



## An empirical analysis of the relationship between economic growth and financial development in Nigeria

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### Abstract

Scholars, academicians, and economists have continued to pay close attention to financial development and how it relates to economic progress. Depending on the country, the discussion takes many different forms. We have attempted to assess the relationship between financial development and economic growth in Nigeria in this study, departing from previous research by incorporating a wide range of distinct financial development indicators into our model and evaluating the relationship between finance and growth using various econometric techniques between the years of 1986 and 2021. The Engel and Granger residual-based cointegration test and the Error Correction model are two of the analytical methods used. The results suggest that whereas trade openness was shown to have a favourable but negligible impact on growth, domestic credit to the private sector (PSC) and stock market capitalisation (MCAP) are negatively and significantly associated with economic growth. GDP growth decreased by 0.16 percent and 0.08 percent, respectively, as a result of unit changes in PSC and MCAP. On the other hand, an increase of one unit in trade openness was linked to an increase of 0.07 percent in GDP growth. We were able to determine the corrective influence on adjustment speed thanks to the error correction term in the model, which showed that mistakes of divergence from equilibrium were being corrected at a rate of 44% annually. According to the Granger causality tests, GDP was a granger causal factor for foreign direct investment. Stock market capitalisation was discovered to cause GDP without a feedback system, but not the other way around. We advise making an effort to guarantee that credit provided to the private sector is invested in the actual productive sectors of the economy rather than being misdirected or incorrectly allocated. This will eventually result in a rise in production for both domestic use and export. By extension, trade openness will be greatly increased and will start to have a favourable impact on the economy.

**Keywords:** Financial Development, Economic growth, Error Correction Model, Cointegration test.

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### 1. Introduction

An effective and efficient financial system creates conditions that are favourable for the expansion and development of the economy. The term "financial system" refers to the collection of financial institutions and markets that work together to play a significant part in driving economic expansion in a variety of ways (Rahyman, Khan & Charfeddine, 2020) <sup>[24]</sup>. This specific goal is accomplished through the intermediary functions of both banking and non-banking financial institutions, which are supported by stringent rules that govern and direct the operations of such organisations. The enhancement of the financial development mechanism is provided by financial innovation and intermediation. The money that is acquired by financial intermediaries comes in the form of deposits, premiums, and other financial claims, among other things (Sarwar *et al.* 2020) <sup>[27]</sup>.

These funds are then converted by the financial intermediaries into assets that the general public finds desirable and favours. In this manner, financial intermediaries are able to carry out the economic functions of offering maturity transition, (ii) reducing risk through diversity, (iii) reducing the cost of contracting as well as information processing, and (iv) providing payment mechanisms. The aforementioned economic functions are a driving force behind the expansion of the financial sector since they facilitate the movement of cash from net savers to investors. According to Carbo *et al.* (2003), in a banking industry that is competitive, borrowing rates are higher while lending rates are lower. This results in a quicker transformation of consumer savings into productive capital investment (Nasir, Mjeed & Aleem, 2018) <sup>[17]</sup>.

The availability of funds that are suitable for investment hence encourages economic expansion by elevating the volume of economic activity and, therefore, real production. Schumpeter (1911) contends that the provision of financial services by financial institutions is one of the most important catalysts for innovation and economic growth. The importance of financial development as a critical factor in increasing the amount of capital and, as a result, economic growth has been emphasised in theoretical and empirical discussions on the nexus between finance and economic growth (Houshaimi, 2020) <sup>[9]</sup>. These discussions have focused on the relationship between finance and economic growth. However, the importance of finance to economic expansion has historically been the subject of heated debate. Traditional growth models, most notably the neoclassical model published by Solow (1956), have downplayed the importance of financial development in the process of economic expansion. Solow's growth model, also known as the exogenous growth model, was predicated on the idea that technical advancement is the primary predictor of growth and is unrelated to funding or money. This was the basis for the model's exogenous growth model. In its purest form, technological advancement is exogenous, and shifts in savings and the structure of the financial system are not accounted for in the model of economic expansion (Hussein, Ahmed & Ahmed, 2020) <sup>[10]</sup>. The fallout from Solow's growth model has, over the course of the years, prompted empirical studies on the relationship between finance and growth. The purpose of these studies is to determine the responsiveness of economic growth to the financial system, as well as the roles of key components of the financial system, such as the banking system and stock markets, in promoting growth.

