

|   |  |   |                 |          |              |
|---|--|---|-----------------|----------|--------------|
|  | <h1 style="color: red;">GOMAL UNIVERSITY</h1> <h2 style="color: blue;">JOURNAL OF RESEARCH</h2> <p>Gomal University, Dera Ismail Khan, Khyber Pakhtunkhwa, Pakistan<br/> ISSN: 1019- 8180 (Print) <span style="float: right;">ISSN: 2708- 1737 (Online)</span></p> |  |                 |          |              |
| Website   | <a href="http://www.gujr.com.pk">www.gujr.com.pk</a>   | HEC Recognized  | Social Sciences | CrossRef | DOI:10.51380 |

## THE NEXUS AMONG INSTITUTIONAL QUALITY, FINANCIAL DEVELOPMENT, AND POVERTY IN SELECTED WEST AFRICAN COUNTRIES

Adekunle Aribatise<sup>1</sup> & Temitope Sade Akintunde<sup>2</sup>

<sup>1</sup>Department of Economics, Wesley university Ondo, NIGERIA

<sup>2</sup>Department of Economics, Osun State University, Oshogbo, NIGERIA

| KEYWORDS   | ABSTRACT  |
|--|---|
| <p><b>Financial Development, Poverty, Institutional Quality, Threshold Regression</b></p>  | <p>This study examines how institutions moderate the contribution of financial development to alleviating or spurring poverty in ten West African countries for period 1986–2021, using the dynamic panel threshold regression analysis. On an ordinal scale of 10, study found that the institutional quality threshold estimate was 3.75. The results of threshold estimation validate institutional component's nonlinearity. The study found that, in the selected West African countries, there is threshold value of institutional quality (3.75) below which financial development will have negative impact on poverty reduction as well as a value above which financial development will positively impact poverty. This is indicated by the negative coefficients of institutional quality index and financial development, which were -0.284 and -1.480 prior to threshold and positive, 0.320 &amp; 5.089 after threshold. Study concludes that institutions must continuously maintain an institutional quality index above 3.75 before they are strong enough to prevent rent-seeking, opportunism, sharp practices, and corruption that hinder the financial sector's ability to finance financial intermediation &amp; ultimately alleviate poverty. As a result, all parties involved including organizations in West African nations must make concerted effort to build political structures, bureaucratic standards, regulatory frameworks, law and order, and corruption prevention in order to reform and improve the quality of institutions.</p> |
| <p>Article History</p> <p><b>Date of Submission:</b><br/>03-07-2024</p> <p><b>Date of Acceptance:</b><br/>20-03-2025</p> <p><b>Date of Publication:</b><br/>30-03-2025</p> |   |
|  |  <p style="color: red;">2025 Gomal University Journal of Research</p>  |
| Corresponding Author   | Adekunle Aribatise: <a href="mailto:kundun95@gmail.com">kundun95@gmail.com</a>  |
| DOI  | <a href="https://doi.org/10.51380/gujr-41-01-03">https://doi.org/10.51380/gujr-41-01-03</a>   |

### INTRODUCTION

Over the past twenty years, a number of ECOWAS member nations have implemented various institutional reforms aimed at enhancing the corporate governance. These reforms include the establishment of international organizations like Transparency International, United Nations Committee on Anti-Corruption, and the African Union Convention against Corruption, which control and prevent money laundering & terrorist financing. Institutionalization of democracy

## Aribatise & Akintunde ... The Nexus Among

was supposed to yield number of projected benefits, including better corporate governance, stronger institutions, good governance, and an overall improvement in the general welfare of populace. The Sustainable Development Goals, that support robust institutions, are consistent with this (Wandeda, Masai & Nyandemo, 2021). Despite these major reforms across continent, quality of institutional in West Africa has continued to be weaker compared to other regions (Degbedji, Akpa, Chabossou & Osabohien, 2024). This persists despite aforementioned players, who are key to improving institutions and the financial sector's growth through regulation and reform.

It is anticipated that the implementation of these and other reforms will improve performance of the nations in the region, enabling citizens to live better and break the cycle of poverty by increasing access to economically viable financial services (Ayoo, 2022). Furthermore, several attempts, strategies and approaches have been adopted in Africa to reduce or alleviate poverty. Some of these key international organizations that work to reduce poverty over their initiatives and programs include: the Ford Foundation, Bill and Melinda Gate Foundation, World Bank, International Monetary Fund, Department for International Development, International Fund for Agricultural Development, and Organization for Economic Corporation and Development. The World Health Organization (WHO), United Nations Industrial Development Organization (UNIDO), United Nations Educational, Scientific, and Cultural Organization (UNESCO), and United States Agency for International Development (USAID) are the few leading examples of organizations that fall under this category. In an effort to lower the high interest rates and the amount of national debt, government has also instituted macroeconomic reforms (Yusuf et al., 2021).

