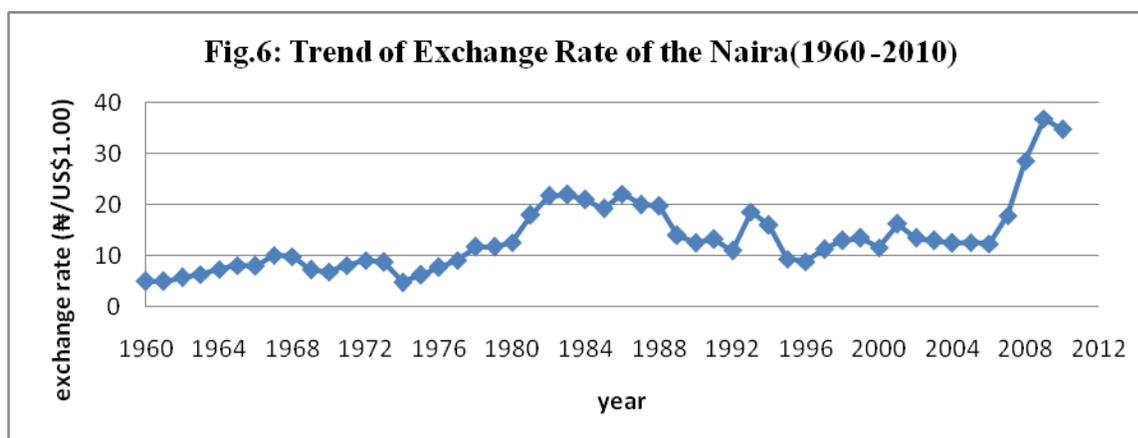


The trend of trade openness from 1960 to 2010 is represented by fig. 2.4.4. as we observe from our data in appendix 2 and trend above, in the years 1962 and 1963, openness was low at just a little above 20% but lowest in 1986 barely surpassing 20%. Trade openness has been the highest in the mid 90's but fell afterwards and has been fluctuating ever since.



Using the consumer's price index as a proxy, fig. 5 shows the trend of inflation rate that prevailed in Nigeria within the annual periods of 1960 till 2010. The steadiest periods of inflation were from 1960 up till 1973, there was a fall and then on inflation rate began to rise rapidly. This can be attributed to the fact that the government witnessed a surplus budget accruing from increased national income, it therefore increased its expenditure on projects like the hosting the world black festival, the Lagos trade fair and FESTAC (festival of arts and culture) in 1974/1975

which increased aggregate demand and inserted inflationary pressures on the economy. This action was later found to be wasteful. Inflation rate fluctuated from the mid- 80's onwards.



The trend of exchange rate of the naira to the US dollar from independence of the country till 2010 is shown above. It was experienced to be at its lowest from independence up until 1986 when it began to rise steadily then rapidly and never fell back to its previously determined position which was not even up to \$1.00 in 1960. This can be economically blamed on the external debt held by the country and continuous borrowing from world financial institutions which compel the government to devalue the naira. Also the rise in exchange rate is also as a result of the fact that the economy has not developed at pace of its international competitors.

3.0 Methodology

3.1 Model Specification

In accordance with the main objectives of this study, following Ndebbio (2004) with slight modifications with the inclusion of exchange rate and real GDP as a proxy for economic growth the model expresses GDP as the endogenous variable, being a function of M2Y, CPSY, TFTY, CPI and EXR. The model is specified thus;

$$GDP = f(M2Y, CPSY, TFTY, CPI, EXR) \quad (1)$$

Where GDP is the endogenous variable:

GDP = gross domestic product, M2Y = broad money velocity, CPSY = net credit to private sector, TFTY = trade openness, CPI = inflation rate, EXR = exchange rate

On transformation, it becomes;

$$\text{GDP} = \alpha_0 + \alpha_1 \text{M2Y} + \alpha_2 \text{CPSY} + \alpha_3 \text{TFTY} + \alpha_4 \text{CPI} + \alpha_5 \text{EXR} + U_t \quad (2)$$

$$\alpha_0 > 0, \alpha_1 > 0, \alpha_2 > 0, \alpha_3 > 0, \alpha_4 > 0, \alpha_5 < 0$$

Where;

α_0 is the intercept, α_1 to α_5 are coefficients of the explanatory variable which are all expected to be positively related to GDP except EXR on a priori.

