



Bilkisu Muhammed Kawu
Department of Economics,
Modibbo Adama University, Yola.
Adamawa State, Nigeria.
bilkisum39@gmail.com

Umar Mohammed (*Ph.D*)
Department of Economics
and Development Studies,
Federal University of Kashere,
Gombe State, Nigeria.

**Corresponding author:*
Bilkisu Muhammed Kawu
Department of Economics,
Modibbo Adama University, Yola.
Adamawa State, Nigeria.
bilkisum39@gmail.com

RE-EXAMINING THE DETERMINANTS OF FINANCIAL SECTOR DEVELOPMENT IN NIGERIA

ABSTRACT

The study re-examines the determinants of financial sector development in Nigeria. The Autoregressive Distributed Lag (ARDL) model was used as the estimation technique using quarterly data from 2012Q1 to 2022Q4. The study found that corruption, financial innovation, trade openness and inflation are the determinants of financial sector development in Nigeria. Corruption and trade openness were found to have a negative impact on financial sector development whereas financial innovation and inflation had a positive impact. The study therefore recommends among others, the strengthening of anti-corruption measures by focusing on enforcing anti-corruption policies and enhancing transparency within the financial sector. It also recommends that financial innovation should be promoted by encouraging technological advancements and the introduction of new financial products so as to enable the financial sector adapt to changing economic conditions.

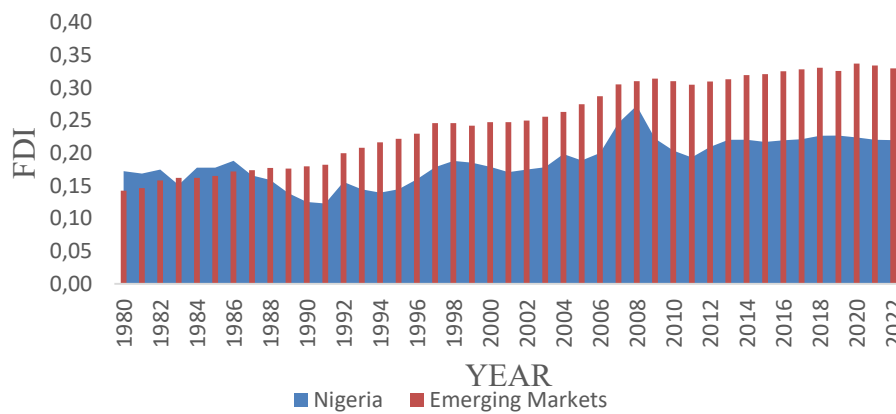
Keywords: ARDL, Corruption, Financial Sector Development, Nigeria.

1.0. Introduction

The development of the financial sector plays a crucial role in the overall wealth and growth of developing economies if properly managed. This stems from the fact that a well-functioning financial sector promotes and sustains economic growth by channeling funds from savers to borrowers (Cooray & Schneider, 2018). According to World Bank (2016), financial sector is the set of institutions, instruments, markets, as well as the legal and regulatory framework that permit transactions to be made by extending credit. A developed financial sector is said to reduce costs by producing information extant about possible investments and improving resource allocation, monitoring investments and exerting corporate governance, and facilitating trade and asset diversification (Kassie, 2021). According to Demirgüç-Kunt et al. (2022) the level of financial development differs between regions. In Advanced economies, the financial development index shows that financial development has steadily increased over the years from 0.26 in 1980 to 0.62 in 2021. In Africa, the index shows that financial development has been slow growing from about 0.09 in 1980 to 0.16 in 2021.

The index also shows that the financial development in Nigeria is still underdeveloped moving from about 0.17 in 1980 to about 0.22 in 2021 (International Monetary Fund [IMF], 2024). Thus, the slow growth rate of Nigeria over the period may not be unconnected to the level of financial development of the country compared to what is obtainable in other emerging markets. Figure 1 presents the overall rating of Nigeria’s financial development index.