This is anticipated to encourage greater growth driven by the private sector and so aid in fight against poverty. But despite significant accomplishments in the fight against poverty in West African economies in recent decades, the region remains third in world with a 36.8% poverty rate (McLachlan & Aikins, 2022). Still, even with notable reforms in West Africa to strengthen institutions and the positive and obviously improved financial system over the years, poverty remains a challenge in the region. Poverty is more pronounced in Africa and continues to be a serious societal issue and threat to nations everywhere. This is because the top ten countries in Africa with highest rates of extreme poverty are all located in Africa (Fambeu & Yomi, 2023). A number of strategies have been put out to reduce poverty, and one of these strategies is the development of the financial sector. Financial development helps reduce poverty in two main ways: directly by increasing access to financial services and indirectly by fostering economic growth (Aribatise & Akintunde, 2023). Bolarinwa, Olayeni and Vo (2021) assert that poverty reduction through banking sector development is limited to specific threshold level of financial development.

According to empirical data presented by Asongu and Odhiambo (2023), there is a threshold for financial development that falls below which it adversely affects the poor and above which it may be associated with decrease in poverty. The scholars and policymakers have suggested further development in the financial sector in Africa compared to other developing countries; this is a result of weak financial development in countries in these regions. Studies have also

established institutional quality as one of major determinants that contribute to development in the financial sector. Consequently, with aid of a quality institutional framework, an optimal level of financial growth with certain threshold point is dynamic to poverty reduction (Nsiah & Tweneboah, 2024). The inference is that the institutional quality needs to reach specific edge in order for financial development to have a positive impact on poverty. Still, there hasn't been much focus in the literature, particularly in West Africa on the threshold relationship between institutional quality, financial development, and poverty. Thus, an analysis of the institutional quality threshold in the relationship between financial growth and poverty is needed in West Africa.

### LITERATURE REVIEW

The theoretical framework for the current research has its basis and drawn from the law and finance theory and trickle-down theory respectively. The Law and finance theory developed by Porta, Lopez, Shleifer and Vishny (1998) is predicated on the institutional school of thought. The theory emphasized how central legal frameworks are to financial markets. It emphasizes how robust institutions guarantee efficient financial intermediation as well as easy accessibility to financial services, thereby supporting the expansion of the financial sector. In essence, this theory essentially contends that institutions especially those that safeguard investors' private property rights are prerequisite for financial development, that explains why different regions have had different rates of financial sector expansion. According to trickle-down hypothesis, growth in economy serves as a primary conduit through which development of the financial sector aids in decrease of poverty. There are several ways in which growth can contribute to the reduction of poverty. It has been proposed that higher growth rates may eventually lead to the reduction in the skill-wage gap which would benefit the impoverished (Galor & Tsiddon, 1996).

Besides, rapid growth might raise tax receipts, which would enable the government to increase spending on social programs like social security, health care, and education while enabling the poor to make larger investments in human capital (Perroti, 1993). Lastly, the poor would have more money available for the investments as capital accumulation rises with strong economic growth (Aghion & Bolton, 1997), which would raise their income. Using sample of 132 nations observed amid 1980 and 2014, Kaidi et al. (2019) employed three-stage least squares method to investigate relationship between financial development, quality of institutions, and poverty. They demonstrated that FD does not help impoverished and that choice of indicators affects how institutions' quality affects both financial development and poverty. In a similar study but on contrary, Kaidi and Mensi (2019) looked at connection between poverty, income inequality (INEQ), political institutions (PI), and (FD) in a study that was similar to this one. They used two distinct samples and various estimating techniques to examine link in study. A panel of 93 democratic countries makes up first sample, and panel of 31 autocratic countries makes up the second.

The results show that, in contrast to autocratic nation, FD and democratic institutions distinctly contribute to the reduction of poverty in democratic nations, hence bridging the wealth gap. In contrast to autocratic nations, relationship amid FD and PI does not lessen INEQ and poverty

in democratic nations. In contrast to high-income countries, analysis of sub-democratic group produces different results, especially in low-, mid-, and upper-mid-income countries. Besides, [Ouechtati \(2020\)](#) empirically explored moderative role of political and economic institutions in promoting financial inclusion and consequently reducing inequality. This study focused on the moderative influence of institutional quality on the financial inclusion and poverty reduction nexus. In this connection, the study, which included 110 nations between 2004 and 2018, found that the quality of an institution has a significant impact on an individual's ability to receive the financial services, indicating that weaker institutions impede efforts to promote the financial inclusion. Moreover, it was discovered that financial access, in conjunction with the influence of the political and economic institutions positively affects income inequality as well as reduces poverty.