3.2 Method of Estimation

To estimate the model we will employ the multiple regression along with the cointegration test. However, we first test for the stationarity properties of all the variables using the Augmented Dickey – Fuller Unit Root test.

3.2.1 Cointegration Test

Cointegration regressions measure the long-term relationship between the variables whose existence guarantees that the variables demonstrate no inherent tendency to drift apart. We employ the Johansen Cointegration tests (Johansen 1988; Johansen and Juselius, 1990), which set up the non-stationary time series as a vector autoregression (VAR) of order p :

$$\Delta y_t = \Pi y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_t + \beta x_t + \epsilon_t \quad (4)$$

$$\Pi = \sum_{i=1}^{p-1} A_i - 1, \Gamma = -\sum_{i=i+1}^p A_j \quad (5)$$

Where y_t is a k -vector of the $I(1)$ variables, x_t is a vector of the deterministic variables, r is the number of the cointegrating relations, and ϵ_t is an identically and independently-distributed error term. Two test statistics, the trace test and the maximum eigenvalue test, are used to test the hypothesized existence of r cointegrating vectors. The trace test statistic tests the null hypothesis that the number of distinct cointegrating vectors is less than or equal to r against a general alternative while the maximum eigenvalue test statistic tests the null hypothesis that the number of cointegrating vectors is r against the alternative of $r+1$ cointegrating vectors..

3.3 Description of Variables and Data

The study employed annual data on selected variables from 1960-2010. As in the empirical literature, real GDP is used to measure economic growth. However, a limitation of studies on the financial sector is that there is no single measure of financial deepening (FD), therefore, instead of a single proxy; two measures are employed in this study in order to improve the robustness of the results as well as three exogenous growth variables. The first measure is M2-to-GDP (M2Y) ratio, also known as broad money volatility. The ratio measures the degree of monetization in the economy as well as the depth of the financial sector while it also shows an expansion of payment and saving functions. The second measure is the ratio of private sector credit to GDP (CPSY) which is also referred to as net credit to private sector. The basis for this indicator is that commercial financial intermediaries are able to identify profitable investments, monitor managers, facilitate risk management, and mobilize savings. The control variables seen relevant to this study are: the ratio of total foreign trade to GDP (TFTY), known as trade openness, inflation rate, proxied by the consumers' price index (CPI) and exchange rate of the naira with respect to 1 US dollar (EXR).

3.4 Source of Data

The data to be used for examination in this study will be secondary data in form of time series data. Majority of the data in this analysis will be sourced from the Central Bank of Nigeria's Statistical bulletin (2012) and internet publication.

4.0 Presentation and Analysis of Result

4.1 Unit Root Test

Time series data are prone to spurious results, a way out of this is to test for the stationary property of the variables using the unit root test. There exist a few types of unit root tests but for this study we adopted the Augmented Dickey-Fuller and it is presented below:

Table 4.1: Result of Unit Root Test (Augmented Dickey-Fuller)

Variables	ADF at levels	ADF at 1 st Diff.	ADF at 2 nd Diff.	Order of integration
GDP	9.299305	-0.153493	-17.43189	I(2)
M2Y	-1.177702	-6.73746		I(1)
CPSY	-1.416206	-5.448688		I(1)
TFTY	-1.623158	-11.07733		I(1)
CPI	3.763579	0.369385	-6.233409	I(2)
EXR	0.884674	-6.402679		I(1)

Source: Author's imputation

From the above result, the unit root test was performed on all six variables using the Augmented Dickey-Fuller (ADF) statistic. The null hypothesis of a unit root was rejected at the 1percent level of significance for all the variables at the levels. However, broad money velocity (M2Y), capital to private sector (CPSY), trade openness (TFTY) and exchange rate (EXR) were integrated after their first difference, each of these variables becomes I(1) after first differencing, showing that these variables at first difference are non-stationary but their growth rates are stationary. Other variables, GDP and CPI, were integrated after their second difference I(2). None of the variables however was integrated at levels.

