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# Exploring the Causal Relationship between Institutional Quality, Financial Development, and Poverty in selected West African Countries: A Dumistrecu-Hurlin Causality Approach

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**Abstract**

*Given the contentious views about the direction and strength of potential feedback among institutional quality, financial development and poverty across the globe and in Africa in particular, this study examines the causal relationship among these variables using a panel data set of 10 West African countries from 1986–2021. The study adopted Dumitrescu and Hurlin (2012) causality test. Cross sectional dependency test was first conducted to check for heterogeneity among the series. The study failed to accept the null hypothesis of no cross- sectional dependency among the series. The study found a bi-directional causal relationship between poverty (POV) and financial development (FD), uni-directional causality running from institutional quality (INS) to poverty (POV), and a no causal relationship between institutional quality (INS) and financial development (FD). The study, however, concludes that there is a reverse causality between financial development and poverty. Also institutional quality better predict poverty in West African region. Thus, this study recommends implementation of appropriate and sound policies that will improve the quality of institutions to support financial development and reduce poverty. Socioeconomic inequities can be decreased and inclusive economic growth can be promoted by bolstering governance, transparency, and regulation.*

**Keywords:** Dumistrecu-Hurlin causality; CIPS; CADF; financial development; institutional quality, poverty
**JEL Classification: G20, I30**

**Contribution to/Originality Knowledge**

## 1.0 Introduction

The nexus of institutional quality, financial development, and poverty is a global concern due to their profound impact on economic stability, social equality, and sustainable development across nations. Strong institutions foster financial systems that support economic growth and poverty reduction. Conversely, weak governance impedes financial development and exacerbates poverty. Prioritizing institutional reforms and inclusive financial policies worldwide is crucial for creating opportunities, reducing inequality, and promoting sustainable development on a global scale. In West Africa, despite challenges in governance, the banking sector shows resilience. However, high poverty rates persist, suggesting a disconnect. However, the intricate and diverse connection that exists among poverty, financial

development, and institutional quality has been extensively researched and discussed in the fields of development studies and economics.

Research has shown that countries with stronger and more transparent institutions tend to have higher levels of financial development, as these institutions are able to create a stable and conducive environment for financial markets to operate. In turn, financial development, which encompasses factors such as access to credit, the availability of financial services, and the depth and breadth of financial markets, has been shown to be a key determinant of economic growth and poverty reduction.

Furthermore, the dynamic relationship between institutional quality, financial development, and poverty is a two-way street, as improvements in one area can have positive spillover effects on the others. For example, better institutional quality can lead to greater financial development, which in turn can facilitate access to credit and other financial services for the poor, helping to lift them out of poverty. Conversely, poverty can be a barrier to financial development, as people living in poverty often lack the resources and opportunities to participate in the formal financial system. Poverty remains a formidable challenge confronting humanity today, and the task of eliminating it has emerged as one of the most arduous endeavors for developing nations as they strive for sustained, long-term development. In West Africa, persistent poverty remains a significant challenge despite efforts to foster economic growth and development. This problem prompts a critical examination of the interplay between institutional quality, financial development, and poverty in the region. Understanding the causal relationships among these factors is crucial for policymakers to design effective strategies for poverty alleviation and sustainable development. While numerous studies (Kar, 2022; Dwunfor, 2020; Kaida and Mensi, 2019; Jindra and Vaz, 2019; Asongu and Kodila-Tedika, 2018; Abdin, 2016; Hamori and Yoshihiro, 2012; Ho and Odhiambo, 2011) have examined the individual impacts of institutional quality and financial development on poverty, there is a gap in understanding the causal relationships among these factors in the West African context.