Also, considering an interaction effect between financial sector and the institutional framework while using fixed effects to investigate relationship amid financial development and poverty for sample of SSA countries from 2000 to 2019. [Fashina \(2021\)](#) found that financial expansion positively and significantly aids the decline in poverty. Additionally, the estimates show that institutional quality significantly and positively contributes to decrease of poverty. But it was shown that the pro-poor effects of financial development are better in places where institutions operate better. With the use of a dynamic panel model, [Bolarinwa et al. \(2021\)](#) explore if there is a threshold between financial development and poverty in African nations. The findings imply that a certain degree of financial development is required in order to reduce poverty in Africa. The study comes to the conclusion that poverty may not be much impacted by the current state of financial development as quality is effectiveness, transparency, and accountability of public and private institutions. In a contrary study, using a fixed effect panel to analyse data for 84 countries between 1975 and 2014, [Haan et al., \(2022\)](#) examine impact of financial development on poverty gap. Nothing in study suggests that gap in poverty is directly impacted by financial development.

The study comes to the further conclusion that financial development raises inequality, which in turn causes more poverty. Supporting this assertion is the study by [Asongu and Odhiambo \(2023\)](#). Using an interactive quantile regression approach as an empirical strategy to examine the incidence of financial institutions' dynamics of depth and access in relationship between income inequality and poverty and the severity of poverty in 42 Sub-Saharan African countries between 1980 and 2019. In this linking, they found that income inequality increases poverty dynamics unconditionally, but depth and access of financial institutions mitigate the adverse effects of income inequality on poverty dynamics. Besides, [Appiah-Otoo et al., \(2022\)](#) analysed multiple challenges facing financial development, improvement on institutions and poverty in 16 selected West African countries for attaining the desired outcome. The study concluded that while feeble institutional quality lessens the beneficial effects of finance on poverty reduction, finance itself reduces poverty. In a related study, [Aracil et al. \(2022\)](#) used quantile and ordinary least squares regressions to examine the moderating influence of institutional quality on the relationship amid financial inclusion & poverty reduction across sample of 75 countries (2004–2017).

## Aribatise & Akintunde ... The Nexus Among

The study found that institutional quality increases benefits of financial inclusion on poverty rates. This effect is more apparent in poorer economies than in affluent ones. Using the Limited Information Maximum Likelihood estimation technique, thus, [Abaidoo and Agyapong \(2022\)](#) investigated the impact of institutional quality on variations in financial development among Sub-Saharan African economies. Their findings indicate that institutional quality significantly accelerates the pace of the financial development in sub-region. Using nonlinear autoregressive distributed lag and Nigerian data covering the years 1980–2018, [Olaniyi et al. \(2023\)](#) examine the relationship between poverty and finance. The study's conclusions support the long-term existence of an asymmetric influence and its absence in the short term in relationship between finance and poverty. The research also indicates that while the banking sector's contractionary and expansionary policies both have positive impact on reducing poverty, former has a greater impact. In a similar study, [Aribatise and Akintunde \(2023\)](#) asserts that financial development is capable of alleviating poverty and that interactive effect of institutional quality and financial development on the poverty are substitute and complementary in the short run and long run respectively.

In more recent and current study, [Ahmad and Law \(2024\)](#) explored the relationship between financial development (FD), institutions, and economic growth using a spatial autoregressive model on a panel dataset of 82 countries spanning 1990 to 2019. Their findings reveal that both financial development and political institutions have significant positive effects on economic growth. However, growth-enhancing impact of financial development diminishes and turns negative once it surpasses certain threshold. But it was shown that pro-poor effects of financial progress are better in places where institutions operate better. Also, using Hansen threshold regression analysis, [Nsiah and Tweneboah \(2024\)](#) investigated the influence of threshold level of quality of institution on relationship between financial inclusion and poverty for a period 2004-2020 in the Africa. Additionally, the estimates show that institutional quality significantly and positively contributes to the decrease of poverty. A double threshold value of 0.0534 and 0.341 was found in the study, meaning that lower and higher financial inclusion values would enhance household consumption expenditure and reduce poverty, while values that fall amid the lower and higher bounds, however, have a detrimental effect on Africa's efforts to reduce poverty.

## RESEARCH METHODOLOGY

### Model Specification

Consistent with the theoretical framework discussed above and for purpose of analyzing the threshold level of quality of institution on nexus between financial development and poverty in selected West African countries over period 1986-2021 and following available literature and empirical evidence in line with [Dollar and Kraay \(2002\)](#), [Clark et al., \(2006\)](#) and [Kaidi et al., \(2019\)](#), study specifies level of poverty as function of financial development and institutional quality.

$$POV = f(FD, INS) \dots\dots\dots (3.1)$$

where prevalence of poverty is measured by *POV*; *INS* is an indicator for institutional quality & *FD* is indicator for *FD*. The empirical specification of relation discussed in Eq (1) is expressed as follows:

$$POV_{it} = \beta_0 + \beta_1 INS_{it} + \beta_2 FD_{it} + \mu_{it} \dots\dots\dots (3.2)$$