4.2 Cointegration Test

Since not all the variables were integrated at levels i.e. I(0), a cointegration test is needed to test whether there is a long run relationship among the variables under the assumption that series have a linear trend and cointegrating equations have intercepts. Hannan-Quinn information criterion and Schwarz information criterion give a lag length of five as the appropriate lag structure.

Table 4.2: Johansen Cointegration Test Result

Sample (adjusted): 1960 2010

Included observations: 51 after adjustments

Trend assumption: Linear deterministic trend

Series: GDP M2Y CPSY TFTY CPI EXR

Lags interval (in first differences): 1 to 5

Unrestricted Cointegration Rank Test (Trace)

Hypothesized	Trace	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999300	735.9394	95.75366	0.0001
At most 1 *	0.994756	409.0631	69.81889	0.0001
At most 2 *	0.885596	172.7860	47.85613	0.0000
At most 3 *	0.725603	75.22526	29.79707	0.0000
At most 4 *	0.313418	17.03221	15.49471	0.0291
At most 5	0.002460	0.110850	3.841466	0.7392

Trace test indicates 5 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen	0.05		
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.999300	326.8764	40.07757	0.0001
At most 1 *	0.994756	236.2770	33.87687	0.0001
At most 2 *	0.885596	97.56077	27.58434	0.0000
At most 3 *	0.725603	58.19305	21.13162	0.0000
At most 4 *	0.313418	16.92136	14.26460	0.0186
At most 5	0.002460	0.110850	3.841466	0.7392

Max-eigenvalue test indicates 5 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Econometric views 7.0

The trace statistics and the maximum eigenvalue statistics for the model are presented above.

The null hypothesis of absence of a cointegrating relation among the variables is rejected at 95% confidence level for both statistics. The trace and maximum eigenvalue statistics both indicate that there are five cointegrating equations. The existence of cointegration indicates a long run relationship between GDP and the financial deepening's control variables.

Regression Analysis

A regression analysis was carried out in order to show the impact of selected exogenous variables on Nigeria's economic growth and the result derived is presented in table 4.1 with its excerpts from econometric views 7.0.

Table 4.3: Ordinary Least Square Regression Result

Dependent Variable: GDP

Method: Least Squares

Sample(adjusted): 1961 2010

Included observations: 50 after adjusting endpoints

Variable	Coefficien	Std. Error	t-Statistic	Prob.
	t			
C	140819.4	429262.2	0.328050	0.7445
M2Y	79951.61	37125.19	2.153568	0.0369
CPSY	-123195.5	47054.16	-2.618164	0.0122
CPI	51581.74	16786.23	3.072860	0.0037
TFTY	-9112.024	7702.987	-1.182921	0.2433
EXR	-7520.875	6300.076	-1.193775	0.2391
GDP(-1)	0.914859	0.073971	12.36779	0.0000
R-squared	0.995046	Mean dependent var	3706612.	
Adjusted R-squared	0.994355	S.D. dependent var	7404392.	
S.E. of regression	556333.8	Akaike info criterion	29.42530	
Sum squared resid	1.33E+13	Schwarz criterion	29.69298	
Log likelihood	-728.6325	F-statistic	1439.448	
Durbin-Watson stat	2.428803	Prob(F-statistic)	0.000000	

Source: Econometric views 7.0

$$\text{GDP} = 140819.4 + 79951.6\text{M2Y} - 123195.5\text{CPSY} + 51581.7\text{CPI} - 9112.1\text{TFTY} - 7520.8\text{EXR} + 0.91\text{GDP}(-1)$$

$$(0.328) \quad (2.153) \quad (-2.618) \quad (3.072) \quad (-1.182) \quad (-1.193) \quad (12.367)$$

Interpretation of Result

Taking from the above result, it shows that the constant was positively related to GDP but not significant. With regards to the measures of financial deepening; the first being the ratio of broad money to GDP as expected showed a positive relationship as well And was significant. From the result, it implies that a 1 percent increase in the ratio of money supply to GDP will lead to a 79951.61million naira increase in GDP. Going by this, the result conforms to apriori expectation. However, the second which is the ratio of credit to private sector to GDP does not conform with the apriori expectation, owing to the fact that the regression result presents and inverse relationship to GDP. It does not conform in that more credit to the private sector ought to have increased investment which will in turn raise national income. This awry result may be due to the high level of defaults in loan repayments and bad investments. Based on the result from the coefficient, a 1 percent increase in net private sector credit will result in a 123195.5million naira decrease in GDPbut it significant in determining economic growth. The significance of this result shows that CPSY is an important variable that determines GDP.