The endogenous growth model, on the other hand, acknowledges that technological advancement is significant but endogenous, and as a result, it acknowledges that funding is essential and the financial system is the key to supporting growth (Khalil, 2014). According to Simwaka, Munthali, and Chiumia (2012) <sup>[28]</sup>, the literature on endogenous growth illustrates the significance of financial development for long-run economic growth by highlighting the impact of financial services on capital accumulation and technological innovation. They say this is evidence that financial development is important for endogenous growth. Sahay (2015) <sup>[26]</sup> argues, lending credence to the role of finance in engineering growth, that financial development increases a country's pliability and boosts economic growth through the mobilisation of savings, the provision of information about investment, and the efficient allocation of resources, as well

as the facilitation of risk diversification and management. This lends credence to the idea that finance plays a role in growth engineering (Pauldel & Acharya, 2020) <sup>[23]</sup>.

The financial system has traditionally been one of the most important factors in maintaining economic activity. It should come as no surprise that the industrialised countries share one thing in common, and that is an advanced monetary system (Nguena and Abimbola, 2013) <sup>[18]</sup>. Over the course of the past several years, the Central Bank of Nigeria (CBN) has consistently implemented new action plans with the intention of fostering long-term economic expansion. Since 1986, the authorities in charge of the nation's monetary policy have implemented a variety of reforms with the intention of broadening the scope of the financial system while simultaneously lowering the amount of financial repression that is inherent to the system (Nzotta and Okereke, 2009) <sup>[20]</sup>. This effort is a result of monetary policies to ensure sufficient regulation and supervision of the financial system in Nigeria. To comprehend the mechanism behind the relationship between finance and growth, however, it is essential to have a firm grasp of the primary forces that propel economic expansion. This is particularly essential since the acquisition of such knowledge will have substantial ramifications for both regulation and policy (Akintola, Orji-Okoro & Itodo, 2020) <sup>[3]</sup>. Financial reforms have a long history in Nigeria, and they have been implemented at various stages of the country's economic development for the purpose of supporting economic growth. This research makes use of more comprehensive measurements of financial development while also making use of a variety of innovative econometric methodologies in order to investigate the nature of the relationship that exists between finance and economic expansion. In addition to this, the study extended its scope to encompass a period of 35 years, from 1981 to 2014.

## 2. Literature Review

A mix of depth (the size and liquidity of financial markets), access (the capacity of individuals to acquire financial services), and efficiency is what constitutes financial development (ability of institutions to provide financial services at low cost and with sustainable revenues, and the level of activity of capital markets) (Wen *et al.* 2021) <sup>[29]</sup>. Stability in the financial sector is fostered by development in the financial sector, which enables the establishment of deep and liquid financial systems that are armed with a variety of mechanisms to absorb the effects of shocks. Like the law of diminishing returns, there is a point where the benefits of financial development start to go down and the costs start to go up (Sahay *et al.*, 2015) <sup>[26]</sup>.

The effort to understand the nature of the relationship that exists between finance and growth has been at the forefront of recent discussions regarding economics. Some research establishes a supply-leading hypothesis, which states that it is believed that finance is the primary driver of economic growth. On the other hand, some other empirical investigations have proposed a demand-following hypothesis, which states that economic growth comes before finance (Nguyen & Pham, 2021) <sup>[19]</sup>. Some research has suggested that there is a feedback response (also known as bidirectional causality) from growth to finance, as well as from finance to growth. This suggests that the postulations of a one-way causal relationship between finance and growth are incorrect. Another topic that has been debated in academic circles is whether the correlation between financial

markets and economic expansion holds true over the long or short term.