**Estimation Techniques**

Equation (3.2) makes the assumption that financial development and institutional quality have a direct impact on poverty. It does not account for this goal, which is to analyse threshold level of quality of institution on connectivity amid *FD* and poverty. This study allows institutions to engage financial growth. As a result, it shows how institutional quality modify *FD* to alleviate poverty level. The study therefore incorporates the interactive variable to account for how financial development and institutional quality interact to determine poverty level in selected countries in THE West Africa. The study therefore augments Equation (3.2) with the interactive variable and the empirical specification of the relation discussed above is thus expressed as follows:

$$POV_{it} = \beta_0 + \beta_1 POV_{it-1} + \beta_2 FD_{it} + \beta_3 INS_{it} + \beta_4 (INS_{it} * FD_{it}) + \mu_{it} \dots\dots\dots (3.3)$$

Where *POV* is a measure of the incidence of poverty, *FD<sub>it</sub>* is financial development and *INS<sub>it</sub>* is the institutional quality indicator at time t. The variable *FD<sub>it</sub> \* INS<sub>it</sub>* represents interaction term between financial development and institutional quality while  $\mu_{it}$  is the error term. The parameters to be estimated are denoted by coefficients  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ , and  $\beta_4$ . Thus, following this specification, given the level of institutional quality, marginal effect of financial development on the poverty is obtained. i.e. the dependent variable, *POV* (poverty) is differentiated partially with respect to financial development (*FD*), given the level of institutional quality (*INS*). This process will yield the results as presented in (3.3). The emerging expression is denoted by  $\theta$  as thus:

$$\theta = \frac{\delta POV_{it}}{\delta FD_{it}} = \beta_2 + \eta INS_{it} \dots\dots\dots (3.3)$$

Equation (3.3) provides the opportunity to determine the institutional quality threshold level, above or below which institutions encourage financial development and ignite it to mitigate or accelerate poverty, help investment, and ensure resources allocation. The signs and statistical status of coefficients,  $\beta_1$  and  $\theta$ , in equation (3.3) determine interpretations. Extant studies have identified four credible interpretations ([Gazdar & Cherif, 2015](#); [Hassan, 2023](#); [Law & Law, 2022](#); [Olaniyi, Al-Faryan, & Ogaro, 2023](#); [Olaniyi & Odhiambo, 2024](#)). These are explained in turn as follows:

- a) If  $\beta_2 > 0$  and  $\eta > 0$ ; It explains that while financial sector directs credit toward financing and endorsing projects and activities that augment technical and productive know-how built into the production system of economy, quality of institutions, on the other hand, also enhances the process and amplifies its impact.
- b) If  $\beta_2 > 0$  and  $\eta < 0$ ; It explained that as development in financial sector encourages more money to be invested in the research and development, technical know-how, as well as innovation, the institutions obstruct this process, acting as a drag on the financial system that reduces the beneficial impact.



## Aribatise & Akintunde ... The Nexus Among

- c) If  $\beta_2 < 0$  and  $\eta > 0$ ; It emphasizes that while institutional quality lessens the detrimental consequences of the financial system, financial development exacerbates poverty and by preventing economy's productive structure from investing more in R&D, knowledge, and technological capabilities.
- d) If  $\beta_2 < 0$  and  $\eta < 0$ ; It implies that the growth of financial sector spur the rate of poverty, and that institutional quality, promote investment, that ultimately opening the prospects and doors towards supporting rent-seeking, corruption and opportunistic conduct in the financial sector.

Capturing simultaneity bias, endogeneity and course dynamism in panel threshold regression is considered important (Olaniyi et al., 2022; Olaniyi, 2022; Bolarinwa et al., 2021), works by Seo and Shin (2016) and Seo et al. (2019), dynamic panel threshold model is offered as follows in equation (3.4):

$$POV_{it} = (1, z'_{it})\beta_1 1\{INS_{it} \leq \theta\} + (1, z'_{it})\beta_2 1\{INS_{it} > \theta\} + \mu_{it} \mu_{it} = \omega_i + \vartheta_{it} \quad i = 1, \dots, n; t = 1, \dots, T, \quad (3.4)$$

where  $POV_{it}$  is the explained or endogenous variable (poverty).  $z_{it}$  serves as proxy for vector of control variables, which include the lag of the endogenous variable ( $POV_{it-1}$ ). The function indication for lower and upper regimes is thus represented by the symbol  $1\{\}$ . The parameters  $\beta_1$  and  $\beta_2$  represent the lower and upper estimates of regimes, or the estimates that characterize regimes 1 and 2. The institutional quality (INS) threshold estimates are defined by  $\theta$ , and these parameters provide explanations for pre- and post-threshold behaviour of the variables. The disturbance term is  $\mu_{it}$ , comprises the time-variant zero mean idiosyncratic as well as random disturbance,  $\vartheta_{it}$  and time-invariant individual-specific fixed effects,  $\omega_i$ . The dynamic panel threshold model developed by Seo et al. (2019) is based upon the first-difference generalized method of moments by Arellano and Bond (1991). This approach is better since it permits the threshold variable and endogenous variable's covariates towards having standard asymptotic distribution while allowing for threshold effects and heterogeneity across different regimes in panel data.

