

Financial Deepening Dynamics and the Nigerian Economy

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Dates:

Received: 2023-10-25

Accepted: 2023-11-06

Published: 07/11/2023

Citation:

Ozor, K. C., Agbaeze, C. C. & Nwoko, N. M. (2023).

Financial Deepening Dynamics and the Nigerian Economy. *Nigerian Journal of Sustainability Research*, 1(1), 48-61.

<https://njsr.com.ng/index.php/home/article/view/10>.

Abstract: *We examined the impact of financial deepening on the economic growth of Nigeria, from 1981 - 2021. The objective of the study was to investigate how money supply, credit to private sector and market capitalisation impacted on economic growth in Nigeria. We employed ex post facto research design in collecting data obtained from CBN statistical bulletin and the National Bureau of statistics for various years. Data obtained from the study was analysed and estimated using the Autoregressive Distributed Lag (ARDL) Model. Results from the study showed that money supply (MS) has a positive and significant impact on economic growth in Nigeria; and credit to private sector (CPS) has significant impact though with negative coefficient value on Nigeria's economic growth. On the basis of the results, we recommend that monetary authorities should be proactive in its policies, reforms, and innovations to ensure adequate deepening of the financial markets and institutions for a healthy competition in the industry so that funds are adequately mobilized from surplus units and channeled efficiently to the productive business class of the Nigerian economy.*

Key words: *Financial deepening, money supply, credit to the private sector, ARDL*

Introduction

1.1 Background to the Study

A developed financial system is an important driver of economic growth due to its effective role in mobilizing savings; promoting information sharing; boosting the efficiency of resources' allocation; and facilitating the management and diversification of risk thereby spurring real sector growth (Levine, 1997).

It is generally believed that a more developed financial system is more stable and therefore less fragile. This conviction is based on the fact that deep and liquid financial systems with varied instruments tend to absorb more growth than a shallow one. According to the Central bank of Nigeria (1993), the financial system refers to the set of rules and regulations and the aggregation of financial arrangements, institutions, agents, that interact with each other and the rest of the world to foster economic growth and development of a nation. Its primary aim constitutes of mobilizing funds and allocating resources for productive uses; providing structure for monetary management; and also, providing a basis for managing liquidity in the system. The financial system additionally, provides linkage for

various sectors of the economy and encourages a high level of specialization, expertise, and economics of scale. The more financial instrument the government of a nation introduces to the economy, the more deepening and robust the financial sector of that economy will be, and the more deepened the sector is, the more an investor would like to invest in such a market

Financial deepening; an important aspect of the financial system and a tool of financial intermediation refers to an increased provision of financial services geared to all levels of society. It generally means an increased ratio of money supply to GDP. It is a method of developing and expanding financial institutions such as commercial banks, merchant banks, discount houses, bureau de change, finance institutions, stock markets and so on. According to Nzotta and Okereke (2009), financial deepening is the capability of financial institutions in any given economy to efficiently and effectively channel savings towards investment purposes. Financial deepening intensely channels savings and funds from the banks and allocates them to the households, entrepreneurs, businesses and governments for investment opportunities and beyond investment purposes with an aim of providing return on investment which enhances economic growth.

Financial deepening is a vital tool for financial intermediation process that can enhance economic growth. Goldsmith (1969) and Shaw (1973) posit that financial deepening is necessary for promoting economic growth. There are empirical evidences that show a positive relationship between financial deepening and economic growth (Hobit & Okumoko, 2013; Ugbaje & Ugbaje 2014). Extant literature submits that finance is a sine-qua non for economic growth (Gurley and Shaw 1995; Mickinnon 1973). Despite this obvious fact that finance propels economic growth, some scholars however contradicted this assertion. Levine (2005) in quoting Robinson (1952) argued that where enterprise leads, finance follows. The position of the opposing group is that finance does not necessarily cause economic growth rather the reverse which means that finance responds according to the need of the enterprise. The opinion of these scholars asserts to the popular demand-following hypothesis.