An overarching consensus at this point appears to be an unachievable goal, given that the feature that helps define the nature of such a relationship differs depending on the country and the location. According to Atemnkeng, Njong, and Neba's (2011) <sup>[12]</sup> explanation, the direction of causality is determined by the development and efficiency of the financial sector. They contend that growth is most likely the causal factor for finance in developed countries. However, in developing countries, the situation is the opposite of what is seen in wealthy countries. In contrast to the industrialised countries, the financial systems of developing countries are characterised by a lack of information equality, inadequate risk diversification and management, and a high cost of contracting. If this line of reasoning is correct, then it is possible to draw the conclusion that countries that are already economically established have a greater potential for financial development than those that are still in the process of developing, such as Nigeria. Ardic and Damar (2006) <sup>[4]</sup> state that there is evidence to suggest that the connection between financial development and economic growth may vary under adverse financial sector conditions as compared to well-functioning financial intermediaries. This is because the evidence suggests that the connection between financial development and economic growth may vary. According to Arestis (2005), a more complex financial system typically has endogenous financing that responds to demand. Arestis makes this claim in his study.

We may very well have the need right now to do a literature assessment of the existing empirical studies and investigate the lines of argument presented in those studies. By applying an estimation technique known as dynamic panel modelling over the course of the years 1994–2007, Caporale *et al.* (2009) investigated the connection that exists between financial development and economic growth in ten countries that had just joined the EU. The evidence suggests that the stock and credit markets in these economies are still in their early stages of development, and that their contribution to economic growth is limited as a result of a lack of financial depth. In addition, the evidence suggests that the stock and credit markets in these economies are not yet integrated. The Granger causality test shows that the chain of events that leads to economic growth starts with financial development and doesn't go the other way around.

Adu, Marbuah, and Mensah (2013) <sup>[1]</sup> investigated the long-run growth effects of financial development in Ghana and found that both the credit to the private sector as a ratio to GDP and total domestic credit have a positive effect on growth, while growth appears to be insensitive to the broad money supply to GDP ratio.

Kang and Liu (2008) <sup>[11]</sup> investigated the connection between financial development indicators and the expansion of the economies of India and Taiwan from 1997 to 2005. Their study covered the time period. The study analyses and compares the factors that affect economic growth in India and Taiwan, as well as the impact that financial development has on economic growth in both countries. The paper also discusses the causes of economic growth in India and

Taiwan. According to the findings of the multiple regression analysis, the total amount of money in circulation and the value of the stock market both have a favourable influence on economic expansion in India and Taiwan.

When analysing the connection between financial development and economic growth in Sub-Saharan Africa, Ngongang (2015) utilised the dynamic panel GMM technique. The dynamic research showed that there is a positive link between the growth of the region's financial sector and the growth of the region's economy as a whole. Onwumere, Onodugo, and Ibe (2013) <sup>[22]</sup> used the method of ordinary least squares to determine the impact of Nigeria's financial structure on the country's economic growth. They emphasised the significance of the intermediary role that the Nigerian financial system plays in bringing about economic expansion. The results show that the way the financial system is set up has a large and positive effect on the growth of the economy.

Aye (2015) <sup>[5]</sup> utilised the bootstrap rolling window estimator to determine the correlation between Nigeria's financial development and the country's overall economic growth between the years 1961 and 2012. The research brought to light the impact of a structural break that occurred throughout the coverage period and demonstrated that the direction of causality did not remain consistent throughout the period. One can draw the conclusion that the outcome of the Granger causality test might be affected by factors such as time variation and structural break effects.

Ardic and Damar (2006) <sup>[4]</sup> analysed the effects of financial sector deepening on economic growth by using a data set that included province-level information for Turkey and spanned the years 1996–2001. The results of both OLS and GMM estimation indicate that financial deepening has a direct and robust effect on economic growth. Similarly, Khalil (2014) employed the Generalized Method of Moments dynamic panel to re-examine the empirical relationship between financial development and economic growth using data sets from 1973–2012. The results showed that financial development has a significant positive impact on economic growth.

Olusegun, Ganiyu, and Oluseyi (2013) <sup>[21]</sup> examined the impact of financial sector development on economic growth in Nigeria using the OLS estimation technique. The results indicate that financial development influences growth, but the influence exerted is weak and non-significant.

Akinguola *et al.* (2013) examined the relationship between financial liberalisation and economic growth in Nigeria using the vector error correction model (VECM). It was shown that while financial liberalisation proxies do not significantly explain economic growth, financial deepening indicators were confirmed to have a significant positive effect on economic growth.