Figure 1:1 Overall rating of Nigeria's and Emerging Markets' Financial Development Index



Source: Author’s computation using data from IMF’s Financial Development Index Database

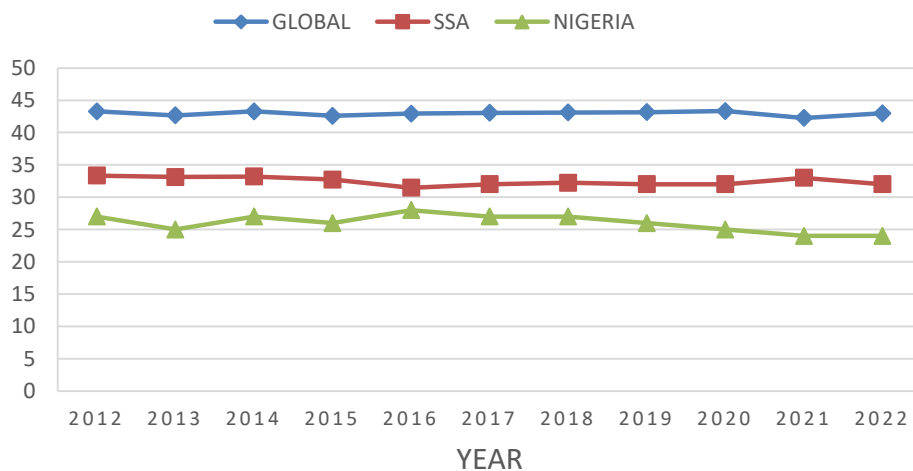
Figure 1.1 shows the FDI of Nigeria using the IMF index as developed by Sahay et al (2015). The indicator is normalized between 0 and 1; the higher the FDI index the more developed the financial Sector. It can be seen from Figure 1.1 that the Nigerian financial sector is still developing given the index score of 0.22 as at 2022 which is lower than the emerging markets index of 0.34. Various financial reforms and financial inclusion strategies & payment system reforms have been carried out over the years such as Banking Sector Recapitalization (2005), National Financial Inclusion Strategy (2012), cashless policy (2012), Financial Technology (Fintech) Regulations (ongoing), Securities Market Reforms (ongoing) among others in order to stimulate and enhance the development of the financial sector. Despite of all these efforts, Nigerian financial sector is still under-developed. Therefore, could it be that the level of corruption in the country has affected the development of the financial sector.

Corruption has been a menace in eroding the gains of development, security and democracy most especially in a period of global crisis (Transparency International, 2022). International organizations, national governments, and non-governmental organizations have all turned their attention to fighting corruption over the past three decades (Eksi & Dogan, 2020). According to World Bank (2020), corruption is “the abuse of public office for private gain, covering a wide range of behavior, from bribery to theft of public funds.” Hence, it is a big threat to social and economic development. Corruption exists all over the world and has

always been a global issue for a long period of time. It is usually present in countries with weak institutions, often affected by fragility and conflict. In an attempt to know the perceived levels of public sector corruption, Transparency International came up with a Corruption Perception Index (CPI) that scores countries on a scale of 0 (highly corrupt) to 100 (very clean). According to the 2022 CPI, it is evident that most nations are failing in effectively fighting corruption. The global average has remained unchanged for more than ten years at just 43 out of 100 with more than two-thirds of countries scoring below 50 and 26 countries falling to their lowest scores yet (Transparency International, 2022).

One of Nigeria's most pressing issues has been recognized as corruption (Kolstad et al., 2008; Cheeseman & Peiffer 2020; Adeleke et al., 2021). The country is consistently ranked poorly on the global corruption perception indices. For instance, Transparency International's Corruption Perceptions Index (CPI) has repeatedly listed the country as one of the most corrupt nations in the world. Transparency International (2022) ranks the country 150 out of 180 countries, with a score of 24 out 100. This score is below the global average of 43 and 32 for African region which marks another year of lack of growth on the corruption perception index (CPI).

Figure 1.2: CPI of Global Average, Sub Saharan Africa and Nigeria



Source: Author’s computation using data from Transparency International

As shown in figure 1.2, Nigeria’s CPI in the last decade shows that the nation has not made any significant progress in its fight against corruption. Between 2012 to 2020, the CPI was fluctuating between 28 and 25 which shows some level of stagnation but the situation worsened in 2021 and 2022 given a CPI of 24. It is evident that corruption in Nigeria has been on the increase and this will definitely impact the development of the financial sector.

The financial sector of an economy though critical to its economic growth and development can be significantly constrained by the presence of corruption (Slesman et. al, 2019; Cooray & Schneider, 2018). In Nigeria, various financial reforms have been introduced over the years to enhance the development of the financial sector such as the banking sector recapitalization, the financial inclusion strategy, cashless policy, payment systems reforms, promotion of fintech and digital payments, capital market reforms, etc. These reforms are meant to improve financial stability, and expand access to financial services aimed at boosting economic growth. However, Nigeria's financial development Index depicts that the financial sector is still under developed

Various studies have been carried out on the impact of corruption on financial sector development. Certain studies have shown that corruption impedes the advancement of financial development (Nasreen et al., 2023; Alsagr & van Hemmen 2022; Song et al., 2021), whereas other studies revealed that corruption promotes financial development i.e., corruption positively impacts financial sector development (Jha, 2019; Sharma & Mitra, 2019; Muhammad et. al, 2011). In contrast, Eksi and Dogan (2020) findings suggest that there is no relationship between the level of corruption perception of a country and its financial development. This shows that findings on corruption and financial sector development is inconclusive.