Notwithstanding the argument on finance-growth nexus, financial deepening and bank credit especially are essential instruments in stimulating economic growth and development of any economy. A well-functioning financial institutions enhance overall economic efficiency, create and expands liquidity, mobilize savings, promotes capital accumulation, transfer resources from the surplus sectors to the deficit sectors of the economy and also encourage the public on the need to invest. The government of Nigeria has paid a great deal of attention in expanding its financial markets by facilitating consolidation of the banking sectors, continuous deregulation of bank lending and deposit interest rates, rapid use of credit and debit cards, increasing use of payment technologies like ATM machines and electronic transfer of deposits, expanding internet banking services, E-banking and mobile banking technology etc.

Prior to June 2004, there were 89 Commercial banks, among other financial intermediaries, with capitalization of less than 10 million USD and three thousand three hundred and thirty branches with top ten banks accounting for about 50% of the industry's total assets and liabilities (Soludo, 2004). This development is considered unhealthy for the financial institutions that are the bedrock of the Nigerian economy.

The Central Bank of Nigeria (CBN) has been trying hard to ensure that the Nigerian financial sector maintains conducive environment to attract and disseminate funds while remaining liquid in order to be able to compete effectively within the global financial market. In 2004, the CBN carried out a far reaching reform which led to increase in the minimum capital requirements for commercial and micro-finance banks respectively. At the end, there were

twenty five commercial banks and this number was further reduced to 24 banks at the end of December, 2007 with the emergence of Stanbic IBTC Bank.

The capital market has also experienced a lot of reforms over the years, especially as regards to the capital requirements of the operators; the operational and ethical standards of the institutions; and the modalities of the market mechanism. The reforms in the system have impacted positively on the growth of the financial system by improving the transmission of monetary policy, increasing competition among financial institutions and helped to discipline banks to improve on their pricing of risk (Edwin, 2015). Financial development tries to address the financial gaps in the system; removes rigidities in the system of credit allocation and control; and achieves positive real interest rates and greater efficiency by the market operators in the intermediation process. The process of financial sector reform consists of the movement from an initial situation of controlled interest rates, poorly developed money and securities market and under-developed banking system, towards a situation of flexible interest rate, an expanded role for market forces in resource allocation, increased autonomy for the central bank and a deepening of the money and capital markets.

Financial deepening enhances financial condition of the populace by creating opportunities for all through improved viable effectiveness within financial market thus ultimately helping non-financial sectors of the economy (Ifeanyi & Chinyere, 2015). Financial development increases the provision and choices of financial services and aids reduction in income inequality and poverty level. Financial deepening dynamically draws the pool of savings and idle cash and distributes some to economic agents such as; households, entrepreneurs, business firms and Government for investment projects.

Records from the Central Bank of Nigeria show that the indices for financial deepening have been growing steadily. Nigeria recorded financial deepening in terms of ratio of money supply to GDP to reflect 15.54% in 2007, 22.93% in 2014, 22.18% in 2015, 23.90% in 2016, 25.16% in 2017, 23.31% in 2018, 23.75% in 2019 and 25.0% in 2020 (Central Bank of Nigeria, 2020). Similarly, Nigeria recorded improvements in financial deepening in terms of ratio of credit to private sector to GDP between 2007 - 2016 to reflect 11.12% in 2007, 17.67% in 2008, 20.55% in 2009, 20.77% in 2016 and a fall since in the inception of the present administration viz; 19.43% in 2017, 17.63% in 2018, 17.28% in 2019 and 17.05% in 2020 (Central Bank of Nigeria, 2020).

Nigeria has experienced financial sectors growth, and as a result, financial deepening has increased growth in the financial market over time, increases in stock and capital market operations. Hence, the study attempts to examine the impact of financial deepening on economic growth in Nigeria.