Sackey and Nkrumah (2012) <sup>[8]</sup> examined the effects of financial sector development on economic growth in Ghana using the Johansen Co-integration analysis. The paper aimed at empirically determining the causal link between financial sector development and economic growth in Ghana. The Johansen Co-integration techniques within a bivariate vector

auto-regressive framework were employed for the regression with a data set from 2000 to 2009. Over a ten-year period (2000-2009), the study found a statistically significant positive relationship between financial sector development and economic growth in Ghana.

Rashti, Araghi, and Shayeste (2014) [25] studied the influence of financial development on economic growth during the period 1990–2010, with special emphasis on the recent financial crisis. The study utilises the generalised methods of Moment (GMM). The results revealed that the financial crisis had greater influence on developing countries and much less influence on developed countries. Moreover, it was shown that financial development indexes relating to the banking sector had a negative effect on economic growth, whereas the capital markets demonstrated a positive effect on economic growth during the period.

Atemnkeng, Njong and Cletus (2011) [12] investigated the relationship between financial development and economic growth in Cameroon using time series data for the period 1970–2005. It was found that financial development has a positive effect on economic growth in the long run, while a long-term causal relationship runs from financial development to economic growth without a feedback system. Simwaka *et al.* (2012) [28] assessed the causal relationship between financial development and economic growth in Malawi using the autoregressive distributed lag (ARDL) approach. Results show that there is a positive and significant relationship between financial development and economic growth in the long run. Granger causality tests show that economic growth drives financial development with no feedback effects, as financial development has no causal effects on economic growth.

Bakay (2014) [6] drew evidence from regional panel data in examining the causality between financial deepening and economic growth. The findings indicate that credits alone do not explain the amount of export and import of a specific province, and that the amount of deposits is negatively associated with the level of imports. measure for the provision of financial services (sum of loans and deposits) statistically explains foreign trade (sum of exports and imports). The Granger causality test revealed that there is bi-directional causality between financial deepening and international trade.

Kargbo, Ding and Kabia (2014) [13] analysed financial deepening in low, middle and high income countries using the Ordinary Least Squares and Multiple Regression model econometrics technique. The empirical results suggest that financial sector development and economic growth are positively co-integrated. The results support the view that, financial deepening is a necessary causal factor of economic growth, although the strength of the evidence varies across countries.

Mirdala (2011) [16] used the vector error correction model (VECM) and the Granger causality test in evaluating the main aspects of the financial deepening in the ten European

transition economies (ETE) in the period 2000–2010. The outcome revealed that countries with lower GDP per capita appear to benefit from financial deepening as the financial deepening indicators influence real economic activity with greater intensity in the short-run and Granger causality for real output in the long-run.

### 3. Methodology and Data

#### 3.1 Model Specification

This study exclusively sourced secondary data between 1986 and 2021 from the World Development Indicators (WDI). Having reviewed the literature exploring links between finance and growth, various empirical works applied different tools while assessing the relation between growth and financial development. The choice of model in this discourse is based on the preliminary test of stationarity on the variables of interest. The baseline model can be represented as follows:

$$GDPG_t = \beta_0 + \beta_1PSC_t + \beta_2MCAP_t + \beta_3TOP_t + \varepsilon_t \tag{2}$$

Where, GDPG = growth rate of real GDP; PSC = domestic credit to private sector as a percentage of GDP; MCAP = stock market capitalization as a share of GDP; TOP = trade openness, and  $\varepsilon$  = error term and t = time. Modifying our baseline model to achieve purpose entails bringing in the error correction term, and the error correction model can therefore be expressed as follows:

$$\Delta GDPG_t = \beta_0 + \sum_{i=0}^n \beta_1 \Delta GDPG_{t-1} + \sum_{i=0}^n \beta_2 \Delta PSC_{t-1} + \sum_{i=0}^n \beta_3 \Delta MCAP_{t-1} + \sum_{i=0}^n \beta_4 \Delta TOP_{t-1} + ECT_{t-1} + \varepsilon_t \tag{4}$$

Where  $\Delta$  is the first differencing operator, and ECT is the error correction term.