In Nigeria, the menace of corruption continues to grow at an alarming proportion which has triggered researchers to examine its effects on economic growth, corporate financial performance, bank profitability, socio-economic development (Adenike, 2022; Igbaekemen et. al., 2014; Bolarinwa et. al, 2019; Timipere et. al, 2020; Oke & Onaolapo, 2022). Nonetheless, there seems to be a dearth of literature on corruption, and financial sector development.

Therefore, this study will add to the existing literature by re-examining the determinants of financial sector development in Nigeria. The study differs from other studies by including financial innovation which is deemed to play a crucial role in the sector.

2.0. Literature Review

Several studies have delved into the impact of corruption on the financial sector development. Nevertheless, there is controversy surrounding whether corruption has a positive, negative, mixed, or no effect on financial sector development, as evidenced by conflicting findings in the literature. Some studies indicate strong evidence that corruption impedes the advancement of financial sector development. Ahmad and Ali (2010) investigated the impact of corruption on the performance of the financial sector across 38 developed and developing economies. The study uses the system general method of moment (GMM) technique. The result shows that corruption has a detrimental effect on the effectiveness of a well-established financial sector. Edirisuriya (2017) examine the relationship between the corruption level and financial market deregulation,

which causes financial deepening by employing the panel data analysis using corruption, deregulation, economic growth and financial deepening. The result aligns with the perspective that there is no substantial positive association between the level of corruption and the expansion of financial depth. Cooray and Schneider (2018) conducted an analysis of the correlation between corruption and financial sector development across 106 countries. The findings indicate that corruption has negative consequences on the progress of the financial sector.

Saied and Awad-Allah (2020) conducted a study assessing the influence of corruption on financial development across 50 African countries. Findings indicate that a stronger control of corruption is associated with increased levels of financial development in the African region. Hung-Son (2020) examines the separate effects of credit information sharing and corruption, as well as their interaction, on financial development across 120 countries using pooled OLS. The empirical findings indicate that corruption negatively influences financial development. Nutassey and Frimpong (2020) study adopted control of corruption as a moderating variable in financial development and foreign direct investment nexus in Sub-Saharan African countries. The result shows that high corruption in Sub-Saharan African has hindered financial development. Song et al. (2021) explored the long-term relationship between corruption, economic growth, and financial development across 142 countries. Variables like corruption, GDP, and financial development. The empirical analysis indicates that corruption has a negative effect on financial development. Chebab et al. (2022) used the pooled mean group (PMG) method of estimation and explored the repercussions of natural resource abundance on financial development, considering the interactive influence of both natural resources and corruption. Findings suggest that corruption plays a noteworthy role in hampering the development of financial sector.

In contrast, a study by Jha (2018) and Sharma (2021) suggests a positive impact of corruption on financial sector development. Sharma (2021) examines the effect of corruption and political instability and violence on the financial sector development using ARDL and NARDL. The findings revealed that widespread corruption can positively affect financial development if a country is suffering from an unstable political institution. Jha (2018) evaluated the consequences of financial reforms on corruption, utilizing a panel of 82 countries using GMM approach and data such as corruption perception index, financial reform index, interest rate, GDP, government size and openness. The empirical findings indicate a positive correlation between the financial liberalization index and corruption.

Contrary to expectations, Eksi and Dogan (2020) examined the effect of corruption perception on financial markets using the GMM approach. The findings revealed that there is no relationship between the level of corruption perception and financial development. In Nigeria, studies specific to corruption influence on

financial sector development appears to be limited. However, studies conducted by Yaroson (2013); Olorunfemi and Alimi (2018); Abdullahi et al. (2023); indicate that corruption detrimentally affects financial sector development.

Yaroson (2013) tested the nexus between corruption and finance using Granger causality test in a VAR. The empirical results indicate that corruption is a tool which hampers financial sector performance and in turn affects economic growth.

