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Original Research Article

Effect of Financial Market Development on Nigeria's Economic Growth

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ABSTRACT

This study examined the effect of financial market development on economic growth in Nigeria between 2013 and 2023. Financial market development was proxied using broad money supply (M2), savings, time deposits, and domestic credit to the private sector, while economic growth was measured using Gross Domestic Product (GDP). Secondary data were sourced from the Central Bank of Nigeria (CBN), World Bank, and other relevant financial databases. The study employed the Autoregressive Distributed Lag (ARDL) technique after conducting stationarity tests using the Augmented Dickey-Fuller (ADF) approach. Findings revealed that broad money supply exerted a negative but insignificant influence on economic growth, while domestic credit to the private sector and inflation exhibited positive but insignificant effects. The study further established the existence of a long-run relationship between financial market indicators and economic growth. The study concludes that financial market development remains a critical driver of economic growth; however, inefficiencies in financial intermediation and macroeconomic instability limit its effectiveness in Nigeria. The study recommends strengthening financial sector reforms, enhancing financial inclusion, and improving credit allocation to productive sectors.

1. Introduction

The financial market plays a fundamental role in the economic development process of every nation by facilitating the mobilization of savings, allocation of resources, capital formation, and investment financing. A well-developed financial market enhances economic productivity by channeling funds from surplus economic units to deficit units, thereby promoting investment, employment generation, industrialization, and sustainable economic growth (Levine, 2005). Financial markets comprise institutions, instruments, and mechanisms through which financial resources are mobilized and allocated to productive sectors of the economy. The efficiency and effectiveness of these markets determine the extent to which financial resources can stimulate economic activities and improve overall economic performance (Pagano, 1993).

Globally, financial market development has been recognized as a major catalyst for economic growth. The finance-growth nexus has attracted considerable attention among economists and policymakers because of its significance in fostering economic transformation and development. Levine (2005) argued that financial market development contributes to economic growth through the mobilization of savings, efficient allocation of capital, monitoring of investment projects, diversification of risk, and facilitation of exchange. Similarly, Romer (1990) maintained that financial systems support innovation and technological advancement by providing the capital required for productive investments and entrepreneurial activities.

In developing economies, particularly those in Sub-Saharan Africa, financial market development has become increasingly important in addressing challenges associated with inadequate capital formation, low investment levels, and sluggish economic growth (Odhiambo, 2010). Countries with efficient financial markets tend to experience higher rates of economic

growth because financial institutions facilitate access to credit, encourage savings, and improve resource allocation efficiency (Misati & Nyamongo, 2011). Furthermore, financial market development promotes financial inclusion, which enhances participation in economic activities and contributes to poverty reduction and improved standards of living (Tchamyou, 2020).

Nigeria, being the largest economy in Africa, possesses one of the most developed financial systems on the continent. The Nigerian financial market consists of the money market, capital market, foreign exchange market, and various financial institutions including commercial banks, merchant banks, development finance institutions, insurance companies, pension fund administrators, and microfinance banks (Central Bank of Nigeria [CBN], 2023). Over the years, several reforms have been implemented to strengthen the financial system and improve its contribution to economic development. These reforms include banking sector consolidation, financial liberalization policies, recapitalization exercises, capital market reforms, electronic banking innovations, cashless policy initiatives, and the emergence of financial technology (FinTech) services (World Bank, 2023).

Despite these reforms and developments, Nigeria's economic growth performance has remained unstable and below expectations. The country has experienced numerous economic shocks, including the global financial crisis, fluctuations in crude oil prices, exchange rate instability, inflationary pressures, the 2016 economic recession, and the economic consequences of the COVID-19 pandemic (World Bank, 2023). These developments have generated concerns regarding the effectiveness of the financial market in promoting sustainable economic growth. Although significant growth has been recorded in some financial indicators such as broad money supply, private sector credit, and financial inclusion, the corresponding impact on economic growth remains uncertain (Odeniran & Udeaja, 2010).

Financial market development in Nigeria has been characterized by increasing financial deepening, expansion of banking activities, growth in domestic credit, and technological innovations in financial services. However, concerns remain regarding weak financial intermediation, inadequate access to credit by small and medium-scale enterprises, high lending rates, poor investment climate, and limited participation in formal financial markets (Oyaromade, 2005). These challenges may constrain the ability of the financial market to effectively stimulate productive investments and economic growth.