For the other control variables; Inflation rate represented by the consumers' price index has a positive correlation to GDP, as a controlled rate of inflation will lead to an increase in national output; i.e. a 1% rise in inflation rate will lead to a 51581.74million naira rise in GDP and is as well significant indicating rate of inflation as an important determinant of the development of the economy. Trade openness came out having an inverse relationship with the dependent variable and also insignificant this does not conform to the apriori expectation as an economy's openness to trade should improve economic development. Our result indicates a 1 percent positive change in openness to cause a 9112.024million naira negative change in GDP, this may be faulted on the mismanagement of revenue derived from trade and that the country spends more on imports than it gains from its exports. Exchange rate as expected has a negative relationship to GDP meaning that a naira/1 US dollar increase in rate of exchange will reduce GDP by 7520.875million naira, but it shows non-significance in the model. The coefficient of the lagged GDP shows a positive interaction to the GDP which is the dependent variable. It is also found to be significant in the specification of the model.

The R^2 which is the explanatory power of the model has a value of 0.995046 is reasonably high, which means that the model can be 99.5% relied upon. In other words, the model has 99.5% predictive power, as all the independent variables contribute about 99.5% in explaining the

dependant variable. The remaining 0.5% was explained by the error term. The model selection criteria which are the Schwarz and Aaike info criteria show a good outcome with 29.69298 and 29.42530 values. The results show the model selection to be good.

Reported in parenthesis are the t-statistics of the explanatory variables which M2Y, CPSY, CPI and GDP(-1) are significant at 5% and 1% level of significance with t-statistics of 2.153568, -2.618164, 3.072860 and 12.36779 respectively; going by the rule of thumb that gives significance of t-statistic greater 2 or probability less than 0.05 at $\alpha=0.05$, which means that they belong to the model. However, the t-statistics of TFTY and EXR have shown not to be statistically significant with t-statistics of -1.182921 and -1.193775. The calculated value of the F-statistic was approximately 1439.448. Meanwhile, the tabulated value for F is 2.43 at 5% significance level. Since $F_c > F_t$; therefore, F is significant which means that all the variables put together belong to the model.

Standard Error of regression was 556333.8 and its ratio to the mean dependant variable of 3706612 is 0.15. The standard error of regression is considered reasonably small to confer acceptability on the result of the model.

The calculated Durbin Watson statistic was given as 2.428803 and the tabulated DW values of $d_U=1.29$ and $d_L=1.82$. Since $DW_c > d_U$; therefore, there is no serial correlation, indicating that the result can be used for policies.

5.0 Conclusion and Recommendations

The Nigerian financial sector is not currently in a position to effectively support a strong expansion of the real sector and maximize their contribution to economic growth and development. Based on the findings, this study concludes that in Nigeria, credit to private sector which is one of the measures of financial deepening is negatively correlated to GDP, this wrong expectation can be attributed to prevailing corruption and mismanagement of funds in the capital market. The finding suggests that financial deepening should not be emphasized unilaterally; rather, attention should also be given to the complimentary and coordinated development of reforms in other areas.

With respect to money supply and inflation, consideration should be given to setting limits on government borrowings from the CBN in absolute cash amounts or as percentages of past revenues and the CBN should firmly exercise its autonomy and enforce the agreed limits on

government borrowings as this invites very high inflationary tendencies. Expansionary policies should be implemented discreetly in order to avoid the scenario of high interest rates and crowding out of private sector investment.

To sustain the existing relationship between economic growth and financial sector development, there is need to adequately deepen the financial system through innovations, adequate and effective regulation and supervision, efficient mobilization of funds and making such funds available for productive investment, and improved services.

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