Olorunfemi and Alimi (2018) investigated the effect of corruption on various indices of financial development in Nigeria. Their research unveils compelling evidence suggesting that corruption exerts a detrimental influence on the progression of the financial sector. Abdullahi et al. (2023) examine the relationship between banking failure, corruption, financial development, and economic growth in Nigeria. Results of the empirical analyses show a negative relationship between corruption and both financial development and economic growth. None of these studies was able to include financial innovation which is a gap this study seeks to fill.

3.0. Methodology

3.1. Theoretical Framework

The Regulatory Capture Theory was developed by George J. Stigler in 1971 where he discussed how regulatory agencies can be influenced or "captured" by the industries they are supposed to regulate. This theory posits that regulatory agencies, which are meant to act in the public interest, may instead be dominated or influenced by the very industries they are supposed to regulate. This can lead to regulations that benefit a small group of firms or individuals at the expense of the broader public, potentially stifling financial sector development. The core propositions of regulatory capture theory revolve around the idea that the regulated industry can exert influence over the regulatory agency through various mechanisms. These include direct lobbying, the provision of expert information, campaign contributions, gifts to influence regulators, and the revolving door phenomenon, where individuals move between roles in regulatory bodies and industry positions. Over time, the agency's decisions increasingly reflect the interests of the industry, leading to regulations that may protect incumbent firms, restrict competition, and ultimately undermine the public interest. This dynamic leads to a regulatory environment where rules and enforcement practices are tailored to the needs of the industry rather than the broader societal good. For instance, regulations might be designed to raise barriers to entry for new competitors, ensuring that established firms maintain market dominance. This not only stifles innovation but also distorts market outcomes, leading to inefficiencies that are borne by consumers and the economy at large. In the context of the financial sector, corruption can

undermine the development of robust financial regulations, hinder competition, and create environments where corrupt practices are tolerated. This can slow financial sector growth and reduce its effectiveness. These propositions provide a framework for understanding how corruption can distort regulatory practices and impact financial sector development making it a valuable framework for analyzing the impact of corruption on financial sector development. The functional form is given as:

$$FSD = f(RC, C, E) \dots \dots \dots (3.1)$$

Where FSD is Financial Sector Development, RC is Regulatory Capture, C is Corruption, E represents the economic variables such as GDP, trade openness, and inflation.

3.2. Model Specification

The rise in corruption has become a focal point for both researchers and policymakers lately. This unethical behaviour (corruption) is facilitated in part by the growing complexity of the financial sector in the digital era (Olorunfemi & Alimi, 2018). To examine the relationship between corruption and financial sector development this study adapted the model of Fagbemi & Ajibike (2018) by replacing the institutional variable with corruption and adding financial innovation and inflation. The functional form of the equation is given as:

$$FSD = f(COR, GDP, TRO, INF, FIN) \dots \dots \dots (3.2)$$

Where: *FSD* represents financial sector development which is the dependent variable, *COR* is corruption, *GDP* is Gross Domestic Product, *TRO* is Trade Openness, *INF* is Inflation and *FIN* is financial innovation all of which are the independent variables in the model.

3.3. Autoregressive Distributed Lag (ARDL) Model

The model that will be used to achieve objective one of the study is the ARDL model of Pesaran et al. (2001). The econometric model and its ARDL estimable model are given in equations (3.3) and (3.4).

$$LnFSD_t = \beta_0 + \beta_1 LnCOR_t + \beta_2 LnGDP_t + \beta_3 LnTRO_t + \beta_4 LnINF_t + \beta_5 LnFIN_t + \mu_t \dots \dots \dots (3.3)$$

Where *FSD_t* = financial sector development, β_0 = constant parameter, β_i = coefficient of the explanatory variables *I*= 1, 2... 5. μ_t = stochastic disturbance term, *LnCOR_t*= corruption, *LnGDP* = log of real gross domestic product, *LnTRO_t* = trade openness, *LnINF_t* = rate of inflation, *LnFIN*= log of financial innovation, *t* = time subscript. β_1 can be either positive or negative in support of ‘‘grease the wheels’’ or ‘‘sand the wheels’’

hypothesis” respectively. β_2 and β_3 are expected to be positive whereas β_4 is expected to be negative and β_5 is expected to be positive.

