



EMPIRICAL EXAMINATION OF THE EFFECT OF GLOBALISED FINANCIAL SYSTEM ON SUSTAINABLE DEVELOPMENT IN NIGERIA

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Abstract

Globally developing nations are viewed have been backward and fairly stagnant, and so were tagged with different appellations such as the peripherals, the poor, the low-income-countries, mono-cultural economies, and the most vulnerable to global economic and financial relationship and shocks. This study examined the empirical effect of globalized financial system on economic growth in Nigeria building the model around the theoretical framework of financial liberalization thesis by Shaw (1973) and McKinnon (1973). The study adopted the econometrics method known as Error Correction Mechanism (ECM) with dataset that spanned 1986 through 2017, the choice of this method rested on the fact that all variables in the model were integrated at order one $I(1)$ using Augmented Dickey Fuller unit root test, and were equally cointegrated as indicated by the results of Johansen cointegration test. The study however, found that financial globalization has limited impact on economic growth in Nigeria both in the short and long runs, but support the McKinnon-Shaw (1973) hypothesis of financial intermediation. This study therefore concludes that financial liberalization policy has limited growth stimulating effect on the Nigeria economy perhaps due to guided liberalization in force, due to this, sustainable development could not be achieved relying on this policy, except a renew effort is geared toward market determined financial rates. Base on the aforementioned this study recommends that Government should allow the invisible hand of the market to determine financial prices as prescribed by the Classical School.

Keywords: Globalized Financial System, Error Correction Model, and Nigerian Economy.

JEL Classifications: E 44; G15

Introduction

Globally developing nations are viewed have been backward and fairly stagnant, and so were tagged with different appellations such as the peripherals, the poor, the low-income-countries, mono-cultural economies, and the most vulnerable to global economic and financial relationship and shocks. This is because of seemingly intractable economic problems that have refuted almost all antidotes for industrialization. The image of Africa as a continent is well captured in this illustration, because none of its sub-region or unit (country) is close to been developed. However, in the mid-eighties, this poor and 'wildful' economic atmosphere in Africa paved way for International Monetary Funds (IMF) to come to rescue of most of these countries (Nigeria inclusive), through loan administration that was accompanied by set of policy programmes. The embodiment of these policies was referred to as Structural Adjustment

Programme (SAP). Major policies of this programme were economic and financial liberalization, the former encompasses such policies like commercialization, privatization, and private-public partnership, in sum, it was a return to classical thinking. While the latter was an attempt to free global financial resources to locate optimal users around the world, but this system could not work in vacuum, it comes with some legal and institutional policy frameworks to engender its efficiency. These policy frameworks include interest rate deregulation, exchange rate deregulation, and capital account liberalization, and stock market liberalization, private ownership of banks and privatization of publicly owned banks cum foreign participation in the banking sector.

The globalized financial system through financial liberalization policy was a child of necessity because the domestic financial resources

mobilization (savings) was very poor, perhaps still poor in Africa and shortfall of potential investment requirement. Hence the need to woo foreign investors and financial resources to augment deficient and deficit domestic savings around Africa occasioned by slow growth, low income, poor private property right enforceability, and excessive regulations by the fiat. The financial globalization is expected to unlock the moribund domestic financial sector in Africa and kick start the industrial engine for inclusive growth and sustainable development.

Nations that adopted financial liberalisation policy encourage inflows of capital through dismantling of restrictions and controls (regulations) on foreign capital flows. It also entails domestic financial markets deregulation in order to improve their economic environments and prospect, through the adoption of strictly market systems (Bakare-Aremu, 2016). In addition, according to Diamond (1984) and Obstfield (1994); financial liberalisation promotes access to international capital inflows which allows recipient economies to smooth both investment and consumption, especially in a situation of adverse shocks. They further noted that the potential growth and welfare gains, resulting from global risk sharing, can be large and permanent.

According to Ram (2009), the key elements of financial liberalisation includes deregulation of interest rate; removal of credit control; privatisation of government banks and financial institutions; removal of restrictions on entry of private sector and/or foreign banks and financial institutions into domestic financial markets; introduction of market based instruments of monetary control; and capital account liberalisation. Also, in accordance to the World Bank Washington consensus agenda, financial liberalisation does not only consist of