1.2 Statement of the Problem

The Nigerian financial sector is mostly uncompetitive while credit allocation is often subject to government intervention. However, most economists argue that growth depends on financial sector development. In fact, a large body of literature (empirical and theoretical) that has examined this finance-growth nexus has come up with different conclusions. While some studies find that financial institutions development has been instrumental in accelerating economic growth, others have suggested that it has not been very significant. Beck et al (2000), Bekaert et al (2005) posit the existence of a causal association between finance and economic growth. La Porta et al (2000) argue that a well developed capital markets, especially those imbued with rights that protect investors, promote the efficient allocation of capital to projects with high rates of return, in turn stimulating savings, investments and economic growth. Evidence from both single country (Guiso et al, 2004) and

cross-country (Levine, 2006; Demirguc-Kurt and Levine, 2001) studies suggest that economies with more developed financial markets begin to grow earlier, attain higher growth rates, and achieve higher levels of per capita income than economies with less developed financial markets.

In the past few years, the Nigerian financial sector has carried out some reforms in both the money and capital markets especially in the banking industry as a result of low capital base, dominance of a few banks, over-dependence on public sector deposits and weak corporate governance among others. The objectives of these reforms are to ensure price stability and facilitate rapid economic development (Abdullahi, 2007). As part of the reform agenda, the Central Bank of Nigeria (CBN) mandated all licensed banks to increase the minimum paid up capital from N2billion to N25 billion with effect from January 1, 2006. The consolidation exercise that resulted from the pronouncement brought the number of banks to 24 in 2006 (Obamuyi and Olorunfemi, 2011). Despite these reforms nevertheless, the Nigerian financial sector is less robust, face difficulties in mobilizing domestic savings as well as attracting foreign private capital and investments in comparison with other developing countries like Taiwan, Malaysia, and Singapore to mention just a few.

An examination of the trend of monetary and financial variables also show that credit to the private sector, money supply and market capitalisation have been on an annual increase and have boosted economic growth. However, the increase in these variables are not in tandem with the low levels of economic growth witnessed in recent times, even in the face of notable financial sector developments. This scenario nevertheless raises doubts about the role of the financial system in promoting economic growth in Nigeria. There is, therefore, the need to re-evaluate this relationship with a view to understanding whether financial development still matters significantly in the face of other variables that could be impacting output growth.

With all the reforms in the financial sector to enhance financial development in Nigeria over time, the kernel of this research work is an attempt to investigate how these policies and reforms in the financial sector have impacted on Nigeria's economic growth.

1.3. Objectives of the Study

The broad objective of the study is to examine the impact of financial development on economic growth in Nigeria while the specific objectives are;

- i. To ascertain the extent money supply impacted on economic growth in Nigeria
- ii. To examine the effect of bank credit to the private sector on economic growth in Nigeria.
- iii. To determine the impact of market capitalization on economic growth in Nigeria.

1.4 Research Hypotheses

In consideration of the statement of the objectives and research questions the following hypotheses were stated to guide the research work:

- i. There is no significant impact of money supply on economic growth in Nigeria.
- ii. Bank credit to the private sector has no significant effect on economic growth in Nigeria.
- iii. There is no significant impact of market capitalization on economic growth in Nigeria.

Literature Review

2.1 Conceptual Framework

According to Camp (2011), conceptual framework can be seen as written or visual representation of an expected relationship between dependent variable and independent variables in the study.

There is a need to conceptualize the relevant terms that will be used as they will be recurring in this project work particularly on financial development and economic growth. Such conceptualization is necessary because it facilitates a more concise explanation of the appropriate terms within which they are used in the study and makes for a clearer understanding of the contents of the work. The literature review is broken down into conceptual framework, theoretical framework and empirical framework. The reason for the breakdown of the outline is to provide an elaborated approach to the research topic.

2.1.1. Concept of Financial Development

The financial sector provides an enabling environment for economic growth and development, productive activity, financial intermediation, capital formation and management of the payments system (CBN, 2017). The extent to which the financial sector would impact on the real sector of the economy would, however, depend on the nature and magnitude of the innovations in the financial sector. Within the context of the financial sector, these innovations can be in terms of stability in key performance indicators of the market, which play a big role in the process of financial intermediation. For example, the stability of the money, capital and foreign exchange markets, are reflective of innovations in the financial sector, and this can be measured by the key performance indicators in these markets (Akintola, Oji-Okoro & Itodo, 2020). Capital, money supply and foreign exchange markets indicators like the all share index (ASI), banking system liquidity, and exchange rate volatility are suggestive of the level of financial sector innovations or development, which would transmit to the enhancement of financial intermediation, and consequently, economic growth.