The ARDL model of Pesaran et al. (2001) is given as:

$$\begin{aligned} \Delta \ln FSD_t = & \beta_0 + \sum_{i=1}^n \beta_1 \Delta \ln FSD_{t-i} + \sum_{i=0}^n \beta_2 \Delta \ln COR_{t-i} + \sum_{i=0}^n \beta_3 \Delta \ln GDP_{t-i} + \sum_{i=0}^n \beta_4 \Delta \ln TRO_{t-i} \\ & + \sum_{i=0}^n \beta_5 \Delta \ln INF_{t-i} + \sum_{i=0}^n \beta_6 \Delta \ln FIN_{t-i} + \gamma_0 FSD_{t-i} + \gamma_1 \ln COR_{t-i} + \gamma_2 \ln GDP_{t-i} \\ & + \gamma_3 \ln TRO_{t-i} + \gamma_4 \ln INF_{t-i} + \gamma_5 \ln FIN_{t-i} \\ & + \mu_t \end{aligned} \tag{3.4}$$

Where β_0 is the drift component, Δ is the First difference operator. β_i, γ_i are parameter coefficients of the variables. μ_t is white noise with zero mean. The terms with the summation signs (\sum) above represent the error correction dynamics while the part of the equation with γ_i corresponds to the long-run relationship. The null hypothesis in the equation is $H_0: \gamma_0 = \gamma_1 = \gamma_2 = \gamma_3 = \gamma_4 = \gamma_5 = 0$. This denotes the absence of long-run relationship while the alternative hypothesis is $H_0: \gamma_0 \neq \gamma_1 \neq \gamma_2 \neq \gamma_3 \neq \gamma_4 \neq \gamma_5 = 0$, for existence of cointegration among the variables.

The ARDL model has some desirable features and advantages over other cointegrating techniques such as Johansen cointegration. First, it has the ability to estimate both long-run and short-run parameters of the model simultaneously. Second, the ARDL approach is applicable irrespective of whether the regressors are purely at levels $I(0)$, at first differences $I(1)$, or mutually cointegrated. Third, the ARDL also gives desirable statistical properties even in small samples and provides information about the long-run relationship between the model’s variables while retaining the information about the short-run adjustment in the variables. Finally, the procedure of ARDL allows that variables might have different optimal lags lengths.

4.0. RESULTS AND DISCUSSION

4.1. Unit Root Test

The stationarity properties is examined using the traditional Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) Test assuming that shocks are temporal and do not have long run effect on the series (Glynn et al., 2007). This is done so as to avoid spurious regression. The results are presented in table 1.

Table 1: Unit Root Tests

Panel A: Augmented Dickey Fuller (ADF) Test				
Variables	Level		First Difference	
	Intercept	Intercept/Trend	Intercept	Intercept/Trend
LNFS	1.079	-2.170	-4.407***	-5.907***
LNINF	2.303	-1.545	-2.972**	-4.304***
LNTOP	-3.989***	-3.843**	-3.050**	-3.008
LNFIN	-0.170	-2.421	-7.439***	-7.405***
LNCOR	-0.481	-5.623***	-3.226**	-3.167
LNGDP	-2.070	-4.294***	-21.266***	-21.913***
Panel B: Phillips-Perron (PP) Test				
LNFS	-0.641	-5.050***	-10.840***	-11.622***
LNINF	6.815***	-3.135	-3.142**	-4.523***
LNTOP	-4.720***	-5.738***	-1.983	-2.108
LNFIN	-0.243	-2.427	-7.439***	-7.405***
LNCOR	-3.835***	-7.487***	-13.646***	-13.427***
LNGDP	-3.863***	-8.110***	-10.766***	-10.726***

Source: Researchers' Computation

Note: Critical values of ADF with intercept and intercept and trend at the 1%, 5% and 10% are -3.574, -2.934, -2.560; -4.161, -3.506, -3.183 respectively. For PP, the critical values for intercept are -3.592, -2.931, -2.604 whereas for intercept and trend are -4.186, -3.518, -3.189 at 1%, 5% and 10% respectively. ***, **, * denotes levels of significance at 1%, 5% and 10% respectively.

The ADF test result is presented in panel A of Table 1. The result shows that trade openness (LNTOP), corruption (LNCOR) and gross domestic product (LNGDP) were stationary at level whereas, financial sector development (LNFS), inflation (LNINF) and financial innovation (LNFIN) were stationary at first difference thus, giving a mix order of integration. The Phillips-Perron Test is presented in panel B of the Table 1. All the variables (financial sector development, inflation, trade openness, corruption and Gross Domestic Product) were stationary at level except financial innovation that was found to be stationary at first difference. This confirms the mixture of order of integration found in the ADF test and that none of the variables is integrated of order two.

4.2. ARDL Results and Discussion

In order to achieve the first objective of the study, the ARDL model was employed to investigate the determinants of financial sector development in Nigeria. The ARDL Bound test in presented in Table 2.