### Data Sources

Data from ten West African countries were used in study as countries that were included were selected in accordance with data that was available from 1986 to 2021. Nigeria, Ghana, Gambia, Sierra Leone, Liberia, Senegal, Niger, Togo, Mali and Burkina Faso are countries that have been chosen.

### DATA ANALYSIS

Descriptive statistics are used to emphasize the characteristics and composition of the data, as well as how the variables behaved during the research period (Akintunde & Aribatise, 2022) in results.

**Table 1**  
*Descriptive Statistics*

|      | POV    | INS    | FD     |
|------|--------|--------|--------|
| Mean | 4.4749 | 3.3837 | 0.1024 |

|             |         |         |        |
|-------------|---------|---------|--------|
| Median      | 4.5084  | 3.3917  | 0.0935 |
| Maximum     | 4.7889  | 4.8250  | 0.2700 |
| Minimum     | 3.4401  | 1.6000  | 0.0178 |
| Std. Dev    | 0.1661  | 0.5978  | 0.0408 |
| skewness    | -2.7539 | -0.2629 | 1.2489 |
| Kurtosis    | 13.3917 | 3.2208  | 4.8132 |
| Jarque-Bera | 2137.79 | 4.8797  | 142.91 |
| Prob        | 0.0000  | 0.0871  | 0.0000 |
| Obs         | 360     | 360     | 360    |

Sources: Author’s Computation.

Table 1 reports the descriptive statistics of the variables for study. The results reveal that the values of the standard deviation significantly spread out from the values of mean respectively. Furthermore, the variables from the descriptive statistics results show remarkable consistency between the mean and median because they fall within the range of their respective minimum and maximum values. For the skewness, the statistics revealed that one of the variables is skill positively while two skewed negatively. The FD is skewed positively while POV and INS, are skewed negatively. Also, all the variables exhibited a leptokurtic distribution (value greater than 3). Also, the Jarque-Bera (JB) statistics significantly reject the normal distribution for POV and FD, indicating non normality and except for INS, indicating normality of their conditional distributions.

**Correlation Test**

Performing correlation analysis is considered important to show the presence of or otherwise exact or linear dependence among the regressors in bit to avoid multicollinearity as presented in table.

**Table 2**  
*Correlation Analysis*

|     | POV     | INS     | FD |
|-----|---------|---------|----|
| POV | 1       |         |    |
| INS | 0.2538  | 1       |    |
| FD  | -0.4689 | -0.2103 | 1  |

Since all of variables’ coefficients are less than 0.8, which is typically used as the benchmark, the summary of the correlation analysis shown in Table revealed that the correlation between all of the variables is modest. This demonstrates that the variables don’t exhibit significant or exact multicollinearity. So based on outcome, can observe that there is no linear dependence between any of regressors. Specifically, the correlation matrix’s coefficients fall between -0.4689 to 0.2538.

**Cross-Sectional Dependence Test**

It is not implausible that there is cross-sectional reliance in African nations as African nations experience external shocks resulting from commerce, capital mobility, financial systems, and



other factors because of globalization. Still, testing for cross-sectional dependence in panel data ensures that residuals are independent across entities, preventing biased estimates and invalid inferences. In order to ascertain if cross-sectional reliance exists in this study or not, the cross-sectional dependence test, which was created by Pesaran (2004), is employed. The alternative hypothesis, which contends that the errors are cross-sectionally dependent, is contrasted with the null hypothesis, which claims that the residuals are cross-sectionally independent, in the CD test.

**Table 4**  
*Cross-sectional Dependence Test*

| Variable | CD-Test | P-value | Correlation | Absolute Correlation |
|----------|---------|---------|-------------|----------------------|
| POV      | 8.08    | 0.000   | 0.103       | 0.402                |
| FD       | 13.26   | 0.000   | 0.329       | 0.454                |
| INS      | 16.69   | 0.000   | 0.415       | 0.472                |

The findings of the cross-sectional dependence test, displayed in Table, refute null hypothesis, which states that the variables are cross-sectionally independent at the 5% significance level. As a result, cross-sectional dependence as an alternate hypothesis is accepted i.e., for all the variables taken into consideration, there is compelling evidence that there is the cross-sectional dependence.