2.1.2 Concept of Economic growth

Economic growth is an increase in the level of production of goods and services by a country over a certain period of time or an increase in a country's gross domestic product (GDP). Todaro and Smith (2006) refers economic growth as a steady process by which the productive capacity of the economy is increased overtime to bring about rising levels of national output and income. GDP is one of the indices for measuring health of an economy. It is the total monetary value of goods and services produced within a country usually a year. This is chosen as a dependent variable in the course of this study because it is used as an indicator for assessing the impact of the stock market development on economic growth Nigeria. The choice of GDP is because of its wide application by scholars in related studies as it serves a useful parameter for economic growth. The values are in billions of Naira (N'B).

2.2 Theoretical Framework

This study is hinged on Financial Liberalization Hypothesis.

Financial Liberalization Hypothesis

This hypothesis developed by McKinnon and Shaw (1973) sees the role of government intervention in the financial markets as a major constraint to savings mobilization, investment, and growth. Government's role in controlling interest rates and directing credit to priority sectors of the economy in developing countries inhibits savings mobilization and impedes the holding of financial assets, capital formation, and economic growth. Indirectly, ceiling on deposit interest rates discourages financial savings, which leads to excess liquidity outside the banking system. According to McKinnon and Shaw (1973), pervasive government intervention and involvement in the financial system through the regulatory and supervisory network, particularly in controlling interest rates and the allocation of credit, tends to distort financial markets. Government intervention, thus adversely affects savings and investment

decision of market participants and lead to fragmentation of financial mediation. The ultimate result is a financial repressed economy. The central idea of McKinnon and Shaw (1973) is that financial markets should be liberalized and allocation of credit determinant by the free market. In this case, the real interest rate will adjust to its equilibrium levels and low yielding projects will be eliminated. This will lead to increase in overall efficiency of investment, savings and total real supply of credit would increase. This in turn induces a higher volume of investment which will then lead to economic growth.

2.3. Empirical Review of Studies

Obi (2021) examined the effect of monetary policy instruments on manufacturing sector output in Nigeria. The study employed an ex-post facto research design because the data for the study were secondary data which were obtained from Central bank of Nigeria Statistical Bulletin, 2020. The result of the study indicates that manufacturing subsector output is an endogenous variable in the explanation of the effect of monetary policy on manufacturing sector output in Nigeria in the short run, monetary policy rate, money supply has positive and significant effect on manufacturing sector output in the short run while treasury bill rate has no significant effect on manufacturing sector output in the short run.

Obinna (2020) examines monetary policy and domestic investment in Nigeria: The role of the inflation Rate. Using data from 1981 to 2018 and applying the vector error correction model, this paper seeks to determine how the changes in the inflation rate affect the ability of monetary policy tools to stabilize the Nigerian economy and stimulate investment. Empirical results suggest that the impact of the interest rates on investment depends on the level of the inflation rate. The size of the effect of interest rates on investment gets weaker as the inflation rate increases suggesting that monetary policy tools, such as the monetary policy rate (MPR), that directly change the interest rates are robust stabilization tools during periods of declining inflation rates but not relevant during periods of rising inflation rates. Additionally, the impact of the money supply target on investment does not depend on the level of the inflation rate.

Dang and Diem (2020) examine the relationship between monetary policy and private investment using Vietnam's provincial data and a system generalized method of moment (GMM) framework. To capture monetary policy's indicators, viz. money supply, domestic credit to the private sector, interest rate and exchange rate are examined. We find that private investment is positively by respective monetary policies through broad money, domestic credit and interest rate channels, yet no credible evidence regarding the exchange rate'. In which, such a surprising co-movement between real interest rate and private investment was illuminated through analysis of the economy's distinctive characteristics over the two development stages (pre- and post-2012). Another notable finding is that economic development prospects of localities, which attract great attention and cause an intense competition between domestic and foreign investors, appear to be a major barrier to investment decisions of private firms.