Empirical Review

Albert et al. (2022) studied the impact of financial development on economic growth in Nigeria (1980-2019) using Ordinary Least Squares. They explored four equations with GDP as the dependent variable. Results showed positive relations between economic growth and paired variables (real interest rate, gross domestic savings), (real interest rate, private sector credit), and (savings, private sector credit). However, combining all 3 variables, real interest rate and savings had an insignificant negative impact, while private sector credit had a significant positive impact on Nigeria's growth.

Song and Appiah-Otoo (2022) employed a dataset that comprises 31 provinces in China to study the impact of financial technology (fintech) on economic growth from 2011 to 2017. The instrumental variable-generalized method of moments technique was employed and the result showed that fintech has a positive impact on economic growth of China.

Ani and Udeh (2021) studied the effect of exchange rate on economic growth in Nigeria from 2009 to 2018. The study utilized ordinary least square model and it was found that exchange rate has positive and significant impact on economic growth in Nigeria. Umar et al. (2021) explored the impact of financial development on economic growth in Nigeria from 1980 to 2019. Using nonlinear autoregressive distributed lag analysis, they identified a lasting connection amid asymmetries. Results showed positive financial development shocks negatively impacted both short and long-term growth, with negative shocks having a similar effect. Inflation had a significant positive impact, while uncertain financial globalization exhibited no meaningful connection to Nigerian economic growth.

Akintola et al. (2020) studied the impact of financial sector development on economic growth in Nigeria using quarterly data between 2000Q1 and 2019Q4 using the Autoregressive Distributed Lag technique. The results indicated that while financial deepening, banking system liquidity and all share index had positive and significant impact on the growth of real output in the long run, the behaviour of exchange rate spread was consistent with falling levels of real output growth.

Alenoghena et al. (2020) studied the impact of financial development on economic growth from 1980 to 2018. They used the NARDL approach to analyze their connection, finding a U-shaped asymmetrical relationship. The research determined that the financial development variables and economic growth are cointegrated in the long run. Threshold regression indicated that when broad money falls below 17.73% of GDP or credit to the private sector drops below 6.03% of GDP, Nigeria's economic growth declines.

Chen et al. (2020) examined the asymmetric influence of financial development on economic growth in Kenya from 1972 to 2017 using Non-linear Autoregressive Distributed Lag (NARDL). The results posit that positive shocks in financial development in the short run and its negative shocks in the long run increase and decrease economic growth respectively. Regarding inflation, its positive (negative) shocks in both runs, respectively, reduce (increase) economic growth. In comparison, positive shocks in financial development that spur growth in the short run and negative shocks in financial development (government expenditure) that increase (reduce) growth are the most domineering effects as the rest of the shocks insignificantly affect growth.

Okunlola et al. (2020). Investigated the causal relationship between financial development indicators and economic growth using the Toda and Yamamoto approach for the period 1985 to 2015. The Toda and Yamamoto approach is based on an augmented VAR modeling and the findings include that a bi-directional causality was found between financial markets indicators and economic growth while unilateral causality running from stock market indicators to GDP was established.

Imoagwu and Ezeanyeji (2019) studied the impact of financial development on economic growth from 1986 to 2017. They used error correction and Toda-Yamamoto tests, finding a short-term positive link between financial development and growth, but a negative impact in the long-term. Causality was from finance to growth. Stock market cap bolstered short-term growth, but hindered it long-term. Interest rate had a slight short-term positive impact, but a significant negative effect long-term. Domestic credit ratio's positive impact was only long-term. Causality was observed from various sectors to financial development. In Okpara et al. (2018) study, the econometric analysis of financial development's impact on Nigeria's economic growth is explored using vector error correction and Granger Causality tests. The study establishes a lasting link between financial development and economic growth. Various financial development indicators foster economic growth. Shortterm causalities are identified: capital market liquidity (VST/GDP) and economic growth display mutual influence, as does economic volatility (CPS/GDP). Market Capitalization ratio (MKTCAP/GDP), Broad money velocity (M2/GDP), and banking system's role in economic financing (DD/M1) unidirectionally propel economic growth. This highlights the role of financial development indicators in driving immediate economic growth.