In addition to the above, some existing studies established causality running from financial development to poverty (Majid *et al*., 2019; Uddin *et al*., 2014; Kar *et al*., 2011; Perez-Mareno, 2011; Odhiambo, 2010; Odhiambo, 2009), some others found evidence of reverse causality from poverty to financial development (Ho and Odhiambo, 2011). Some other studies also found a bi-directional causal link between financial development and poverty (Kheir, 2018; Yaya, 2017; Abosedra *et al.*, 2016; Uddin *et al*., 2012), while a study established evidence of no causal link (Ayad, 2017). Also studies found a uni-directional causal relationship between institutions and poverty, running from institutional quality to poverty (Olaoye, 2021), and a bi-directional causality between institutional quality and financial development (Fergusson, 2006; Rathman & Raja, 2010; Law et al., 2015).

The present study aims to ascertain the causal relationship between the variables in order to determine the strength and direction of potential feedback between poverty and financial development in specific West African countries, given the contentious and inconclusive nature of these views.

This study is a departure from previous studies in the following ways: first, we first take into consideration the cross-sectional dependence in the series in this study which cannot be ruled out in African as a result of various economic integration and globalization. Checking for cross-sectional dependence helps in adopting the best estimates to avoid biased and misleading results. Secondly, we adopt the IMF broad based financial index as against the typical proxy for financial development (ratio of broad money supply and private sector credit to GDP etc.) which can't fully account for the concept. The IMF broad base financial index gives the overall performance of the financial system in terms of access, depth and efficiency. Furthermore, we adopt the house hold consumption expenditure as our proxy for poverty.

The paper is organized as follows: Section two comprises the literature review, section three outlines the methodology, section four discusses the findings, and section five concludes the study.

## 2.0 Literature Review

Studies abound in the literatures on the causal relationship between institution–finance nexus, institution-poverty nexus and financial-poverty nexus across the globe, and in Africa specifically. But literatures report mixed findings. These mixed findings have continued to generate an unclear understanding of the relationship among these variables. With regards to the causal link between financial development and poverty, some existing studies established causality running from financial development to poverty (Sovia *et al*., 2018; Uddin *et al*., 2014; Kar *et al*., 2011; Perez-Mareno, 2011; Odhiambo, 2010; Odhiambo, 2009), some others found evidence of reverse causality from poverty to financial development (Ho and Odhiambo, 2011). Some other studies also found a bi-directional causal link between financial development and poverty (Kheir, 2018; Yaya, 2017; Abosedra *et al.*, 2016; Uddin *et al*., 2012), while a study established evidence of no causal link (Ayad, 2017). Also studies found a uni-directional causal relationship between institutions and poverty, running from institutional quality to poverty (Shah and Wani, 2024; Olaoye, 2021), and a bi-directional causality between institutional quality and financial development (Fergusson (2006); Rathman and Raja, 2010; Law et al., 2015; Uzar et al., 2023).

For Bangladesh between 1975 and 2011, Uddin et al. (2014) arrived at the same conclusion using a similar estimating technique with structural breaks. They also discovered that financial development and the fight against poverty stimulate economic growth.

Moreover, Sirajo, Umar, Musa, and Haruna (2018) observed that corruption, inadequate management and supervision, political instability, insufficient infrastructure, and a lack of transparency and accountability have impeded the efficacy of past poverty reduction initiatives by the Nigerian government while Kheir (2018) concludes that there is a long-term, reciprocal relationship between poverty and economic progress and the existences of a bidirectional causal relationship between poverty reduction and financial development, as measured by real domestic credit to the private sector per capita.

The literature review showcased varying perspectives on the relationship between institutional quality and poverty, as well as financial development and poverty. Hence, establishing causal links among these variables is essential. Literature also underscores the significant role institutions play in addressing poverty. Thus, this study incorporates multiple indicators of institutional quality, distinguishing it from prior research in this field.

## 3.0 Methodology

### 3.1 Conceptual Framework

This study's fundamental tenet as regards the conceptual framework on the linkage between the quality of institution and financial development is drawn from the Law and finance theory (La Porta *et al*., 1998) and is predicated on the institutional school of thought. The theory stressed the significance of legal institutions in the financial market and the resulting effect on poverty reduction.