Victor, Gbatsoron, Joseph and Bridget (2019) examine employs dynamic panel models; Pooled Mean Group (PMG) and Mean Group (MG) estimators to assess the growth-differential effects of Foreign Direct Investment (FDI) and Domestic Investment (DI) among 41 selected African countries from 1970 to 2017. The result of Hausman test shows that PMG estimator is preferred. The study found that FDI and DI are important grease for growth of African countries in the long-run. The study also found that inflows of FDI crowds-in DI in Africa and that there is significant difference in the growth effects of foreign direct investment and domestic investment while the joint effects of foreign direct investment and

domestic investment on growth of African countries is found to be statistically significant. In the short-run, estimates show that foreign direct investment has negative influence on growth of 24 countries out of which four (Benin, Madagascar, Nigeria and Equatorial Guinea) are highly significant at 5% level, while the estimated influence of domestic investment on growth of most African countries was positive.

Anah (2019) examined the impact of monetary policy on economic growth in Nigeria; for the period 1990-2017. Secondary data were collected from the Central Bank of Nigeria Statistical Bulletin. The study used Gross Domestic Product as proxy for economic growth and employed as the dependent variable; whereas, monetary policy rate, liquidity rate and Treasury Bills respectively were used as the explanatory variables to measure monetary policy. Hypotheses formulated were tested using Ordinary Least Square (OLS) techniques. The study revealed a significant impact of Treasury Bills on Gross Domestic Product in Nigeria. Liquidity ratio had a significant impact on Gross Domestic Product in Nigeria. Monetary policy rate had a significant impact on Gross Domestic Product in Nigeria. The coefficient of determination indicated that about 62% of the variations in private sector of the economy can be explained by changes in monetary policy variables.

Lawrence, Odimgbe, Ezeabalisi and Alajekwu (2019) investigated the effect of monetary policy on economic growth in Nigeria. The natural log of the GDP was used as the dependent variables against the explanatory monetary policy variables: monetary policy rate, money supply, exchange rate, lending rate and investment. The time series data is the market-controlled period covering 1986 to 2016. The study adopted an Ordinary Least Squared technique and also conducted the unit root and co-integration tests. The study showed that long run relationship exists among the variables. In addition, the core finding of this study showed that monetary policy rate, interest rate, and investment have insignificant positive effect on economic growth in Nigeria. Money supply however has significant positive effect on growth in Nigeria. Exchange rate has significant negative effect on GDP in Nigeria. Money supply and investment granger cause economic growth, while economic growth causes interest rate in Nigeria. On the overall, monetary policy explains 98% of the changes in economic growth in Nigeria.

Godwin and Kehinde (2018) examine the impact of domestic investment and economic growth in Nigeria. The model was subjected to a Co-integration test in order to determine the long run relationship between domestic investment, and economic growth in Nigeria for the period of 1980-2016. The Granger causality test was also used to determine the causality between domestic investment, and economic growth in Nigeria for the period of 1980-2016. The results also showed long run significant relationship exists between the variable examined and domestic investment. Granger cause economic growth in Nigeria within the period under study. The study also found that domestic investment positively influences real gross domestic product.

Bosco and Emerence (2016) analyzed the impact of GDP, interest rate and inflation on private investment in Rwanda. They employed Error Correction Modelling Technique and found that private investment was significantly influenced by economic growth. Additionally, Diabate (2016) reviewed Cote d'Ivoire Domestic Private Investment Determinants, 1970–2012. They had applied the technique of Auto Regressive Distributed Lag Modelling (ARDL). The result revealed that short-and long-term domestic private investment is substantially influenced by public investment, foreign direct investment, and trade; while GDP and interest rates were deemed negligible.

Research Methodology

3.1 Research Design

The study used *ex-post facto* research design for the study. The choice of this research design is because the researcher dealt with secondary data. Furthermore, *ex-post facto* design is usually applied when the researcher is attempting to ascertain the cause and effect of the relationships that exist between variables.

3.2 Nature of Data

For purposes of this study, the researcher used annual time series data which is of secondary nature to carry out the analysis.