Judith and Chijindu (2016) examined the relationship between financial development and economic growth in Nigeria between 1987 and 2014 using the error correction and granger causality test to assess the finance-growth link. The findings indicate that financial development and economic growth move along together in the long run. It was revealed that credit to the private sector, stock market capitalization and inflation have negative and impact on the economy, while broad money supply, trade openness and foreign direct investment exert positive influence on the economy. The error correction term in the model availed us the correctional influence in the speed of adjustment which indicated that errors of divergence from equilibrium was corrected at the speed of 86% each year. The Granger causality tests show that gross domestic product was granger causal for foreign direct investment, without a feedback system.

Oshota and Badejo (2015) empirically investigated the impact of remittances on economic growth in Nigeria, covering the period of 1981 to 2011. The method of analysis employed was error correction model and the result revealed that remittances positively impacted economic growth in Nigeria.

Chinaemerem and Chigbu (2012) carried an evaluation of financial development and economic growth in Nigeria from1960 to 2008 using error correction method and causality test. The results showed that money supply and credit to private sectors are cointegrated with economic growth and they are positively related to economic growth. Also, the Granger causality test showed that all the exogenous variables granger causes economic growth in Nigeria.

Theorectical Review

Financial Liberalization Theory

Theoretically, the Financial Liberalization Theory proposed by McKinnon (1973) and Shaw (1973) posits that financial repression through interest rate controls and excessive government intervention discourages savings and investment, thereby limiting economic growth. The theory advocates financial liberalization as a means of improving resource allocation and stimulating economic development.

Endogenous Growth Theory

Endogenous Growth Theory developed by Romer (1990) emphasizes that financial development promotes innovation, technological progress, and long-run economic growth through increased investment in productive activities. Financial Intermediation Theory also suggests that efficient financial institutions enhance economic growth by reducing transaction costs and information asymmetry between savers and investors (Levine, 2005).

2. Methodology

Method of Data Analysis

The collected data will be analyzed using Regression Analysis for econometric analysis. The following steps will be undertaken during the data analysis: Descriptive Statistics: To summarize the key characteristics of the data. Regression Analysis: To estimate the effect of financial market development on economic growth using the specified model.

The study used secondary data from the Stock Exchange Bulletin and CBN Statistical Bulletin, from 2013 to 2023.

Model Specification

The study will use an econometric model to investigate the relationship between financial market development and Nigeria's economic growth. The model is specified as follows:

GDP -F(FD$_I$FE)

$GDPGR = \beta 0 + \beta 1M2G + \beta 2CPSG + \beta 3INF + \varepsilon$

WHERE

EG= Economic Growth

GDP= Gross Domestic Product

BM+ Broad Market

FMD= Financial Market Development

FD= Financial Depth

EE= Financial Efficiency

TD= Time Deposit

Estimation Technique

The study will apply the Ordinary Least Squares (OLS) method to estimate the parameters of the model. OLS is chosen due to its simplicity, efficiency, and reliability when dealing with linear relationships. The technique will allow for the estimation of the impact of each financial market development indicator on Nigeria's economic growth.

Additionally, to ensure the robustness of the results, diagnostic tests such as the Augmented Dickey-Fuller (ADF) test for stationarity and Granger Causality Test will be conducted. These tests are important to verify the time-series properties of

the data and the direction of causality between financial market development and economic growth.

3. Results and Discussion

Stationarity Test

The study employed Augmented Dickey-Fuller as the stationarity test for the variables used. Table*4.1 presented the results. The study*found that all the variables at their different levels exhibit unit root, suggesting that these variables are not stationary at their level when their respective p-values are compared to 5% level of significant. Meanwhile, when they were tested at the first difference, they all become stationary, as the p-values for each variable are found to be below 5% LOS, suggesting that these variables stay constant at first difference, and no unit root problem was found. This implies that variables were integrated at the same order I (1).

Table 4.1: Summary of the Augmented Dickey Fuller Unit Root

		t-Statistic	Prob.		Integration
At level	GDPGR	-2.7068	0.0881	*	Insignificant
	M2G	-1.0195	0.7265	n0	insignificant
	CPSG	-1.3431	0.5896	n0	insignificant
	INF	-2.8336	0.0692	*	insignificant
At First Difference	d(GDPGR)	-6.7004	0.0000	***	I(1)
	d(M2G)	-3.4702	0.0197	**	I(1)
	d(CPSG)	-4.4164	0.0025	***	I(1)
	d(INF)	-7.3641	0.0000	***	I(1)

Source: Authors Computation using EViews 10, 2023

The study conducted a co-integration test to determine whether money market instruments have long run relationship with economic growth, using auto-regressive distributed lag technique, and the result is presented in table 4.2. The result revealed that F-Statistic of 40.9819 is higher than the upper critical bound of 3.67. The decision rule is that when the F-test is greater than the upper bound test, existence of co-integration should be upheld, and if otherwise, it should be refuted. Since the F-statistic is above the critical limit, the study affirmed that there exists a co0integration between money market instruments and economic growth.