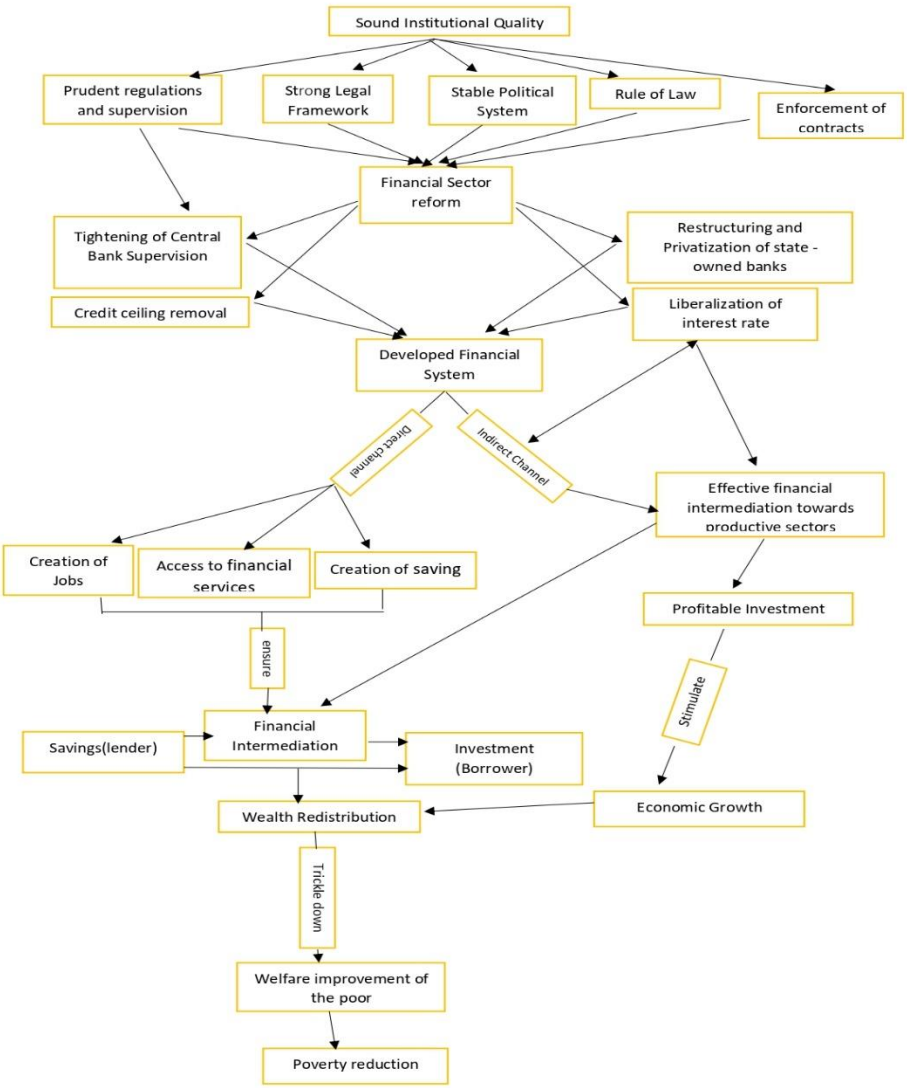


**Figure 1: The linkage among Institutional Quality, Financial Development and Poverty**
**Sources:** *Author's concept (2024)*

Figure 1 explains the linkage between the quality of institutions, financial development, and poverty. However, strong/quality institutions would bring about a strong legal framework, stable political system, rule of law, prudent regulations, and enforcement of contracts. La Porta *et al.,* (1997) and Beck *et al.,* (2003), stated that when legal frameworks are strong, the level of financial development is consistently found to be higher. However, weak frameworks may erode the efficiency of the legal framework, in consequence reducing the pace of financial development.