3.3 Sources of Data

In carrying out this study, data were extracted from various sources such as:

- Central Bank of Nigeria Statistical Bulletin and
- National Bureau of Statistics of various years.

Gujarati and Portal (2009) asserted that the success of any econometric analysis depends on the availability of appropriate and accurate data. The dataset covered the period 1981 to 2021.

3.4 Model Specification

This study is primarily aimed at examining the impact of financial development on economic growth in Nigeria using econometric technique. In evaluating this, variable such as annual nominal Gross Domestic Product (i.e. GDP at basic market prices), ratio of money supply (M3) to GDP, credit of banks to the private sector, and market capitalization. While the annual nominal Gross Domestic Product (GDP) serves as a dependent variable, ratio of money supply (M3) to GDP (MGDP), ratio of credit of banks to the private sector (RCPS), and market capitalization (MCAP) are used as explanatory variables. To establish the relationship between financial development and economic growth, we adopted the theoretical underpinnings of Shahnoushi, et al. (2008) and Güryay et al (2007). Empirical model used in those studies is the linear OLS model that regresses four measures of financial development (independent variables) against an index of Real GDP (dependent variable). For Shahnoushi, et al. (2008) economic growth is the dependent variable and is measured as the annual data of real GDP as indicator for economic growth. But real GDP does not necessarily measure growth; therefore nominal GDP (GDP at basic market prices) was used as dependent variable in this work. This is in line with the work of Audu & Okumoko (2013). Following the models used by the aforementioned scholars, the researcher made some modifications in its definition of financial development. Principally, bank credit to the private sector was considered as a primary indicator of financial development.

Given the above, the model is thus specified as follows:

$$GDP = f(MOSP, BCPS, MCAP) \dots\dots\dots 3.1$$

The mathematical regression model for the equation above is transformed to the econometric model, thus;

$$GDP = \beta_0 + \beta_1 MOSP + \beta_2 CRPS + \beta_3 MCAP + \mu \dots\dots\dots 3.2$$

Where;

GDP	=	Natural logarithm of the Gross Domestic Product
MOSP	=	Ratio of Money Supply (M3) to GDP
BCPS	=	Bank Credit to the Private sector
MCAP	=	Natural logarithm of Market Capitalization
β_0	=	Intercept
$\beta_1 - \beta_3$	=	Parameter estimates
μ_t	=	Error terms

3.5 Data Analysis Technique

The dataset was analysed by using the Ordinary Least Square (OLS) model and Autoregressive Distributed Lag (ARDL) of multiple regression type. Hypotheses 1 to 3 were combined to form one multiple regression. The analysis was conducted using E-views statistical software package 12.0.

Data Presentation, Analysis and Discussion

4.1 Data Analysis

The analysis of data was carried out by using the ARDL form of Ordinary Least Square regression estimation.

4.1.1 Data Series Estimation and Analysis

The analysis and estimation of the model were carried out using: stationarity; lag selection; co-integration and ARDL regression estimates.

4.1.2 Unit Root Test

Augmented Dickey Fuller (ADF) test in table 4.1 below gives a summary of unit root tests for our model. Given that the ADF t-test statistic at 1%, 5% and 10% levels of significance provides strong evidence of non-stationarity at levels [I(0)] for all the variables; which means that there is presence of unit root. Hence, the null hypothesis is accepted and the study concludes that there is a presence of unit root at levels. Stationarity was achieved at first difference with the independent variables having I(1) order. With all the variables stationary at I(1), the variables in our model are of uniform order of integration, the study hence, employed ARDL Model for regression estimation.

Table 4.1: Summary result of unit root test

Variables	Augmented Dickey-Fuller with constant		
	1(0) Level	1(1) FD	Order of Integration
GDP	4.595563	-3.744628**	I(1)
MOSP	2.431270	-6.158173***	I(1)
CRPS	1.650518	-5.070345***	I(1)
MCAP	0.700886	-5.895441***	I(1)
Test critical values: 1% level	-4.211868	-4.211868	
5% level	-3.529758	-3.529758	
10% level	-3.196411	-3.196411	

Note: ***, ** and * denote significance at 1%, 5% and 10% levels, respectively.