**Unit Root Test**

The second-generation unit root test that takes into consideration the variables' cross-sectional dependence and variability is used to further evaluate the degree of stationarity of variables. Second-generation unit root tests account for cross-sectional dependence, improving accuracy in panel data by addressing interdependencies between units. In this linking, there are two tests used: cross-sectionally enhanced Im, Pesaran, and Shin (CIPS) test and cross-sectionally enhanced Dickey-Fuller (CADF) test. For balanced panels, CIPS is used; however, CADF can be used for both unbalanced and balanced panels. Thus, contrary to cross-sectional augmented Dickey-Fuller (CADF), which is based on null hypothesis that the series are all heterogeneous non-stationary with cross-sectional dependence, cross-sectional augmented IPS (CIPS) is based on the null hypothesis that the data are all homogeneous non-stationary in the study (Pesaran, 2007).

**Table 5**  
*Unit Root Test With Cross Section (Constant)*

| Variables      | CIPS Test |          | CADF test |          |
|----------------|-----------|----------|-----------|----------|
|                | levels    | 1st diff | levels    | 1st diff |
| POV            | -2.502**  | -6.101** | -1.845    | -3.785** |
| FD             | -2.728**  | -5.669** | -2.394**  | -4.023** |
| INS            | -1.988    | -4.911** | -2.072    | -3.802** |
| Critical Value | 10%       |          | -2.21     |          |
|                | 5%        |          | -2.33     |          |
|                | 1%        |          | -2.55     |          |

Sources: Author’s Computation (\*\* indicates %5 level of significance)

**Table 6**  
*Unit Root Test With Cross Section (Constant & Trend)*

| Variables          | CIPS Test |          | CADF test |          |
|--------------------|-----------|----------|-----------|----------|
|                    | levels    | 1st diff | levels    | 1st diff |
| POV                | -3.317**  | -6.277** | -2.616    | -3.691** |
| FD                 | -3.195**  | -5.738** | -2.954**  | -4.111** |
| INS                | -2.482    | -4.187** | -2.503    | -4.173** |
| Critical Value 10% | -2.73     |          | -2.73     |          |
| 5%                 | -2.84     |          | -2.84     |          |
| 1%                 | -3.06     |          | -3.06     |          |

Sources: Author’s Computation (\*\* indicates %5 level of significance)

Tables (constant and trend) display the findings from unit root tests, which revealed a mixed order of integration between variables i.e., I(0) or I(1). The results further showed that while most of the variables became stationary at levels, all of variables did so at the first difference. In line with the research conducted by Aluko (2020), Olaniyi et al. (2022), Olaniyi and Odhiambo (2023), Olaniyi, Al-Faryan, and Ogbaro (2023), Olaniyi et al. (2022), Bolarinwa et al., (2021), and Seo et al. (2019), study uses a robust dynamic panel threshold to determine the level at which institutions are efficient and successful in fostering growth of financial sector, hence lowering poverty in selected West African countries. The outcome of threshold analysis of institutional quality.

**Institutional Quality, Poverty & Financial Development**

The dynamic threshold regression is a statistical technique that allows for the estimation of threshold effects in dynamic models, when there are variations over time in the connectivity between the variables. Thus, dynamic panel threshold regression analysis identifies nonlinear relationships, thresholds in panel data, capturing unobserved heterogeneity and addressing endogeneity across cross-sectional units over time. This approach accounts for time varying relationships, identifying regime switch and structural breaks in time series data. The nalysis revealed that existence of the institutional quality threshold in the nexus between financial development and poverty, this study conducted a linearity test for threshold using probability value (bootstrapped). The alternative hypothesis of non-linearity is taken into consideration since the null hypothesis that institutional components are linear is rejected with bootstrapped p-values of 0.000 at p-value < 0.01 (Bolarinwa et al., 2021). In this drive, these verify presence of institutional quality thresholds and nonlinearity in the relationship between poverty as well as finance.

**DISCUSSION**

On a 10-point ordinal scale, 3.754 is the estimated threshold value for institutional quality. This research demonstrates that institution must continuously maintain overall institutional quality index above 3.75 before they are strong enough to prevent corruption, opportunism, and rent

## Aribatise & Akintunde ... The Nexus Among

-seeking that hinder the financial sector's ability to aid effective financial intermediation. This will increase the investment and productive capabilities, which will lead to the creation of job opportunities, inspire savings, and lessen poverty in West Africa (Ayoo, 2022). Consequently, in order to create institutional framework for the financial sector to deliver required financial resources, stimulus to reduce poverty in West Africa, Policymakers and stakeholders need to set institutional development target higher than 3.75. The entire institution index's coefficient is markedly negative (-0.284) prior to threshold & turns positive (0.320) after it, according to the results.