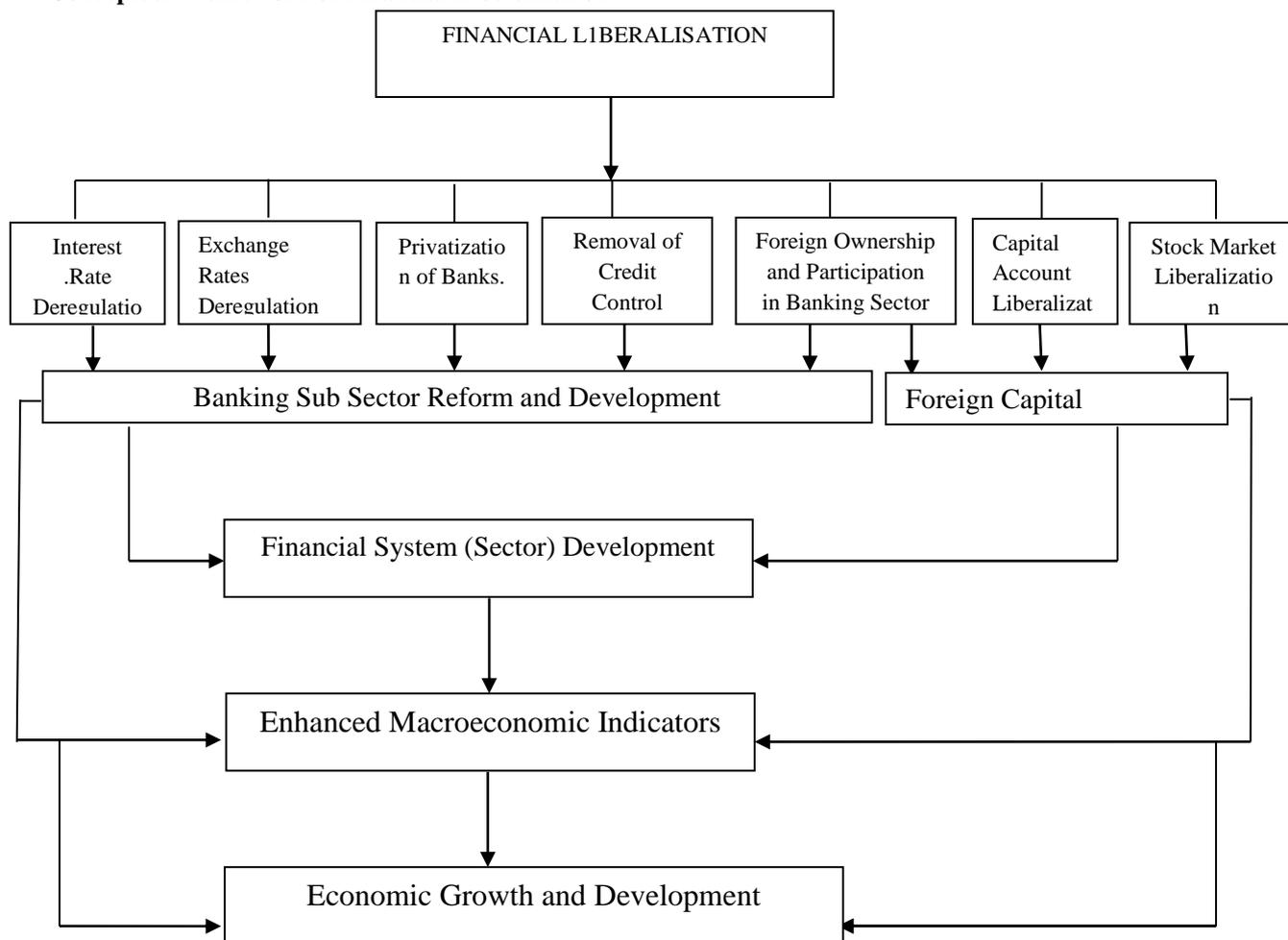
tight budgetary policy and the removal of trade subsidies but also includes privatisation of state owned enterprises. This suggests that financial liberalisation has both domestic and foreign dimensions.

However, there is a consensus in the literature that macroeconomic policy outcomes and performance reflects the relative degree of financial liberalisation. Among the macroeconomic indicators often influenced by liberalisation regimes, are economic growth, trade openness, deficit financing, capital and current account balances and financial prices (i.e. inflation rate, exchange rate, interest rates and external reserves, etc.) (Balogun, 2014). Therefore, this study links financial liberalisation to macroeconomic performance and national economic capacity to use its gains for developmental purposes.

Consequently, within the theoretical framework of financial liberalization by Shaw (1973) and McKinnon (1973), this study investigates the gains from globalized financial freedom (financial liberalization) to the Nigerian economy using both descriptive and econometrics method of analysis and dataset that spanned 1986 through 2017.

This research study is subdivided into seven parts; the first part provides general information on the study's background which hubs the introduction, problem statement, and objectives, while the second section shed light on conceptual issues and relevant literature review. The third reflects on the theoretical issues while the fourth and the fifth respectively discussed research method adopted and the empirical results. The sixth part evaluates major findings from the empirical results while the last section discusses the study's conclusion and policy recommendations.