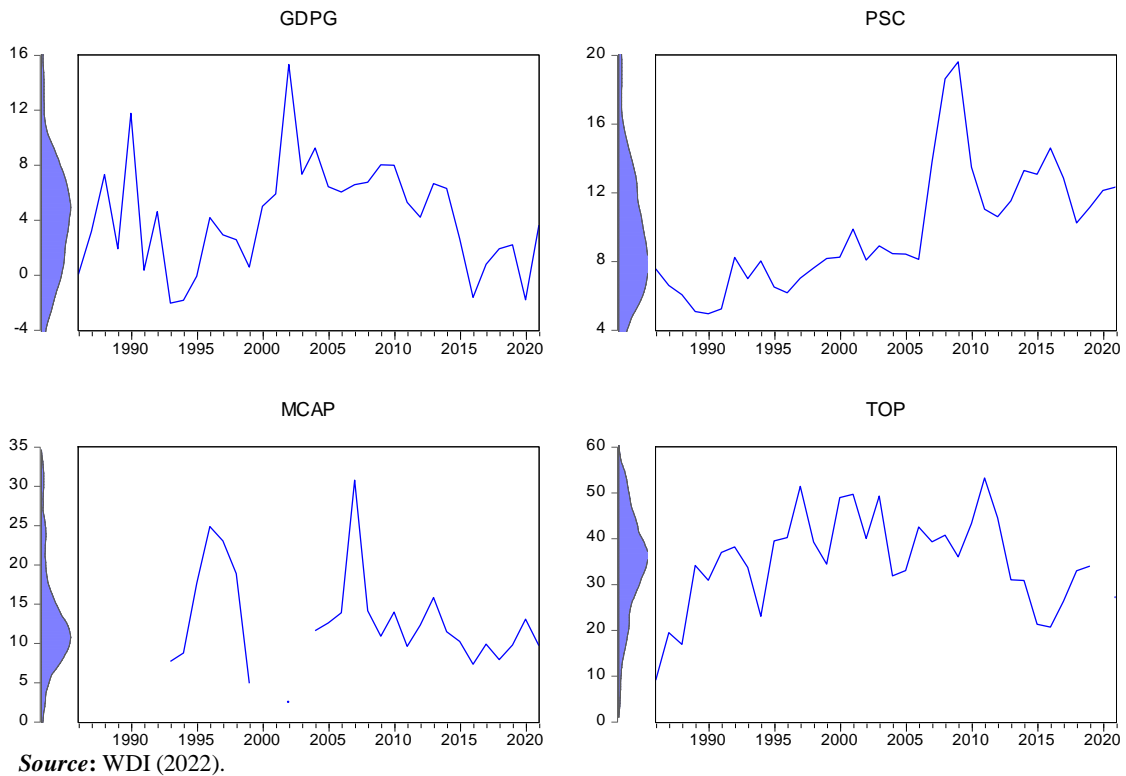
### 4. Results and Analysis

#### 4.1 Descriptive statistics

Table 4.1: Descriptive statistics of variables

Statistic	GDPG	PSC	MCAP	TOP
Mean	4.187726	9.802797	12.84181	35.00108
Max.	15.32916	19.62560	30.80067	53.27796
Min.	-2.035119	4.957522	2.488777	9.135846
S.D	3.905618	3.542806	6.207129	10.25470
Obs.	36	36	26	35

Table 4.1 explains statistical description of each variable over the period, 1986-2021. It can be observed that GDP grew at an average rate of 4.19% and was at its highest peak in 2002 at 15.33%. Domestic credit to private sector and stock market capitalization relative to GDP averaged 9.80% and 12.84%, respectively while the mean of trade openness stood at 35.00% within the coverage period. The trends of the selected variables are further illustrated in Figure 4.1 which depicts the variants in trend patterns across years.



Source: WDI (2022).

Fig 4.1: Graphical representation of variable proxies

4.2 Unit root test

Table 4.2: Augmented Dickey-Fuller (ADF) Unit root Test.