Table 4.2: ARDL Bound Test for Co-Integration

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
F-statistic	40.98199	10%	2.37	3.2
k	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

Source: Authors Computation using EViews 10, 2023

The effect of financial market (money market) on economic growth was estimated using the auto-regressive distributed lag technique, as it is capable of handling variables of same or different orders. Table 4.2 presents the outcome of the estimation. The study revealed that the lagged value of gross domestic product growth rate, denoted as GDPGR (-1) of 0.2985 has a direct effect on its current value of GDPGR. Its probability level of 0.2375 is statistically insignificant at the 5% level of significance. This implies that holding other variables in the model constant, GDPGR (-1) would bring about a 29.85% increase in its current value, all things being equal.

Furthermore, the variables of money market such as ratio of money supply to GDP (M2G) of -0.5015 has a negative effect on economic growth, while ratio of credit to private sector to GDP (CSPG) of 0.1126 and inflation (INF) of 0.1854 have a positive effect on economic growth. Their probability level shows that none of the variables has probability values that are below or equal to the 5% level of significance, suggesting that none of the variables statistically impacted on economic growth. By implication, a percentage change in CPSG and INF would bring about a 11.26% and 18.54% increase in economic growth, while a percentage change in M2G would bring about a 50.15% decrease in economic growth. This results suggests that economic growth is more impacted by credit to the private sector than availability of money in the circulation without supporting economic production level The coefficient of determination R^2 of 0.4673 shows that the explanatory variables such as M2G, CPSG and INF jointly explained 46.73% variations in dependent variables (GDPGR), while other variables not included in the model explained the remaining 53.27%. This implies that money market, though as a factor contributing to economic growth but not substantially only the factor necessary to impact on growth.

The adjusted R^2 of 34.90% shows the true behaviour of the dependent variable according to the number of explanatory variables in the model. The F-statistic of 3.9483 and the p-value of 0.0017 suggest that the whole model is highly statistically significant at the 5% level. This implies that the model is well fitted and significant to explain the effect of money market on economic growth in Nigeria. More importantly, the result of Durbin-Watson of 2.0624 indicates that the model is not suffering from the auto-correlation problem, as the value can be easily approximated to 2.00.

Table 4.3: ARDL Long Run Estimate

Dependent Variable: LGDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDPGR(-1)	0.2985	0.2443	1.2218	0.2375
M2G	-0.5015	0.5442	-0.9217	0.3689
CPSG	0.1126	0.4422	0.2546	0.8019
INF	0.1854	0.1446	1.2821	0.2161
C	9.2350	5.7453	1.6074	0.1254
R-squared	0.4673	Mean dependent var		4.9530
Adjusted R-squared	0.3490	S.D. dependent var		3.6360
S.E. of regression	2.9337	Akaike info criterion		5.1801
Sum squared resid	154.9223	Schwarz criterion		5.4269
Log likelihood	54.5710	Hannan-Quinn criter.		5.2422
F-statistic	3.9483	Durbin-Watson stat		2.0624
Prob(F-statistic)	0.017968			

Source: Authors Computation using EViews 10, 2025

The diagnostic checks on regression residual are tested using Breusch Godfrey serial correlation, the Breusch Godfrey Pagan test and Jarqua-Bera tests. The three tests for serial correlation, constant of variance and normality of the regression residual. The study revealed that the probability of these variables such as 0.5622, 0.3554 and 0.8678 are higher than the 5% level of significance, indicating no problem of serial correlation, residual variance is constant and normally distributed.