Conceptual Framework of Financial Liberalization



Source: Sketch by the Author (2016)

Fig.1 Conceptual Framework of Financial Liberalization

The above conceptual framework of financial liberalisation shows several linkages among financial liberalization policy and financial sector development, on the one hand and economic growth and development on the other hand (Finance-led Growth Thesis). This begins with financial liberalisation policies (such as interest rates deregulation, exchange rate deregulation, removal of credit control, private and foreign ownership and control of banks, capital market and capital account liberalisations) which lead to domestic financial sector development and positive net foreign capital inflows. Both foreign capital inflows and domestic financial sector development (financial deepening) have dual effects on economic activities. Firstly, they smoothen hitherto deficit domestic financial resources through improved savings mobilization and also increase investible funds in the capital market; secondly it encourages foreign direct investment flows. These dual effects will result in the enhancement of some

macroeconomic indicators, such as reduction in inflation rates through increase and improved investment (productive base), increased GDP growth rate, increased tax base and tax revenue, (and thus reduce public debt and debt servicing), increase foreign reserves, appreciate and conserve foreign exchange earnings, improve balance of payments and trade, and increase real interest rates. This improvement on the macroeconomic indicators will then have direct and indirect enhancement effects on the economic growth and development. Direct effect is evidence from increased productivity through enhanced fund mobilization and its optimal disbursement for productive purposes. On the other hand, the indirect effect is premise on the fact that financial liberalization can enhance revenue generation and reduce debt financing and servicing, and thus in a way increase the productive base of the nation through provision of improved infrastructures and

facilitation of social health insurance that will consequently increase the average wellbeing of the

Literature Review

Prior to financial liberalisation, the government of developing countries practiced financial repression thereby limiting the administrative framework of the financial system to its whims and caprices, such that financial policies formulated and implemented go well with its desires, (Sulaiman et. al. 2012).

Financial liberalisation (FL) refers to the deregulation of domestic financial markets and the liberalisation of the capital account. The effects of FL have been a matter of some debate. In one view, it strengthens financial development and contributes to higher long-run growth. In another view, it induces excessive risk-taking, increases macroeconomic volatility and leads to more frequent crises. (Romain, 2007).

Misati and Nyamongo (2012), investigated the dual role of financial liberalization on growth in 34 Sub-Saharan African countries, using a Bank crisis model and a growth model. The outcome of their study indicates that institutional variables are key factors that determine economic growth while they recommend the adoption of the financial liberalisation policy and institutional reform measures. But Stiglitz (1994) argued that, while government intervention (beyond financial sector regulation) could not guarantee a more productive and efficient financial sector, a partially repressed financial sector clearly had the capacity to outperform more liberalised finance. It should, therefore, not be assumed a- priori, that liberalisation will bring a net improvement in the financial sector or in the real sector performance. In addition, the role of capital flows volatility threat on economic growth stability was examined on selected developing economies, using the empirical model of panel logit estimation, and it was shown that foreign debt liabilities to total liabilities and foreign direct investment liabilities to total liabilities increase the likelihood of banking crisis (Helmi & Nabila, 2014).

McKinnon (1973) argued that the limited capital market development of developing countries meant that firms were largely confined to self-finance at the same time that indivisibilities in physical capital required the accumulation of savings prior to physical capital accumulation. Bekaert, Harvey and Lundblad (2005) studied growth volatility and financial liberalisation in 40 developed and 95 developing countries and concluded that financial liberalisation was associated with decline in the ratio of consumption growth volatility to GDP growth volatility. This means there exists a nexus between financial liberalisation and consumption

people and their performance in the work place.

volatility; the result, however, holds for both total and idiosyncratic consumption growth. This is in line with the findings by Bekaert *et al.* (2005).

In a similar study, Romain *et.al.* (2011) examined the costs and benefits of financial liberalisation and conclude that a number of problems are associated with financial liberalisation, despite its growth and welfare benefits; however, they argued that ameliorating contract enforceability problems, through a better legal system and other institutional reforms are seen as fundamental sources of higher growth and lower volatility in the long-run. They note, also, that it often takes time for these reforms to be achieved. They further note that countries with a functioning financial sector can be made better-off by liberalising and experiencing a rapid but fairly risky growth path, rather than by remaining closed and trapped in a safe 'haven' but slow growth path.

A study by Fowewe (2006), examined the effect of financial liberalization on savings in 16 Sub-Saharan African countries, found that financial liberalisation had dual and conflicting effects on savings. These conflicting effects were as a result of the usage of two mutually exclusive variables to proxy financial liberalisation namely, FINDEX1 and FINDEX2, the former being derived from method of principal component which put into consideration various phases of financial liberalisation process while the latter (FINDEX 2) used period in which the countries under study adopted financial liberalization policy which took dummy '0' before liberalisation and '1' after liberalisation. The conflicting resultant effects indicates that financial liberalisation (FINDEX 1) positively and significantly spurs savings while financial liberalisation (FINDEX 2) has a negative effect on savings. This was as a result of the credit constraint in the economy which the financial liberalisation removed and thereby increased consumption. Gries *et. al.* (2009) examined linkages between financial deepening, trade openness and economic development for 16 Sub-Saharan Africa countries and concluded that there was a limit to which finance (Financial sector) could promote regional development and thereby refuted (not really support) the popular finance-led hypothesis. In general, they found that financial deepening and trade openness had swayed regional development only marginally. Therefore, rather than support any development strategies prioritising financial sector liberalisation or trade liberalisation, they advocated a holistic policy approach that would take into account other fundamental development factors. Their study,