Variables	ADF Test Statistic	Critical Value at 5%	Order of Integration
GDPG	-10.37542	-3.548490	1(1)
PSC	-5.351750	-3.557759	1(1)
MCAP	-4.689154	-1.958088	1(1)
TOP	-7.112872	-3.557759	1(1)

The representation in Table 4.2 shows that all the variables do not have unit root and therefore are stationary at 5% level of significance. They all attained stationarity at first difference i.e. at order one. This outcome permits us now to go ahead with Johansen co-integration test, and estimate our model using the error correction model approach.

Engel and Granger Residual Based Cointegration Test

Table 4.3: Cointegration Test Results

<b>Null Hypothesis: ECT has a unit root</b>			
<b>Exogenous: Constant, Linear Trend</b>			
Lag Length: 0 (Automatic - based on SIC, maxlag=5)			
	t-Statistic	Prob.*	
Augmented Dickey-Fuller test statistic	-3.710534	0.0442	
Test critical values:	5% level	-3.644963	

Table 4.3 presents the cointegration test result based on the Engel and Granger residual approach. The results tested the residual of the baseline model for stationarity at level. The result shows that the residual does not have a unit root at level. This implies that the variables are cointegrated. In other words, the model variables have long-run relationship, and move together in the long run.

4.3 Regression Results

Table 4.4: Error Correction Model

Dependent Variable: D(GDPG)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PSC)	-0.158399	0.177373	-2.893025	0.0001
D(MCAP)	-0.079607	0.055859	-2.425139	0.0003
D(TOP)	0.065665	0.053819	1.220105	0.2401
ECT(-1)	-0.442376	0.144624	-3.058807	0.0075
C	-0.356591	0.383419	-0.930028	0.3662
R-squared	0.763716	Mean dependent var	-0.210613	
Adjusted R-squared	0.729645	S.D. dependent var	2.114109	
S.E. of regression	1.730931	Akaike info criterion	4.139453	
Sum squared resid	47.93798	Schwarz criterion	4.388149	
Log likelihood	-38.46426	Hannan-Quinn criter.	4.193427	
F-statistic	4.458730	Durbin-Watson stat	1.973033	
Prob(F-statistic)	0.000222			

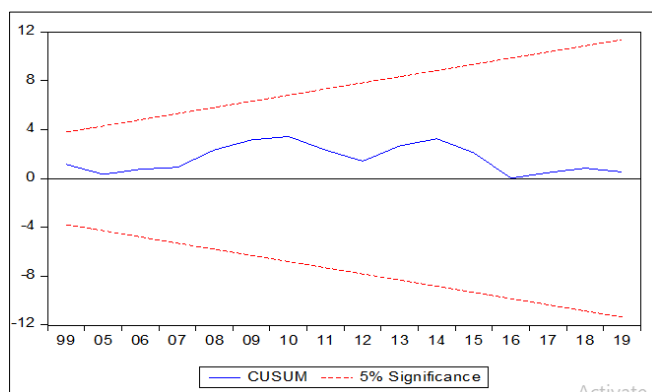
Table 4.4 presents the error correction model estimation. The result reveals that domestic credit to the private sector (PSC) and stock market capitalization (MCAP) are negatively and significantly related to economic growth whereas trade openness was found to have positive but insignificant influence on growth. A unit change in PSC and MCAP led to about 0.16% and 0.08% decline GDP growth, respectively. On the other hand, a unit change in trade openness was associated with about 0.07% increase in GDP growth. Even though the cointegration results confirm presence of a long run relationship, there are always deviations along the long run equilibrium path. Such deviation is addressed by the speed of adjustment as explained by the ECT in table 4.4. The speed of adjustment is 0.44, which means that 44 percent of errors due arising from departures from equilibrium is corrected annually as the variables converge towards long-run equilibrium relationship.