Table 2: ARDL Bounds Test

Model	K	F-Stat.	Significance Level	Critical Values	
				I(0)	I(1)
LNFSD	5	7.286	1%	4.045	5.898
			5%	2.962	4.338
			10%	2.483	3.708

Source: Researchers’ Computation

The F-statistics of 7.286 is greater than the upper bound critical values at 1 percent level of significance. This shows that there is a long run relationship between financial sector development and corruption in Nigeria. Based on this F statistic of the study, the long run estimates of the ARDL model is presented in table 3.

4.3. Long Run Results

Table 3: ARDL Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNCOR	-0.880	0.281	-3.138	0.003
LNFIN	0.059	0.027	2.159	0.037
LNGDP	-0.076	0.278	-0.273	0.786
LNINF	0.538	0.095	5.678	0.000
LNTOP	-0.086	0.034	-2.527	0.016

Source: Researchers’ Computation

Corruption has a negative relationship with financial sector development and it is statistically significant at 1 percent. Thus, percentage increase in corruption will decrease financial sector development by an average of 0.88 percent. This means that corruption typically introduces inefficiencies in economic and financial systems, discouraging investment and eroding public trust in financial institutions hence a higher level of corruption undermines the integrity and efficiency of financial markets, reducing overall financial sector development. This is in line with the studies of Cooray and Schneider (2018), Nutassey and Frimpong (2020), Abdullahi et al. (2023). However, financial innovation has a positive relationship with financial sector development and it is statistically significant at 5 percent. This implies that a percentage increase in financial innovation will increase the level of financial sector development by an average of 0.06 percent all other things being equal. The introduction of new financial instruments, technologies, and systems, generally improves the efficiency and accessibility of the financial sector thereby enhancing its development. Gross domestic product however was negative and statistically not significant. Inflation has a positive relationship with financial sector development and it is statistically significant at 1 percent. Hence, a percentage increase in inflation increases financial sector development by an average of 0.54 percent. This is line with the studies

of Sanusi et al. (2017) and Bilalli and Sadiku (2023). This finding might not be unconnected to the fact that the relationship between inflation and financial sector development is highly nonlinear (Boyd et al., 2001). Therefore, increases in inflation will reduce financial sector development whereas decreases in inflation will boost financial sector development. Furthermore, in high-inflationary environments such as Nigeria, digital financial products such as mobile banking and digital wallets help reduce cash dependency thereby fostering financial sector development. These innovations have also increased financial inclusion through fintechs. Trade openness has a negative relationship with financial sector development and it is statistically significant at 5 percent level of significant. Therefore, a percentage change in trade openness decreases financial sector development by an average of 0.08 percent. This is consistent with the studies of Batayneh et al. (2021) and Almalki and Batayneh (2015).

4.3. Short Run Results

Table 4 presents the results of the short run of the ARDL model. The error correction term as expected is significant, less than one and negative. It means that 59.3 percent of the disequilibrium that occurs every quarter is corrected for and reverts back to the long run in the next quarter. Trade openness has a positive relationship with financial development and it is statistically significant at the second lag. This means that in the short run, trade openness increases financial sector development by an average of 0.18 percent. The first, second and third lags of corruption however have a positive relationship with financial sector development and are statistically significant at 1 percent thus supporting the grease the wheels hypothesis that says that corruption enhances the development of the financial sector.

Table 4: ARDL Short Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECT(-1)	-0.593	0.080	-7.392	0.000
D(LNFSD(-1))	0.234	0.111	2.101	0.046
D(LNFSD(-2))	0.168	0.106	1.575	0.128
D(LNTOP)	0.002	0.051	0.049	0.962
D(LNTOP(-1))	0.177	0.062	2.852	0.009
D(LNCOR)	0.024	0.093	0.253	0.803
D(LNCOR(-1))	0.313	0.084	3.741	0.001
D(LNCOR(-2))	0.486	0.067	7.294	0.000
D(LNCOR(-3))	0.265	0.082	3.232	0.003
D(LNFIN)	0.018	0.009	2.0178	0.055
D(LNGDP)	-1.220	0.095	-12.805	0.000
D(LNGDP(-1))	-0.426	0.186	-2.284	0.031
D(LNGDP(-2))	-0.259	0.122	-2.123	0.044
D(LNGDP(-3))	-0.429	0.097	-4.427	0.000
C	0.299	0.038	7.931	0.000

Source: Researchers' Computation

A percentage increase in corruption increases financial sector development by an average of 0.31 percent, 0.49 percent and 0.27 percent in the first, second and third quarters respectively. Financial innovation though still positive is weakly significant at 10 percent. Gross domestic product on the other hand had a negative relationship with financial sector development and is statistically significant at the all lags. This suggests that in the short run, economic growth reduces financial sector development. This is consistent with the findings of Bilalli and Sadiku (2023) and Hung Son et al. (2020).