Table 4.4: Diagnostics Checks on Residual

Diagnostics Tests	F-STAT	Prob
BGSC-LM	0.3493	0.5622
BGPT	4.3929	0.3554
J.B	0.2835	0.8678

Source: Authors Computation using EViews, 10

Test of Hypothesis

Ho1: There is no significant effect of ratio of money supply to GDP (M2G) on economic growth in Nigeria

Table 4.2 presents the p-value of the estimated results. It was found that the p-value of M2G of 0.3689 is higher than the 5% level of significance. This implies that the ratio of money supply to GDP has no statistically significant effect on economic growth. Therefore, the hull hypothesis is retained.

Ho2: There is no significant effect of ratio of credit to private sector to GDP (CRSP) on economic growth in Nigeria.

As presented in Table 4.2, it was found that the p-value of CPSG of 0.78019 is higher than the 5% level of significance. This implies that the ratio of credit to private sector to GDP has no statistically significant effect on economic growth. Therefore, the null hypothesis is retained'

4. Summary of Findings

This study examined the effect of financial market, specifically, money market on economic growth in Nigeria, covering a period from 2013 to 2023. Augmented Dickey fuller test revealed that variables are integrated of the same order, as such auto-regressive distributed lag was employed as analysis method, as it is a great technique that captures different integration level. The results revealed that money market has

no statistical significant effect on economic growth. Although, while CPSG and INF (control variable) positively impacted on economic growth, M2G impacted negatively. Therefore, the study submitted that money market effect on economic growth is statistically insignificant during the period of review.

Summary

This study examined the effect of financial market development on economic growth in Nigeria using annual data from 2013 to 2023. Financial market development was measured using the ratio of broad money supply to GDP (M2G), the ratio of credit to the private sector to GDP (CPSG), and inflation (INF) as a control variable. The ARDL estimation results indicated that M2G had a negative but statistically insignificant effect on economic growth, while CPSG and inflation had positive but insignificant effects. The ARDL bounds test confirmed the existence of a long-run relationship among the variables.

5. Conclusion

The study concludes that financial market development remains important for Nigeria's economic growth. However, during the period under review (2013–2023), broad money supply (M2G), credit to the private sector (CPSG), and inflation did not exert statistically significant effects on economic growth. Although a long-run relationship exists among the variables, improving the efficiency of financial intermediation and strengthening macroeconomic stability remain essential for enhancing the contribution of the financial sector to sustainable economic growth.

Recommendations

Strengthen credit intermediation quality: Incentivize banks to expand CPS to MSMEs and manufacturing via risk-sharing schemes, performance-based guarantees, and improved collateral registries. Scale up credit analytics, data infrastructure and insolvency resolution to lower non-performing loans and lending spreads.

Broaden and liquefy the capital market: Promote new listings (especially mid-cap/tech/agribusiness), simplify issuance for commercial papers and corporate bonds, and deepen market-making to raise TVT and TOR. Expand derivatives and repo markets with robust margining/clearing to improve hedging and liquidity without compromising stability.

Mobilize long-term patient capital: Enable pension and insurance funds to invest prudently in infrastructure and private credit through clear risk-based limits and transparent project pipelines. Accelerate asset securitization and infrastructure funds to convert idle assets into investable products.

Macro-financial stability and inflation control: Maintain a credible disinflation path and FX clarity to reduce risk premia that blunt the growth effect of M2 and dampen equity valuations. Coordinate fiscal-monetary-exchange-rate policy to anchor expectations and support investment horizons.

Market governance and transparency: Tighten disclosure, audit quality, and timely reporting, harmonize listing rules, and enforce market abuse sanctions to boost investor confidence. Continue digitalization (e-offerings, e-dividends, seamless KYC) to reduce frictions and widen participation.

Financial inclusion and fintech rails: Leverage open banking, tiered KYC, and agent networks to channel savings into formal products, raising M2 quality and investable funds.Support regulatory sandboxes that scale fintech credit scoring, supply-chain finance, and crowdfunding under investor-protection rules.

Suggestions for Further Research

1. **Firm-level panels** linking financing structure (bank loans vs. bonds/equity) to productivity and employment.
2. **Sectoral analyses** (manufacturing, services, agriculture) to map which sectors benefit most from market liquidity vs. bank credit.
3. **Causal identification** using **instrumental variables** (e.g., regulatory shocks, inclusion to indices) or **synthetic control** for policy changes.
4. **Microstructure studies** on spreads, depth, and order-book resilience to understand how liquidity channels feed into real activity.
5. **Fintech and inclusion**: quantify how digital credit, mobile money, and open banking alter CPS quality and the growth multiplier.

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