however, did not look at the country specific-effect of these Sub-Sahara Africa countries, they only considered the joint effects. In a similar study, Elsabe (2002) examined globalisation and economic growth in South Africa, with primary concern on benefit of trade and financial liberalisation to the South African economy. He observed that financial liberalization had a dramatic impact of about 136% on RGDP/capita over the period under review. It was also noted that capital account openness contributed about 34% increase to the Real GDP per capita growth over the period of 11 years. Noting, that impact of globalisation on the South African economy was more complex, he explained further that South Africa re-entered the international economy from isolation at a time when the focus of globalisation, especially for developing countries seemed to gain momentum. He further noted that the economic growth pattern was lower than the acceptable norms in other emerging economies, as the forces of globalisation seemed to be stronger than expected. His analysis shows that 98% of the performance of the South African economy growth in 2008 was due to the globalisation processes which encapsulated the financial liberalisation policy.

Also, John (2009) examined the impact of financial liberalisation on domestic resources mobilization in nineteen (19) African countries. He noted that the available domestic savings were insufficient to meet the already low investment requirement, and that to achieve the Millennium Development Goals, substantial external resource inflows was required, with a view to relieving the savings and foreign exchange constraint faced by most of these countries. John (2009), further noted that most resources inflows for the preceding three decades were largely Official Development Assistance (ODA), that is, they were Aid rather than Capital Investment inflows. This is, however, dangerous because it could lead a country to be a Aid dependent and incapable of mobilising financial resources, domestically. Specifically, during the period stated earlier, foreign savings had been necessary for funding more than 35 percent of the region's already low investment level and they are largely ODA.

Essays, (2013) examined and analysed the relationship between capital account liberalisation and economic growth in the West African Monetary Zone (WAMZ) for the period 1980-2012. The result revealed that in Ghana and Sierra Leone there was a significant positive relationship between capital account openness and economic growth, both in the short and long-run. But, there was no significant long-run relationship between capital account liberalization and economic growth

in the Gambia, Guinea, Liberia and Nigeria, which implies that opening of capital accounts should be gradual and be complemented with sound macroeconomic and financial policies. In a related Okpara (2010) examined the effect of financial liberalisation on selected macroeconomic variables in Nigeria. Such variables includes Gross Domestic Product (GDP), Foreign Direct Investment (FDI), financial deepening, savings and inflation rate, using discriminant analysis, and empirically established that real GDP recorded positive and significant contribution, National savings and FDI inverse and also statistically significant. Financial deepening and inflation rate did not discriminate significantly between non-financial and financial liberalization. But, Akingunola, Adekunle, Badejo and Salami (2013) used vector error correction model to establish a positive relationship between financial liberalisation and economic growth in Nigeria. While, Sulaimon, Oke and Azeez (2012), empirically investigates the effect of financial liberalisation on economic growth in developing countries (The Nigerian experience), using the Johansen co-integration test and the Error Correlation Mechanism (ECM) and found that financial liberalisation had growth stimulating effects.

It was noted in a separate study that the failure of Keynesian theories of government intervention had reinforced the invisible hand of allocative power of the market of the classical thought with the adoption of financial liberalisation through structural adjustment programmes in Ghana and Nigeria. The paper which examined whether these two countries had benefited from this policy, noting the imperfection of the financial market concluded that the duo have benefited but that more could be achieved, if the market is well developed (Essay, 2015). In the same vein, Owusu (2009), investigated the financial sector reforms programme in Ghana taking into consideration, the pre and post-reforms policies to determine whether those policies had helped to eradicate associated problems in the financial system and noted that the performance had been substantial and healthy since the adoption of financial liberalisation (financial reforms). In a similar study, Orji, Eigbiremolern and Ogbuabor (2013) examined the nexus between financial liberalisation and private investment in Nigeria and found that financial liberalisation had a significant impact on private investment flows. The study noted the existence of a structural break within its scope.

Agbaeze and Nwaka (2014) examined the sequencing of financial liberalisation process within the hostile macroeconomic environment and concluded that the hostile macroeconomic environment minimised the expected benefit of

financial liberalisation. They then however, recommended policies that could ensure promotion of monetary stability, stabilise macroeconomic environment and provide infrastructures to enable private investments to thrive in Nigeria. Also, Santigie (2010) examined the complementary between the accumulation of money balances (financial assets) and physical capital accumulation in Sierra Leone within the context of a theoretical underpinning of the McKinnon-hypothesis and suggested the need for achieving positive real interest rate to support capital formation. Mansaray and Swaray (2013) examined the rate of how changes in the financial market in Sierra Leone affect real money balance behaviours. The result suggested stable demands for real money balance and recommended that monetary authorities should continue to pursue real money balance as an intermediate target in setting the country's monetary policy framework.