Girma and Shortland (2008) while explaining the roles of political institutions, stated that there is strong evidence that political and administrative stability induces financial development. Furthermore, it is found that the political system that constrains the influence of specific interest groups which is quite common in democratic systems, exhibits more developed financial systems. Thus, the evidence indicates that stable political systems that constrain executive influence exhibit higher levels of financial development. When systems are stable, there are more incentives to invest in the long run and to develop trust in the financial sector. However, when the political elites are less restricted, this influence may be used to constrain financial development.

The institutional framework such as prudent regulation and supervision, enforcement of contracts, and rule of laws that guide the operations of the banks and protect the depositors encourages savings. The banks pool the savings together and make it available both in short and long-term loans for borrowers and investors which would in turn boost economic activities. Additionally, essential factors for the growth of banking and financial systems generally include the level of trust and transparency of the laws governing the financial sector as well as the legal protection provided to creditors. These institutional frameworks therefore aid and facilitate better reform in the financial sector. Basic reforms in the financial sector such as interest rate liberalization, restructuring and privatization of state-owned banks, abolishment of credit ceiling, tight central bank supervision, etc. ensure a development in the financial system. Thus, the effect of any financial reform on the development of the financial sector is necessarily the reorganization of the institutional environment. Furthermore, a developed financial system would either directly or indirectly facilitate improvement in the welfare of the poor which them reduce the incidence of poverty. The developed financial system would therefore increase access to financial services for the poor, create jobs, encourage remittance, and as such encourage savings which will assist them in growing their income and obtaining capital, therefore ensuring financial intermediation.

By providing necessary services like directing capital to high-yielding (profitable) investments, which in turn encourage economic growth, financial intermediation through the banking system plays a crucial role in advancing technological advancements as well as economic development. Aghion and Bolton (1997) reveal that wealth redistribution from the wealthy to the poor may be a means through which the advantages of a thriving financial sector trickle down to the poor. This therefore improves the welfare of the poor and ultimately enables them to overcome the cycle of poverty.

### 3.2 Model Specification

In line with the conceptual framework discussed above and for the purpose of investigating the dynamic association among institutional quality, financial development, and poverty in selected West African countries over the period 1986-2021 and following the available literature and corroborating empirical evidence in line with Dollar and Kraay (2002), Clark *et al.,* (2006) and Kaidi *et al.,* (2019), the study specifies the level of poverty as a function of financial development and institutional quality.

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

Where $POV$ is a measure of the incidence of poverty; *INS* is an institutional quality indicator and *FD* is the financial development indicator.

The empirical specification of the relation discussed in Eq (1) is expressed as follows:

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

### 3.3 Estimation Procedure

Considering the linear heterogeneity of the regression model as well as the heterogeneity of causality relationship among the variables, this study adopts the Dumitrescu-Hurlin panel causality techniques developed Dumitrescu and Hurlin (2012). Dumitrescu and Hurlin (2012) model the following equation for panel causality test as follows:

$$y_{i,t} = \alpha_i + \sum_{k=1}^{L} \gamma_i^{(k)} y_{it-k} + \sum_{k=1}^{L} \beta_i^{(k)} x_{it-k} + \varepsilon_{it} \quad , i = 1,2, \ldots . N : t = 1, 2, \ldots \ldots T \quad (3.3)$$

Where $\alpha_i$ denotes individual effects, $\gamma_i^{(k)}$ and $\beta_i^{(k)}$ represents the lag and slope parameters, and L the lag orders, $x_{it}$ and $y_{it}$ are the observations of stationary variables for individual *i* in period *t*. The model's assumptions can thus be summarized as; The individual effects are constant, the lag length in the cross-section is constant, but the lag parameters and slope coefficients differ between units, therefore the Dumitrescu-Hurlin test particularly needs a balance panel. Therefore, the procedure to determining the existence of causality is to test for significant effects of past values of *x* on the present value of *y*. The null and alternative hypotheses equations are defined as:

$$H_o: \beta_{i1} = \cdots = \beta_{ik} = 0 \qquad \forall i = 1, \ldots, N \quad (3.4)$$