#### 4.4 Diagnostics Test

The Serial Correlation and the Heteroskedasticity diagnostic test result are presented in Table 4.5. The serial correlation test result in the first panel confirmed the Durbin Watson stat in Table 4.4 that the model variables do not have traits of autocorrelation. Heteroskedasticity test result in the second panel suggests that the model is homoskedastic since the probability values of observed R-squared is greater than 5% probability level. The stability of the regression coefficients is also confirmed in Figure 4.1 with the Cumulative Sum (CUSUM) recursive estimate where the middle line fell within the upper and lower bound

**Table 4.5:** The Serial Correlation and the Heteroskedasticity Tests

<b>Breusch-Godfrey Serial Correlation LM Test:</b>			
F-statistic	2.798684	Prob. F(2,14)	0.0950
Obs*R-squared	5.997985	Prob. Chi-Square(2)	0.0998
<b>Heteroskedasticity Test: Breusch-Pagan-Godfrey</b>			
F-statistic	0.218227	Prob. F(4,16)	0.9244
Obs*R-squared	1.086422	Prob. Chi-Square(4)	0.8964
Scaled explained SS	0.517806	Prob. Chi-Square(4)	0.9717



**Fig 4.1:** CUSUM Test

#### 5. Conclusion and Recommendations

Scholars, academics, and economists have continued to pay special attention to the development of the financial sector and how it connects to the advancement of the economy. The discussion on the subject takes many various forms, which vary greatly from country to country. We made an attempt to examine the connection between financial development and economic expansion in Nigeria by departing from the methodology of previously conducted research and including into the model a variety of broad and specific indicators of financial development. A number of distinct econometric strategies were employed in order to ascertain not only the nature but also the extent of the influence. The findings indicate that, over the course of time, advances in financial development and economic growth go hand in hand. The findings of the residual-based cointegration test developed by Engel and Granger provided support for the hypothesis that there is a long-run link between the financial development and growth. Further investigation revealed that the extent to which the economy was open to trade had a positive but insignificant effect, while domestic credit to the private sector and the stock market capitalization had negative and significant effects on growth. The model's error correction term gave us the information we needed to determine the speed of adjustment, and it demonstrated that errors in divergence from long-run equilibrium were being corrected

at a rate of 44 percent annually. Based on the findings, it is recommended that measures be taken to prevent private-sector credit from being misallocated or used for purposes other than those for which it was intended. If this happens, the economy has a better chance of keeping growing. The end result will be more output for sale on the domestic market and for export.

#### References

1. Adu G, Marbuah G, Tei J. Financial development and economic growth in Ghana: Does the measure of financial development matter? *Journal of Advanced Research*. 2013; 3(4):192-203. <http://doi.org/10.1016/j.rdf.2013.11.001>
2. Akingunola RO. The effect of the financial liberalisation on economic growth. *International Journal of Academic Research in Economics and Management Sciences*. 2013; 2(1):123-155.
3. Akintola AA, Oji-Okoro I, Itodo IA. Financial sector development and economic growth in Nigeria: An empirical re-examination. *Economic and Financial Review*. 2020; 58(2):1-26.
4. Ardic OP, Dama HE. Financial sector deepening and economic growth: Evidence from Turkey, 2006.
5. Aye GC. Causality between financial deepening and economic growth in Nigeria: Evidence from a Bootstrap Rolling Window Approach. *Journal of Economics, Business and Management*. 2015; 3(8): <http://doi.org/10.7763/JOEBM>.
6. Bakay A. Granger causality between financial deepening and international trade: Evidence from Regional Panel Data 1. *Eurasian Journal of Business and Economics* 2014; 7(14):91-107. <http://doi.org/10.17015/ejbe.2014.014.06>
7. Elie B, Ph N. Financial development and economic growth in Sub-Saharan Africa: A dynamic panel data analysis. *European Journal of Sustainable Development*. 2015; 4(2):369-378. <http://doi.org/10.14207/ejsd.2015.v4n2p369>
8. Gyimah F, Eric S, Nkrumah M. Financial sector deepening and economic growth in Ghana. *Journal of Economics and Sustainable Development ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)*. 2012; 3(8):122-140.
9. Houshaimi MJ. Financial structure and economic growth: An empirical study in the MENA Region. *Management Studies and Economic Systems*. 2020; 5(3/4):1-15.
10. Hussein MA, Ahmed SA, Ahmed HMS. Impact of financial development on economic growth in Sudan: short-run and long-run analysis. *International Journal of Management*. 2021; 11:12. <https://doi.org/10.34218/ijm.11.12.2020.274>
11. Hsin-Hong Kang, LIU PC. Comparative studies between financial development indicators and economic growth relevance in India and Taiwan. *International Conference on Applied Economics – ICOAE*. 2008; (1):455-463.
12. Johannes TA, Njong AM, Cletus N. Financial development and economic growth in Cameroon, 1970-2005. *Journal of Economics and International Finance*. 2011; 3(6):367-375, June 2011 Available Online at <http://www.academicjournals.org/JEIF>
13. Kargbo AA. A situational analysis of financial deepening in low, Middle and High income economies.