Nwadubu and Onwuika (2014) observed the impact of financial liberalisation in Nigeria on saving-investment relationship and, by implication, on economic growth using error correction mechanism (ECM) and concluded that financial liberalisation

Theoretical Framework

Financial Liberalization Theory

The justifications for policies of financial liberalisation find their initial expression in the propositions contained in the independent (and nearly simultaneous) publications of McKinnon (1973) and Shaw (1973). These propositions, taken together, have since become known as the McKinnon-Shaw hypothesis or the financial liberalisation thesis. In sum, these authors argued that the financial sectors of most developing economies were repressed by misguided financial and monetary policies, overregulation of the financial sector and other forms of public sector intervention and excessive public borrowing from the financial system. The consequences of this repression could be seen in administering low nominal interest rates, often resulting in negative real rates (nominal interest rate less inflation rate), low ratio of real money to national income, Small and oligopolistic financial sectors (relative to the size of the economy) dominated by intermediation in short-term financial assets, dual economies with capital-intensive modern sectors served by cheap foreign exchange and low-interest finance and labour-intensive traditional sectors, left to be served by informal finance, and large government deficits that pre-empted the resources of the formal financial sector and generated inflation (by inducing excess money creation).

The outcome of that repression was low savings and investment rates and retarded growth.

impacted minimally on economic growth. In contrast to this, the study by Sulaimon *et al.* (2012) examined the presence of the McKinnon-Shaw hypothesis in Nigeria, that is, that financial liberalisation has a positive impact on economic growth. The study concluded that financial liberalisation has a growth-stimulating effect in Nigeria and, thus, recommends that economic stability should either be maintained or pursued before implementing any form of financial liberalisation measures, and that, the regulatory and supervisory framework for the financial sector should be strengthened.

In summary, most studies favour financial liberalisation policy measures on both country-specific and zone-wide basis, however, it is observed that macroeconomic stability is key to a successful financial liberalisation adoption. However, the global lesson from the adoption of financial liberalisation is inconclusive since a greater number of studies reported growth stimulating effects of financial liberalization. While some reiterate its glut effects and some others maintain the 'median' position.

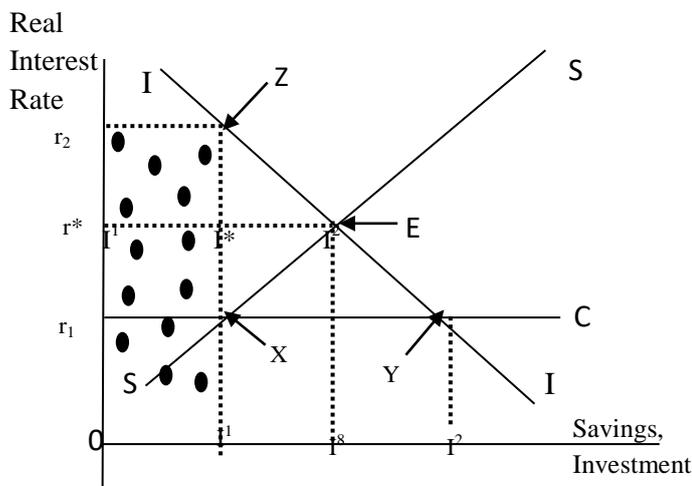
On the other hand, Shaw (1973) argued that increased financial intermediation provided the impetus for growth more directly. Liberalisation would result in an expanded, improved and integrated financial sector that would lead to an Increase in the savings rate from the diversion of potential savings from inflation hedges, capital flight and the like such as an Increase in the rate of investment by facilitating more lumpy investment; and a direct enhancement to growth via improved financial technologies. These growth-inducing consequences of increased monetisation and financial sector intermediation are referred to as Shaw's 'intermediation' effect. Financial liberalisation, in the view of both authors, meant:

- a) Market-determined interest rates
- b) Greater ease of entry into the banking sector to encourage competition
- c) The elimination of directed credit programmes
- d) Reduced fiscal dependence of the state on credit from the banking system (to allow for greater expansion of credit to the private sector)
- e) The integration of formal and informal markets
- f) A movement towards equilibrium exchange rates and, eventually, flexible exchange rate regimes with open capital accounts

Initiatives (a)-(e) are, effectively, domestic financial liberalisation, while (f) extends

liberalisation to external finance. Though the causal links between liberalised finance and growth

suggested by McKinnon (1973) and Shaw (1973) were different, they were not mutually exclusive.