From the diagnostics tests in table 5, there’s no evidence of serial correlation and heteroskedasticity. The residuals are normally distributed and the model is correctly specified.

Table 5: ARDL Diagnostics

Diagnostics	Test Statistic
Breusch-Godfrey LM	2.303 (0.103)
Breusch-Pagan-Godfrey	24.295 (0.185)
Jarque-Bera	1.871 (0.392)
Ramsey RESET	0.779 (0.389)

Source: Researchers’ Computation

The parameters estimates of the model are also stable as shown by the CUSUM and CUSUM of squares in figure 4.1.

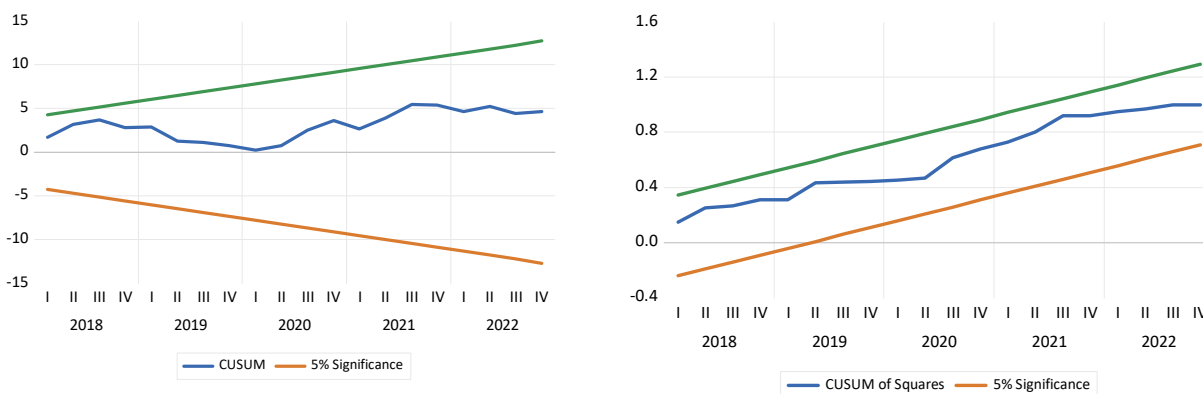


Figure 4.1: CUSUM and CUSUM of Squares

5.0. CONCLUSION AND RECOMMENDATIONS

The study examined the impact of corruption on financial sector development in Nigeria using Autoregressive Distributed Lag model. The study utilized data from 2012Q1 to 2022Q4. The objective of the study is to re-examine the determinants of financial sector development in Nigeria. The results indicate that corruption, financial innovation, inflation and trade openness are the determinants of financial sector development. Corruption was found to be the determinant with the highest level of impact. Based on the

results obtained from the ARDL model, the study concludes that corruption, financial innovation, inflation and trade openness are determinants of financial sector development in Nigeria. Based on the findings, the study recommends that policy makers should focus on strengthening anti-corruption measures by focusing on enforcing anti-corruption policies and enhancing transparency within the financial sector which can be done through institutional collaboration between anti-corruption agencies and financial institutions to share information and best practices; use of blockchain technology to improve transparency in transactions, reducing the risk of fraud and corruption; and the conduct of regular training for financial sector employees and stakeholders on ethics, compliance, and corruption risks among others. Furthermore, financial innovation should be promoted by encouraging technological advancements and the introduction of new financial products so as to enable the financial sector adapt to changing economic conditions.