This supports the earlier claim that institutions below the threshold may not be as effective in preventing financial recklessness, corruption, and financial mismanagement. This means that quality of institutional below the threshold encourages financial irregularities and corruption in the West African (Olaniyi & Odhiambo, 2023). This issue may cause resources and credit options to be diverted from productive investments that raise the poverty line. It implies that in order to guarantee effective resource allocation and equitable wealth distribution to enhance living conditions and reduce poverty in West African nations, institutional quality above the threshold is required particularly in this context. (Appiah-Otoo et al., 2022). In this connection, this is in line with the position of Nsiah & Tweneboah (2024) indicating the threshold value of institution quality at that financial inclusion will impact negatively on domestic consumption as well as value above which financial inclusion will positively impact household consumption in Africa. Financial development coefficient in the lower regime is negative with a value of -1.480.

It suggests that the quality of institutional below the threshold is insufficient to thwart political meddling and corruption, and it exposes gaps and inadequacies in the financial sector that squander the benefits of financial development in alleviating poverty. Financial development's impact on poverty in upper regime turns out to be positive with a value of 5.089. This shows that the quality of institution above a certain threshold becomes a powerful driver of financial development, supporting and financing investments in productive activities, innovative and technological initiatives, and entrepreneurship (Ahmad & Law (2024), all of which are critical to raising people's living standards and ultimately reducing poverty in West Africa. In this drive, the evidence revealed an inverted-U shape curve type of response on finance-poverty threshold relationship. Thus, this finding reaffirms Zahonogo (2017), whose empirical research demonstrated that there is, in fact, a threshold level of financial development, over which may it be linked to reduced poverty and below which it has ultimate negative consequences on the poverty.

## CONCLUSION

The current study analysed the threshold of institutional quality in the finance-poverty nexus in selected West African countries over the period 1986-2021. This study however revealed that for financial development to have a significant impact on the reducing poverty, West African nations must consistently maintain and have a level of international development equal to or higher than 3.75 on a 10-point scale. This indicates that when countries in this region function

below the threshold level of institutional development, institutional factors generally cannot promote financial development to create the needed growth in the financial system to alleviate poverty. Consequently, the study comes to the conclusion that institutional factors act as drags, sapping the benefits of a developed financial system on poverty in the West Africa. Therefore, concerted effort to build political structures, bureaucratic standards, regulatory frameworks, law and order, and corruption prevention to reform and enhance the quality of institutions is recommended to all parties involved including the government organizations in West African nations.

### REFERENCES

- Abaidoo, R., & Agyapong, E. K. (2022). Financial development and institutional quality among emerging economies. *Journal of Economics and Development*, 24(3).
- Abdulkarim, A., Saidatulakmal, S., & McMillan, D. (2021). Financial development and institutional quality among the emerging economies. *Cogent Economics & Finance*, 9(1). <https://doi.org/10.1080/23322039.2021.1946249>.
- Aghion, P., & Bolton, P. (1997). A Theory of Trickle-Down Growth and Development. *Review of Economic Studies*, 64(2), 151-172.
- Ahmad, M., & Law, H. S. (2024). Financial development, institutions, and economic growth nexus: A spatial econometrics analysis using the geographical and institutional proximities. *International Journal of Finance & Economics*, 29(3), 2699-2721.
- Akintunde, T. S., & Aribatise, A. (2022). Institutional Quality, Financial Inclusion and Shadow Economy in Nigeria (1991-2020): An ARDL Approach. *Farabi International Journal of Social Sciences*, 8(2).
- Appiah, I., & Xudong, C., Song, N., & Dumor, K. (2022). Financial development, institutional improvement, poverty reduction: The multiple challenges in West Africa. *Journal of Policy Modeling*, 44(6), 1296-1312.
- Aracil, E., Gómez, G., & Moreno, O. (2022). Institutional quality & financial inclusion-poverty alleviation link: Empirical evidence. *Borsa Istanbul Review*, 22(1), 179-188.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58(2), 277-297.
- Aribatise, A., & Akintunde, T. S. (2023). Financial Development and Poverty in Selected West African Countries: A Mediating Role of Institutional Quality. *Kardan Journal of Economics and Management Sciences*, 6 (4), 30-45.
- Asongu, S., & Odhiambo, N. M. (2023), The effect of inequality on poverty and severity of poverty in SSA: the role of financial development institutions, *AGDI Working Paper, No. WP/23/030, African Governance and Development Institute (AGDI), Yaoundé*.
- Ayoo, C. (2022). Poverty Reduction Strategies in Developing Countries. IntechOpen. doi: 10.5772/intechopen.101472
- Bolarinwa, S. T., Olayeni, R. O., & Vo, X. V. (2021). Is there a nonlinear relationship between nonperforming loans and bank profitability? Evidence from dynamic panel threshold. *Managerial & Decision Economics*, 42(3), 649-661.