Source: Romain et al (2011)

Figure 2: Financial Repression

In Figure 2, the real rate of interest is measured on the vertical axis, while the level of investment and savings are measured on the horizontal axis. The SS curve represents the savings function, while the II curve represents the investment function. If the market is allowed to operate freely, equilibrium in the market for loanable funds would be attained at point E, where amount saved (S) is equal to amount invested (I*), and the market-determined rate of interest will be r^* . However, if an interest rate ceiling (C) is imposed on deposit interest rates at r_1 , savings will be I^1 , banks can charge a lending rate at r_2 , which corresponds to investment at I^1 . However, interest rate ceilings will more likely apply to both deposit and lending interest rates. In this case, both savings and investment will be restricted to I^1 ; XY amount of investment

opportunities is not met, and the investment undertaken will be inefficient (dotted area).

Therefore, liberalisation of the financial sector through interest rate decontrols, denationalization of banks, strengthening of prudential regulations, and the granting of more bank licenses (including foreign participation), is expected to raise interest rates, thereby increasing savings and also investments. This process will continue until the real interest rate is at r^* , where saving is enough to satisfy investment. McKinnon and Shaw, therefore, advocated the liberalisation of such repressed financial systems so as to increase savings and investment, and consequently promote economic growth.

Methodology

To achieve this study objective the Ordinary Least Square (OLS) techniques was used to estimates the effect of global financial liberalisation policy on the economic growth in Nigeria. The data used spanned the period 1986 through 2017. Therefore, being the characterisation and nature of time series data, the unit root test (Augmented Dickey Fuller (ADF)) is employed to smooth the dataset, while Johansen cointegration test was applied to test for long run relationship among all the variables. The

data used in this study were obtained from Central Bank of Nigeria (CBN) statistical bulletin (2016).

This study hypothesized that there is no significant effect of financial liberalization on economic growth in Nigeria using econometric method known as Error Correction Mechanism (ECM). The long run linear relationship is given by equation (1), while the short run dynamic model is explicitly expressed in equation (2).

$$LGDP_t = \varphi_0 + \varphi_1FLPIND_t + \varphi_2TRO_t + \varphi_3EXR_t + \varphi_4LGNS_t + \varphi_5LGDI_t + \varphi_t \dots (1)$$

And;

$$\Delta LGDP_t = \alpha + \sum \theta \Delta LGDP_t + \sum \theta \Delta LGDP_{t-2} + \sum \beta_1 \Delta TRO_t + \sum \beta_2 \Delta TRO_{t-1} + \sum \beta_3 \Delta TRO_{t-2} + \sum \gamma_1 \Delta FLPIND_t +$$

$$\sum \gamma_2 \Delta FLPIND_{t-1} + \sum \gamma_3 \Delta FLPIND_{t-2} + \sum \varphi_1 \Delta EXR_t + \sum \varphi_1 \Delta EXR_{t-1} + \omega_1 \Delta LGNS_t + \omega_2 \Delta LGNS_{t-1} + \partial_1 \Delta LGDI_t + \delta ECV(-1) \text{-----} (2)$$

where Y is the GDP, the dependent variable, TRO represents trade openness; FLPIND represents financial liberalization policy index; EXR represents rate of foreign exchange; GNS depicts gross national savings; while GDI stands for gross domestic investment; they are all explanatory variables and ECV represent error correction variable and the δ represent speed of adjustment while $\alpha, \theta_i; \beta_i; \sigma_i; \varphi_i; \text{ and } \omega_i$ are parameters to be estimated.

However, relating to measurement of financial liberalization policy index, this study capture the scenario of part, step-wise or gradual liberalisation process in the financial system of the two countries through historical financial reform processes. Partial values, like 0.33, 0.50, and 0.66, are assigned for a step-wise policy achievement. A value of 0.50 (or less, depending on the number of policy thrust to achieve full liberalization) would indicate the first phase of partial deregulation in a two-step deregulation process, whereas a value 0.33 and 0.66 would indicate the first and second steps, respectively, in a three-phased deregulation process. The two-phased process takes a value of 1 in the second phase and the three-phased case takes a value of 1 in the third phase. In other words, if a country is fully liberalised in a single phase, the value assigned in this case is 1, but if the liberalisation is completed in two phases, then 0.5 is assigned for the first phase and 1 for the second. Similarly, if the liberalisation takes place in three phases, then the number assigned is 0.33 for the

Presentation of Empirical Results

The results in the Table 1 represent the long run estimation of linear relationship between economic growth proxy by gross domestic product and the

first phase, 0.66 for the second phase and 1 for the last phase (Shrestha and Chowdhury, 2006). However, this study joins other authors, in particular, Shrestha and Chowdhury (2006), Fowowe (2006), and Owusu (2012), to derive financial liberalisation policy index for WAMZ, using five compressed policy thrusts to represent both domestic and foreign or international dimension of financial liberalisation policy (FLP), which includes, capital account liberalisation (including stock market liberalisation), removal of credit control, interest rate deregulation, ownership structure of banks (indigenes, foreigner participation, and privatisation of Government banks) and, lastly, foreign exchange liberalisation. Each of these is assigned the value of 0.2 and any country that has achieved the five is assigned 1 and that indicates full liberalisation.