Source: Researcher's compilation from E-view 12.0

4.3. Hypotheses Testing

Restatement of Hypotheses

H0₁: Money supply (M3) has no significant impact on gross domestic product in Nigeria.

H0₂: There is no significant impact of credit to the private sector (CPS) on gross domestic product in Nigeria.

H0₃: There is no significant impact of market capitalization (MCAP) on gross domestic product in Nigeria.

4.3.1 Autoregressive Distributed Lag (ARDL) model

The study on the impact of financial development on gross domestic product in Nigeria was analyzed using ARDL model. The outcome of the regression analysis is as presented in Table 4.2 below:

Table 4.2: Summary of the ARDL Regression Estimation Results for Testing the stated hypotheses (Dependent variable, GDP).

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDP	1.079271	0.119827	9.006886	0.0000***
MS	1.921350	0.708382	2.712307	0.0111**
MS(-1)	-2.340262	0.590507	-3.963141	0.0004***
CPS	-2.287219	0.888434	-2.574438	0.0154**
CPS(-1)	0.909123	0.614462	1.479544	0.1498
CPS(-2)	1.013545	0.545776	1.857073	0.0735*
MCAP	0.190969	0.197654	0.966180	0.3419
MCAP(-1)	0.397782	0.196963	2.019574	0.0528**
MCAP(-2)	0.520759	0.405435	1.284444	0.2092
C	807.9506	510.1467	1.583761	0.1241
R-squared	0.998776			
Adj R-squared	0.998397			
F-statistic	2629.990			
Prob(F-statistic)	0.000000			
Durbin-Watson	1.898074			

Source: Researcher's computation from E-views 12.0

NB: ***, **, * = Significant @ 1%; 5% and 10% respectively.

The multiple regression result presented in table 4.2 shows the impact of financial development on economic growth in Nigeria. The result revealed that the independent variables money supply (M3), credit to the private sector (CPS) and Market capitalization (MCAP collectively accounted for about 99% of the total variations in the dependent variable [(gross domestic product (GDP)], while the insignificant percentage that is less than 0.02% was due to stochastic error. The result also showed that the F-statistic is 2629 with a probability value (0.0000). The result is statistically significant at both 1% and 5% levels. The interpretation of the model result is that the model is fit for the estimation.

The positive coefficient of the constant term (C) suggests that holding the independent variables constant, gross domestic product (GDP) will be increasing by 807.95 units. Based on the coefficient estimates, it was found that money supply (MS) has a positive coefficient. This implies that a unit increase in money supply (MS) will increase gross domestic product (GDP) by 1.92 units.

The negative coefficient value of credit to the private sector suggests that a unit increase in credit to the private sector (CPS) will lead to a decrease in gross domestic product (GDP) by - 2.287219.

The coefficient estimate of market capitalization (MCAP) is 0.190969. This implies that a unit increases in market capitalization (MCAP) will increase gross domestic product (GDP) by 19.1 percent

4.3.2 Test of hypotheses

The decision rule is as follows:

Accept null hypothesis (H_0) if p-value of the t-statistics is greater than 0.05

Reject null hypothesis (H_0) if p-value of the t-statistics is less than 0.05

Testing of Hypothesis 1

H0₁: Money supply (MS) has no significant impact on gross domestic product in Nigeria.

Based on the p-value (0.0111) of money supply (MS), the study concludes that money supply (MS) has a positive and significant impact on gross domestic product in Nigeria. Therefore, the null hypothesis (H0₁) is rejected and the alternative accepted.

Testing of Hypothesis 2

H0₂: There is no significant impact of credit to the private sector (CPS) on gross domestic product in Nigeria.

From the result of the p-value (0.0154) of credit to the private sector (CPS), the study submits that credit to the private sector (CPS) though with a negative coefficient value has a significant impact on gross domestic product in Nigeria. Hence, the null hypothesis (H0₂) was rejected and the alternative accepted.

Testing of Hypothesis 3

H0₃: Market capitalization has no significant impact on gross domestic product in Nigeria.