Equation (3.2) presents the null hypothesis which corresponds to the absence of Granger causality relationship amongst variables for all units in the panel. In contrast, the alternative hypothesis represents at least one unit that there is evidence of Granger causality amongst the variables. i.e. individual residues are independent for each cross-section unit. Thus, the alternative hypothesis is defined as:

$$H_1: \beta_{i1} = \cdots = \beta_{ik} = 0 \qquad \forall i = 1, \ldots, N_1 \quad (3.5)$$

$$\beta_{i1} \neq 0 \; or \; \ldots or \; \beta_{ik} \neq 0 \qquad \forall i = N_1 + 1, \ldots, \mathrm{N}$$

where $N_1 \in [0,N-1]$ is unknown. If $N_1 = 0$, there is causality for all individuals in the panel. N1 must be strictly smaller than N; otherwise, there is no causality for all individuals, and $H_1$ reduces to $H_0$ (Lopez and Weber, 2017).

A test statistic, which is the mean of all test statistics of cross-sectional units, can be used to ascertain the results of the Dumitrescu-Hurlin panel causality test hypothesis.

$$W_{N,T}^{HNC} = \frac{1}{N}\sum_{i=1}^{N} W_{i,T} \qquad \text{(HNC: Homogeneous Non-Causality)}$$

Where $W_{i,T}$ represents the test statistics of each cross-sectional unit. In this test, two different test statistics can be obtained based on whether T is greater or less than N. These test statistics are $Z_{N,T}^{HNC}$ and $Z_{N}^{HNC}$ obtained from $W_{N,T}^{HNC}$. When T > N, $Z_{N,T}^{HNC}$ statistics is used and if T < N, $Z_{N}^{HNC}$ statistics is otherwise used. Furthermore, the following equations give these statistics.

$$Z_{N,T}^{HNC} = \sqrt{\frac{N}{2K}}(W_{N,T}^{HNC}\text{-K}) \qquad \text{T, N}\rightarrow\infty\,, N(0,1)$$

$$Z_{N}^{HNC} = \frac{\sqrt{N}(W_{N,T}^{HNC} - N^{-1}\sum_{i=1}^{N} EW_{i,T}}{\sqrt{N^{-1}\sum_{i=1}^{N} varW_{i,T}}} \qquad \text{N}\rightarrow\infty\,, N(0,1)$$

Where $EW_{i,T}$ and $varW_{i,T}$ denotes the mean and the variance of $W_{i,T}$ respectively, if there is a cross.

The study employed data from 10 West African countries. The countries were chosen based on the availability of data for the years 1986 to 2021. The selected countries are Nigeria, Ghana, Gambia, Sierra Leone, Liberia, Senegal, Niger, Togo, Mali, and Burkina Faso.

However, the sources and measurement of the variables employed in this study is captured in Table 3.1 below.

**Table 3.1: Measurement of Variables and Sources**

| Variable | Symbol | Description | Sources | Measurement |
|---|---|---|---|---|
| Financial Development | FD | Financial development | IMF International Financial Statistics database 2022 | Index |
| | FI | Financial institutions development | | |
| | FM | Financial market development | | |
| | FID | Financial institution depth | | |
| | FIA | Financial institution access | | |
| | FIE | Financial institution efficiency | | |
| Institutional Quality | INS | 1. Democratic accountability<br>2. Government stability<br>3. Bureaucratic quality<br>4. Corruption control<br>5. Law and order | International Country Risk Guide (ICRG) assembled by the Political Risk Services (PRS) group. | Index |
| Poverty | POV | This is measured by household consumption as a ratio of population | World development indicator, 2022 | Index |

**Source:** Authors' Compilation

## 4. Results and Discussion

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). Table 1 presents the synopsis of the descriptive statistics.