The measure of trade openness is the ratio of total trade to GDP is in line with the Central Bank of Nigeria's definition. The gross domestic investment is the gross capital formation, gross national saving is the total mobilized savings in Nigeria by deposit money bank, and exchange rate is the amount naira is exchanged for dollar on annual basis. The log transformation of the time series data involve in this study is based on the advice of Carlos Barrera-Chaupis, that is, to adopt the rule: $\log(x) = \begin{cases} \log(x) \text{ if } x > 0 \\ -\log(x) \text{ if } x < 0 \end{cases}$ where "x" is the time series variable.

primary independent variable (the FLPIND) and other independent variables. This is result would only valid if there exist long run relationship among the variables in the model.

Table 1: The Ordinary Least Square Regression Model

Dependent Variable: GDP

Method: Least Squares

Sample: 1986 2017

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-577483.0	2377080.	-0.242938	0.8099
TRO	146471.8	152950.4	0.957642	0.3467
LGNS	0.120050	0.015486	7.752264	0.0000
LGDI	15.31514	3.055888	5.011683	0.0000
FLPIND	1534815.	2811998.	0.545809	0.5897
EXR	-0.233454	0.043216	4.564785	0.4453
R-squared	0.878038	Mean dependent var		8817049.
Adjusted R-squared	0.859969	S.D. dependent var		16151297
S.E. of regression	6043926.	Akaike info criterion		34.20961
Sum squared resid	9.86E+14	Schwarz criterion		34.43863
Log likelihood	-542.3537	Hannan-Quinn criter.		34.28552
F-statistic	48.59499	Durbin-Watson stat		2.828635
Prob (F-statistic)	0.000000			

Source: Author's computation using E-View software

From the long run static model, the ordinary least square result in Table 1, reveals that the constant factor is negative and insignificant meaning that, this model is robust and really capture major variables that influences the economic growth of Nigeria. The primary explanatory variable is the financial liberalization index which has positive but insignificant impact on the growth of the Nigerian economy, it is insignificant because the probability value is more than (0.05) and/ or the t- statistic is not up to (2.00). The implication of this is that financial openness in Nigeria does not guarantee a sustainable development since it's not impacting significantly on the growth of the economy, but growth is a necessary condition for economic development. The next explanatory variable in no particular order, is the gross national savings (GNS), the GNS is positively related to growth of Nigerian economy and it is statistically significant, meaning that saving mobilization within the economy is beneficial to the Nigeria economy through investment. In the same vein, gross domestic investment is also directly related to the Nigerian economic growth and development, a testimony that savings are rightly converted to investment through financial intermediation

processes. The impact of exchange rate is negative but insignificant on economic growth, this is because the Nigerian import demand is very high and she sell less to the rest of the world. The last but not the least is the trade openness which show that Nigeria as country has positive trade relationship with external economies but the benefit ever reaped is not significant to the growth of the Nigerian economy.

On the statistics and econometrics ground, the R-Square which measures goodness of fit of the model or the joint influences of the entire explanatory variables is high at 88%, meaning that 88% variation in GDP of Nigeria is explained by all included exogenous variables while the remaining 12% are unexplained variation , however, the adjusted R-square that measure the fitness of the model even if other missing variables are included, suggest that 86% variation in Nigerian GDP would still be explained by the exogenous variables. Also the F-statistics that measures the robustness of the entire model is significant at one per cent, meaning that the model is robust and reliable at 99% level of confidence. However, the Durbin Watson- statistics shows

absence of serial autocorrelation, that is our dependent variable has no relationship with the error term of the model. So we can state that the model is far from spuriousness and that any inferences made thereafter are reliable and justifiable.

The next step in the analysis is to test for stationarity of all variables use in the model and if they are found stationary, then they would be subjected to longitivity test, that is, co-integration test- the test for long run relationship among the variables.

Table 2: Augmented Dickey Fuller Unit Root Test Results

VARIABLES	@ LEVEL	FIRST DIFFERENCE	ORDER OF INTEGRATION
LGDP	7.632487	-4.592684**	I(1)
TRO	9.709218	-5.838241***	I(1)
LGDI	-1.282412	-5.705792***	I(1)
LGNS	-2.075490	-5.674332***	I(1)
FLPIND	-2.0699438	-3.807887***	I(1)

Source: Author’s computation using E-View software

From the Table 2 above, all variables became stationary at first difference level, except exchange rate which integrated at second difference i.e. I(2), and was discarded because it is highly volatile and not suitable for inference or forecasting. We should also note that *, **, *** represent 10%, 5% and 1% respectively.