On the basis of the p-value (0.3419) on market capitalization, we conclude that market capitalization though gave a positive coefficient value but showed an insignificant impact on gross domestic product in Nigeria. Therefore, the null hypothesis (H0₃) is accepted and the alternative rejected which means that market capitalization has no impact on economic growth proxied with gross domestic product during the period covered by the study.

4.4 Discussion of Result

The study examined the impact of financial development on economic growth in Nigeria. The stated hypotheses were analysed using ARDL model. The result of the first hypothesis revealed that money supply (MS) has both positive and significant impact on economic growth in Nigeria during the study period. The result shows that financial deepening through the opening up of the financial markets, instruments, reforms, products and institutions by the apex bank (Central Bank of Nigeria) is yielding dividend with its positive impact on economic growth. The finding of the study is in line with the finding of Fasanya, Onakoya & Agboluaje, (2019).

The result of the second hypothesis depicted that credit to the private sector (CPS) has a negative and significant impact on economic growth in Nigeria. The result of this hypothesis will only hold on the ground that if the percent of cash reserve ratio demanded by apex bank from commercial banks in the country is high and as such this may have an adverse effect on the domestic investment in Nigeria. The finding of the study is in line with the finding of Sunday Garba, Arigo, Kufre, Suleiman, Deborah, and Francisca (2016).

The result of the third hypothesis revealed that broad money supply has positive and significant effect on domestic investment in Nigeria. The result will only hold on the ground that the Central bank of Nigeria will increase their money supply to the economy through proper regulation of various macroeconomic policies. The finding of the study is in line with the finding of Udude (2014).

Summary of Findings, Conclusion and Recommendations

5.1. Summary of Findings

This research work studied the impact of financial development on economic growth in Nigeria (1981-2021). With the aid of statistical and econometric techniques employed, the study revealed as follows:

- i. Money supply (MS) has a positive and a significant impact on economic growth in Nigeria.
- ii. Credit to the private sector (CPS) has a negative coefficient value and significant impact on economic growth in Nigeria.
- iii. Market capitalization has a positive and an insignificant effect on impact on economic growth in Nigeria.

5.2 Conclusion

The research set out to evaluate the impact of financial development on economic growth in the Nigerian economy, from 1981 – 2021. The model was estimated by using the Autoregressive Distributed Lag (ARDL) model and the stability test was conducted using the method of recursive regression by putting the recursive residuals about the zero line. The findings of the study confirm that two out of the three independent variables used conformed to the apriori expectations and have significant impacts on GDP except money supply that negated the apriori expectation while market capitalization revealed negative impact on economic growth in Nigeria during the period of study. The result therefore shows that government policies relating to money supply aggregate by the monetary authority has not being too favourable and this could be attributed to prevalent inconsistencies in economic and financial policies of the policy makers and those implementing them.

5.3. Recommendations

- i. The study found strong evidence that bank credit to private sector exerted negatively to GDP despite having a positive impact on the economy. This means that loans from bank to private sector was not directed to businessmen who should invest these funds into the economy thus failing the apriori expectation and likely one of the reasons for the rate of unemployment in the country. CBN as the apex supervisory bank and a major policy maker should look inwards and examine where these funds to the private sector went to and what they were used for. Therefore, government should make policies as well as provide a conducive business environment that would ensure banks provide more credit to private sector (loans) for businesses, who will invest such funds for productive purposes that will yield the desired or required return and this will lead to an improvement in the GDP growth.
- ii. The study equally revealed a direct relationship and positive impact of money supply and economic growth. This result gives the monetary authority a pass mark and therefore encourages her to be proactive in its policies and innovations so that funds are adequately mobilized from surplus units and channeled efficiently to the productive business class of the economy.
- iii. Central Bank of Nigeria should also check mate the rate in which the Cash reserve ratio (CRR) is being keep for commercial banks in the country to ensure that this does not have any adverse effect on the domestic investment in the country.
- iv. Executive Arm of government should also checkmate the amount of money supply by carrying proper regulation of fiscal policy to forestall it adverse effect on the economy.

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