**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:** Authors' Computation

Table 1 reports the descriptive statistics of the variables for the study .The results reveal that the standard deviation values spread out significantly from their respective mean values. Furthermore, the variables from the result of the descriptive statistics are within the range of their minimum and maximum values respectively depicting exceptional consistency between the mean and the median. For the skewness, the statistics revealed that one of the variables is skill positively while two skewed negatively. FD is positively skewed while POV and INS, are negatively skewed. 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 accept for INS, indicating normality of their conditional distributions.

It is always important to perform correlation analysis to show the presence of or otherwise exact or linear dependence among the regressors in a bit to avoid multicollinearity. Table 2 therefore present the Correlation matrix of variables.

**Table 2: Correlation Matrix**

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

**Sources:** Authors' Computation

Since all of the variables' coefficients are less than 0.8, which is typically used as the benchmark, the summary of the correlation matrix shown in Table 2 shows 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 the outcome, we can observe that there is no linear dependence between any of the regressors. Specifically, the correlation matrix's coefficients fall between -0.4689 to 0.2538.

### 4.3.1 Cross sectional dependence test

It is not implausible that there is cross-sectional reliance or dependence among African nations as African nations experience external shocks resulting from commerce, capital mobility, financial systems, and other factors because of globalization. Therefore, the cross-sectional dependence (CD) test developed by Pesaran (2004) is used in this study to determine the presence or otherwise of cross-sectional dependence. The CD test contrasts the null hypothesis, which states that the residuals are cross-sectionally independent, with the alternative hypothesis, which states that the errors are cross-sectionally dependent.

**Table 3: 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 |

**Sources:** Authors' Computation

At a 5% level of significance, Table 3 which shows the cross-sectional dependence test results disprove the null hypothesis that the variables are cross-sectionally independent. 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 cross-sectional dependence.

A 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 the variables.

There are two tests used: the cross-sectionally enhanced Im, Pesaran, and Shin (CIPS) test and the cross-sectionally enhanced Dickey-Fuller (CADF) test. CIPS is utilized for balanced panels, but CADF is acceptable for both balanced and unbalanced panels. Contrary to cross-sectional augmented Dickey-Fuller (CADF), which is based on the 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 (Pesaran, 2007).

**Table 4: 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 | | -2.21 | |
| 5% | -2.33 | | -2.33 | |
| 1% | -2.55 | | -2.55 | |

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

**Table 5: Unit Root Test with Cross Section (Constant and 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:** Authors' Computation (** indicates %5 level of significance)

The unit root tests presented in Tables 4 (constant) and 5 (constant and trend), which use cross-sectionally augmented IPS (CIPS) and cross-sectionally augmented Dickey-Fuller (CADF) test statistics, reveal that the variables are either stationary at a level I(0) or stationary at the first difference I(1). The results reported show that few of the variables are stationary at levels while at the first difference, all the variables turned stationary. Hence, as the estimation model excludes I(2) series, the validity of the panel ARDL technique is ensured. As a result of the cross-sectional dependence and unit root hypothesis tests, this study adopt the Dumitrescu-Hurlin panel causality techniques developed Dumitrescu and Hurlin (2012) to investigate the causal relationship among institutional quality, financial development and poverty in selected West African countries.

This method considers the cross-sectional dependence between the sample countries. Dumitrescu-Hurlin causality is appropriate if cross-sectional dependency is present in the panel in addition to the presence of heterogeneity among the cross-sections.

**Table 6: Dumitrescu–Hurlin panel causality tests**

| Null Hypothesis: | W-bar | Z-bar | Z-bar tilde | Prob. | Results | Conclusion |
|---|---|---|---|---|---|---|
| POV does not homogeneously cause FD | 3.2631 | 5.0604 | 4.3759 | 0.0000** | Homogeneous Bidirectional causality | Reject Null |
| FD does not homogeneously cause POV | 3.0279 | 4.5345 | 3.9073 | 0.0100** | | Reject Null |
| POV does not homogeneously cause INS | 1.2571 | 0.5748 | 0.3794 | 0.7044 | Homogeneous Uni-directional causality | Accept Null |
| INS does not homogeneously cause POV | 2.2709 | 2.8418 | 2.3992 | 0.0164** | | Reject Null |
| FD does not homogeneously cause INS | 1.3538 | 0.7911 | 0.5720 | 0.6200 | No Causality | Accept Null |
| INS does not homogeneously cause FD | 0.8147 | -0.4144 | -0.5021 | 0.6600 | | Accept Null |