- Alimamy Amara Kargbo *et al* | International Journal of Business Management and Economic Research (IJBMER). 2015; 6(2):143-157.
14. Maria G, Christophe C, Sova R, Sova A. Financial development and economic growth: Evidence from Ten New EU Members. Discussion, 2009, Paper 940.
  15. Mhadhbi K. Financial development and economic growth: A dynamic panel data analysis. International Journal of Econometrics and Financial Management. 2014; 2(2):48-58. <http://doi.org/10.12691/ijefm-2-2-1>
  16. Mirdala R. Mp r a. MPRA Paper No. 33609, Posted 22. September 2011 05:56 UTC Online at <Http://mpra.ub.uni-muenchen.de/33609/>, (33609).
  17. Nasir H, Majeed S, Aleem A. Does financial development leads economic growth? Evidence from emerging asian markets. Asian Economic and Financial Review. 2018; 8(5):599-617. <https://doi.org/10.18488/journal.aefr.2018.85.599.617>
  18. Nguena CL, Abimbola TM. Financial Deepening Dynamics and Implication for Financial Policy Coordination in a Monetary Union: the case of WAEMU. Ican Economic Conference 2013 “Regional Integration in Africa Johannesburg, South Africa; From 28 to 30/10/2013, 1-22.
  19. Nguyen P, Pham TT. The Impact of Financial Development on Economic Growth: Empirical Evidence from Transitional Economies. Journal of Asian Finance. 2021; 8(11):191-0201. <https://doi.org/10.13106/jafeb.2021.vol8.no11.0191>
  20. Nzotta SM. Financial deepening and economic development of Nigeria: An empirical investigation Department of Finance and Banking. African Journal of Accounting, Economics, Finance and Banking Research. 2009; 5(5):52-66.
  21. Olusegun AA, *et al*. Impact of Financial Sector Development on the Nigerian Economic Growth. American Journal of Business and Management. 2013; 2(4):347–356. <http://doi.org/10.11634/216796061302361>
  22. Onwumere JUJ, Onudugo V, Ibe IG. Financial Structure and Economic Growth: Evidence from Nigeria. Global Journal of Management and Business Research Finance. 2013; 13(5).
  23. Paudel RC, Acharya CP. Financial Development and Economic Growth: Evidence from Nepal. NRB Economic Review, 2021, 1-22.
  24. Rahman A, Khan MA, Charfeddine L. Does Financial Sector Promote Economic Growth in Pakistan? Empirical Evidences from Markov Switching Model. SAGE Open. 2020; 10(4). <https://doi.org/10.1177/2158244020963064>
  25. Rashti NA, Shayeste M. Relationship between financial development and economic growth: Evidence from financial crisis. Asian Economic and Financial Review. 2014; 4(7):930-940.
  26. Sahay R, *et al*. Rethinking Financial Deepening: Stability and Growth in Emerging Markets. IMF Staff Discussion Note SDN/15/08, 2015.
  27. Sarwar A, Khan MA, Sarwar Z, Khan W. Financial development, human capital and its impact on economic growth of emerging countries. Asian Journal of Economics and Banking. 2021; 5(1):86-100. <https://doi.org/10.1108/ajeb-06-2020-0015>
  28. Simwaka K, Munthali T, Kabango G. Financial development and economic growth in Malawi: An empirical analysis. Banks and Bank Systems. 2012; 7(3).
  29. Wen J, Mahmood H, Khalid S, Zakaria M. The impact of financial development on economic indicators: a dynamic panel data analysis. Economic Research-Ekonomska Istrazivanja, 2021, 1-14. <https://doi.org/10.1080/1331677X.2021.1985570>