- Clarke, G.R., Xuy, L.C., & Zou, H. (2006). Finance and Income Inequality: What Do the Data Tell Us? *Southern Economic Journal*, 72(3), 578-596. DOI: 10.2307/20111834.
- De Haan, J., Pleninger, R., & Sturm, J.E. (2022). Does financial development reduce the poverty gap? *Social Indicators Research*, 16(1), 1-27.
- Degbedji, D. F., Akpa, A. F., Chabossou, A. F., & Osabohien, R. (2024). Institutional quality and green economic growth in West African economic and monetary union. *Innovation and Green Development*, 3(1).
- Dollar, D. & Kraay, A. (2002). Growth Is Good for the Poor. *Journal of Economic Growth*, 7, 195-225. <https://doi.org/10.1023/A:1020139631000>.
- Fambeu, A.H., & Yomi, P.T. (2023). Is democracy pro poor in sub-Saharan Africa? *Journal of policy modelling*, 45(1), 10-30.
- Fashina, O. (2021). Financial development, institutions and poverty reduction: Empirical evidence from sub-Saharan Africa. An unpublished Master Thesis. Linnaeus University, Sweden.
- Galor, O., & Tsiddon, D. (1996). Income Distribution and Growth: The Kuznets Hypothesis Revisited. *Economica*, 63, 103-17.
- Gazdar, K., & Cherrif, M. (2015). The quality of institutions and financial development in MENA countries, *Borsa Instabul Review*, 15(3), 137-160.
- Hassan, A. S. (2023). Modeling linkage between coal mining and ecological footprint in South Africa: Does technological innovation matter? *Mineral Economics*, 36(1), 123-138.
- Jeanneney, S. G., & Kpodar, K. (2008). Financial development and poverty reduction: Can there be a benefit without a cost? *IMF Working Paper*, WP/08/62. IMF, African Department.
- Kaidi N., & Mensi S. (2019). Financial Development and Poverty: A study of middle-income countries. *Economic research forum (ERF), working paper series No: 1216*.
- Kaidi, N., Mensi S. & Amor M. B. (2019). Financial Development, Institutional Quality and Poverty Reduction: Worldwide Evidence *Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement*, Springer, 141(1), 131-156.
- Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R.W. (1998). Law and Finance, *Journal of Political Economy*, 106(6), 1113-1155.
- Law, C., & Law, S. H. (2022). The non-linear impacts of innovation on unemployment: Evidence from panel data. *International Journal of Finance & Economics*, 29, 402-424.
- McLachlan, D. T., & Aikins, E.R. (2022, July 13). Africa is losing the battle against extreme poverty. Institute for Security Studies (ISS) report.
- Nasreddine K., Sami M. & Mehdi B.A. (2019). Financial Development, Institutional Quality and Poverty Reduction: Worldwide Evidence. *Social Indicators Research*, 141(4),131-156.
- Nsiah, A. Y., & Tweneboah, G. (2024). Threshold Effect of Financial Inclusion on Poverty Reduction in Africa: Does institutional quality play a role? *Journal of African Business*, 1-35.
- Olaniyi C.O., Dada J.T., & Odhiambo N.M. (2022). Modelling asymmetric structure in the finance-poverty nexus: empirical insights from an emerging market economy. *Quality and quantity*, 57(1), 453-487.

## Aribatise & Akintunde ... The Nexus Among

- Olaniyi, C. O. (2022). On the transmission mechanisms in the finance-growth nexus in Southern African countries: Does institution matter? *Economic Change and Restructuring*, 55(1), 153-191.
- Olaniyi, C. O., & Odhiambo, N. M. (2023). Does institutional quality matter in the financial Development-Economic complexity Nexus? Empirical insights from Africa. *Research in Globalization*, 7, 100173. <https://doi.org/10.1016/j.resglo.2023.100173>.
- Olaniyi, C. O., & Odhiambo, N. M. (2024). Do natural resource rents aid renewable energy transition in resource-rich African countries? The roles of institutional quality and its threshold. *Natural Resources Forum*, 1-46.
- Olaniyi, C. O., Dada, T., Odhiambo, N. M. & VO, X. N. (2023). Modelling asymmetric structure in the finance-poverty nexus: empirical insights from an energy market. *Quality & Quantity: International Journal of Methodology*, 57(1), 453-487.
- Ouechtati, I. (2020). The contribution of financial inclusion in reducing poverty and income inequality in developing countries. *Asian Economic and Financial Review*, 10(9), 1051-1061. <https://doi.org/10.18488/journal.aefr.2020.109.1051.1061>.
- Pesaran, M.H. (2004). General Diagnostic Tests for Cross Section Dependence in Panels, *Cambridge Working Papers in Economics*, 435.
- Seo, M. H., & Shin, Y. (2016). Dynamic panels with threshold effect and endogeneity. *Journal of Econometrics*, 195(2), 169-186.
- Seo, M. H., Kim, S., & Kim, Y. J. (2019). Estimation of dynamic panel threshold model using Stata. *The Stata Journal*, 19(3), 685-697.
- Wandeda, D.O, Masai, W. & Nyandemo, S.M. (2021). Institutional quality and economic growth: evidence from Sub-Saharan Africa countries. *African Journal of Economic Review*, 9(4).