**Sources**: Authors' Computation (** indicates 5% level of significance respectively)

Table 6 present the result of the Dumistrecu and Hurlin (2012) causality test on the possible causal relationship between institutional quality, financial development and poverty in selected West Africa countries. At a 5% level of significance, Table 6 show that the causality test results disprove the null hypothesis that POV does not homogeneously cause FD and vice versa. As a result, homogeneous causality as an alternate hypothesis is accepted i.e. for poverty (POV) and financial development (FD) taken into consideration, there is compelling evidence of a bi-directional causal relationship between them i.e. (POV ↔ FD). Meaning that poverty granger cause financial development and so do financial development causes poverty. This implies that improved financial system with the help of strategies such, as microfinance and financial literacy programs has the potential to empower people to break the cycle of poverty. In turn initiatives aimed at reducing poverty can create a need for services leading to advancements and growth, in financial markets, which in turn promotes financial progress. This finding is in line with Kheir (2018); Yaya (2017); Abosedra *et al.*, (2016) and Uddin *et al*., (2012).

Furthermore, it is evident from this analysis that the study fail to accept the null hypothesis that the institutional quality doesn't homogeneously cause poverty but accept the null hypothesis that poverty does not cause institutional quality. Meaning that there is a uni-directional causality running from institutional quality (INS) to poverty (POV) i.e. (INS → POV). This implies that strong institutions, characterized by effective governance, rule of law, property rights protection, and low corruption, create an environment conducive to economic growth and development. They ensure equitable access to opportunities, resources, and justice, thereby reducing poverty levels. This finding is also in line with Shah and Wani (2024) and Olaoye (2021), but negate N'Zue & N'Guessan (2005), who found no causal relationship between institutional quality and poverty. Lastly, the study found no causal relationship between institutional quality and financial development. Meaning that the study fail to reject the null hypothesis that financial development (FD) does not homogeneously cause institutional quality (INS) and vice-versa. This finding however negate the findings of Fergusson (2006); Rathman and Raja (2010); Law et al., (2015) and Uzar et al., (2023) who found a bi-directional causal relationship between Institutional and financial development.

## 5.0 Conclusion and Recommendation

Varying evidence indicates that West African nations rank high in poverty rates despite being classified among regions with low institutional quality. Surprisingly, their banking sector stands out globally, experiencing rapid growth and significant profitability, fuelled by innovation (Chironga et al., 2018). Given the established theoretical and empirical links between poverty and institutional quality, this raises questions about the region's underperformance in both aspects. Addressing this challenge requires careful consideration of policy measures aimed at enhancing both poverty alleviation efforts and institutional quality to spur overall socio-economic progress in the region.

This study aimed at determining the direction and strength of potential feedback between institutional quality, financial development and poverty in selected West African countries which span from 1986-2021. Dumistrecu and Hurlin (2012) causality test was employed to determine the causal. The study found a bi-directional causal relationship between poverty (POV) and financial development (FD), uni-directional causality running from institutional quality (INS) to poverty (POV), and a no causal relationship between institutional quality (INS) and financial development (FD). The study however, concludes that there is a reverse causality between financial development and poverty and also institutional quality better predict poverty in West African region.

Thus, this study recommends policies that is aimed improving institutions to foster financial development, which can alleviate poverty, and enhancing financial inclusion to empower individuals, thereby influencing institutional quality positively as well as prioritizing enhancement of institutional quality as a primary strategy to stimulate financial development, subsequently mitigating poverty through improved governance, regulation, and investor confidence.

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