The fact that all variables are stationary at first difference signifies that the unit roots tests have indicated that all variables are integrated of order 1, therefore the next test is the long run relationship test known in literature as co-integration test. This study will adopt Johansen co-integration test.

Table 3: The Results of Johansen Cointegration Test

Sample (adjusted): 1986 2017
 Included observations: 30 after adjustments
 Trend assumption: Linear deterministic trend
 Series: GDP GNS GDI TRO FLPIND
 Lags interval (in first differences): 1 to 1
 Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.815074	99.41768	69.81889	0.0000
At most 1 *	0.576860	48.78369	47.85613	0.2408
At most 2	0.440503	22.98212	29.79707	0.2469
At most 3	0.162251	5.560589	15.49471	0.7467
At most 4	0.008282	0.249492	3.841466	0.6174

Trace test indicates 3 cointegrating eqn(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 *	0.815074	50.63400	33.87687	0.0002
At most 1	0.576860	25.80156	27.58434	0.0831
At most 2	0.440503	17.42154	21.13162	0.1530
At most 3	0.162251	5.311096	14.26460	0.7022
At most 4	0.008282	0.249492	3.841466	0.6174

Max-eigenvalue test indicates 3 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: Author’s computation via E-View software

The Table 3 above show the results of Johansson co-integration test using both max-eigen value and trace statistics, considering trace statistics we reject

null hypothesis at “none” and “at most1” but accepted the null hypothesis at “at most 3” meaning that there are three co-integrating

equations. Also, if we consider the max-eigen value, the null hypothesis was rejected at “none” but accepted at “at most 2”, meaning that there are

two co-integrating equation. From both tests there are cointegration equations meaning that the entire variables have a long run relationship.

Table 4: Parsimonious Error Correction Model

Dependent Variable D(LGDP)

Method: Least Squares

Sample (adjusted): 1987 2017

Included observations: 30 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	168586.8	165388.0	1.019341	0.3208
D(LGDP(-1))	0.542389	0.216738	2.502512	0.0216
D(LGDP(-2))	0.547388	0.198108	2.763079	0.0124
D(LGNS)	-0.034197	0.005346	-6.396715	0.0000
D(LGNS(-1))	0.178665	0.008179	21.84509	0.0000
D(LGNS(-2))	0.076267	0.037552	2.030981	0.0565
D(LGDI(-1))	-1.252961	0.543685	-2.304570	0.0326
D(TRO)	-12975.04	15556.72	-0.834047	0.4146
D(FLPIND)	2.765303	0.002674	1.067345	0.6543
ECM(-1)	-132099.1	681887.2	-0.193726	0.0484
R-squared	0.992440	Mean dependent var		2477565.
Adjusted R-squared	0.989257	S.D. dependent var		6338599.
S.E. of regression	656987.3	Akaike info criterion		29.88381
Sum squared resid	8.20E+12	Schwarz criterion		30.31202
Log likelihood	-409.3733	Hannan-Quinn criter.		30.01472
F-statistic	311.7818	Durbin-Watson stat		2.027138
Prob(F-statistic)	0.000000			

Source: Author’s Computation

The parsimonious ECM above indicated that two year lag variable of Gross Domestic Product (GDP) has significant influences on the current GDP also Gross National Savings (GNS) and Gross Domestic Investment (GDI) are statistically influenced by the economic growth in Nigeria while financial liberalization policy (FLPIND) and trade openness (TRO) have statistically insignificant impact on the economic growth. The model is good because the R square is 99 per cent, meaning that 99 percent variation in GDP is due to the included explanatory variables while the adjusted R-square at approximately 99% indicates that, if other factors that influence economic growth other than the included explanatory variables, the explanatory variables in the model will still account for 99% variation in the Nigerian economic growth. The model equally show absence of serial correlation and the F-statistic also indicate the robustness of the entire model at one per cent level, this was

support with the value of Durbin Watson greater than the R-square value..

Discussion of Major Findings

The financial liberalization policy index has positive but insignificant effect on economic growth both in the short and long run, the implication of this is that the expected gains from liberalization experience is being thwarted with distortion from the fiat through management of financial prices which was expected to be out rightly determined by market forces. But savings which is an integral part of domestic financial liberalization is positive and have significant impact on economic growth. The trade openness index indicates an insignificant influence of external trade on the economy, this imply fairly poor level of .external trade relationship

Conclusion and Recommendations

This study however concludes that financial liberalization policy has positive effect though insignificant on the economic growth of Nigeria, but the fact remain that financial liberalization policy has impacted positively on domestic financial sector through improvement on saving and investment. Thus financial liberalization is a growth stimulating policy in Nigeria. However, this study recommends as follows;

- i. That Government should allow the invisible hand of the market to determine financial prices.

- ii. The tempo of development in the financial sector should be kept up since financial liberalization is usually anchor on a developed financial sector, that is, it's more efficient in a well-developed financial sector
- iii. Financial liberalization policy should be adopted in accordance to the world best practice.

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