REFERENCES

- Abdullahi, S. I., Shuaibu, M., Yusufu, M., Shehu, K. K., & Rafay, A. (2023). Economic growth, financial development and bank failure: The case of corruption in Nigeria. *In A. Rafay (Ed.), Concepts, Cases, and Regulations in Financial Fraud and Corruption*. IGI Global, 6, 144–163.
- Adeleke, R., Alabede, O., Osayomi, T., & Iyanda, A. (2021). The geographies of corruption in Nigeria: understanding the patterns and correlates. *Journal of Financial Crime*, 28(4), 1124-1140.
- Adenike, I. M., Binitie, J. O., & Ugwu, S. I. (2022). Under-Industrialization, Corruption and Financial Sector Development in Nigeria, 24(2), 2910-1083
- Ahmad, N., & Ali, S. (2010). Corruption and financial sector performance: A cross-country analysis. *Economics Bulletin*, 30(1), 303-308.
- Almalki, A. M., & Batayneh, K. I. (2015). The relationship between inflation and financial development in Saudi Arabia. *The Journal of Developing Areas*, 49(6), 321-332.
- Alsagr, N., & van Hemmen, S. (2022). The asymmetric influence of corruption on financial development: fresh evidence from BRICS economies. *Journal of Financial Crime*, 29(2), 665-679.
- Batayneh, K., Al Salamat, W. A., & Momani, M. Q. (2021). The impact of inflation on the financial sector development: Empirical evidence from Jordan. *Cogent Economics & Finance*, 9(1), 1-15.
- Bilalli, A., & Sadiku, M. The impact of inflation on financial sector performance: evidence from Western Balkan countries. *SEEU Review*, 18(2), 74-89.
- Bolarinwa, S. T., & Soetan, F. (2019). The effect of corruption on bank profitability. *Journal of Financial Crime*, 26(3), 753-773.
- Boyd, J. H., Levine, R., & Smith, B. D. (2001). The impact of inflation on financial sector performance. *Journal of monetary Economics*, 47(2), 221-248.
- Chebab, D., Mazlan, N. S., Rabbani, M. R., Chin, L., & Ogiri, A. I. (2022). The Role of Corruption in Natural Resource-Financial Development Nexus: Evidence from MENA Region. *Institutions and Economics*, 14(2), 1-29.

- Cheeseman, N., & Peiffer, C. (2020). The unintended consequences of anti-corruption messaging in Nigeria: Why pessimists are always disappointed. *ACE Working Paper*, 24.
- Cooray, A., & Schneider, F. (2018). Does corruption throw sand into or grease the wheels of financial sector development? *Public Choice*, 177, 111-133.
- Demirgüç-Kunt, A., Leora K., Dorothe S., & Saniya, A. (2022). The global finindex database 2021: financial inclusion, digital payments, and resilience in the age of COVID-19. *World Bank*. <https://doi.org/10.1596/978-1-4648-1897-4>
- Edirisuriya, P. (2017). Financial deepening, economic growth and corruption: the case of Islamic banking. *Review of Economics & Finance*, 8(2), 1-16
- Ekşi, İ. H., & Doğan, B. (2020). Corruption and financial development: Evidence from Eastern Europe and Central Asia countries. *PenzugyiSzemle/Public Finance Quarterly*, 65(2), 196-209.
- Fagbemi, F., & Ajibike, J. O. (2018). Institutional quality and financial sector development: Empirical evidence from Nigeria. *American journal of Business and Management*, 7(1), 1-13.
- Hung Son, T., Gia Khanh, H. C., & Thanh Liem, N. (2020). Credit information sharing, corruption and financial development: International evidence. *Cogent Business & Management*, 7(1), 1851856.
- Igbaekemen, G. O., Abbah, M. T., & Geidam, M. M. (2014). The effect of corruption on socio-economic development of Nigeria. *Canadian Social Science*, 10(6), 149.
- Jha, C. K. (2019). Financial reforms and corruption: Evidence using GMM estimation. *International Review of Economics & Finance*, 62, 66-78.
- Kassie, N. M. (2021). The effects of financial development on economic growth in africa: does the quality of institutions matter? *Journal of Business Economics and Finance*, 10(4), 166-177.
- Kolstad, I., & Søreide, T. (2009). Corruption in natural resource management: Implications for policy makers. *Resources Policy*, 34(4), 214-226.
- Muhammad, S., Qazi, M. A. H., & Muhammad, S. S. (2011). *Does Corruption Increase Financial Development? A Time Series Analysis in Pakistan*, 29640, 1-13.
- Nasreen, S., Gulzar, M., Afzal, M., & Farooq, M. U. (2023). The role of corruption, transparency, and regulations on Asian banks' performance: An empirical analysis. *Journal of the Knowledge Economy*, 14(4) 1-32.
- Nutassey, V. A., & Frimpong, S. (2020). The role of corruption in financial development-foreign direct investment nexus in sub-Saharan African countries. *International Journal Business Economics Law*, 23(1), 333-342.
- Olorunfemi, R., & Alimi, R. S. (2018). Corruption and financial sector development in Nigeria. *Ife Journal of Economics and Finance*, 7(1&2), 67-74.
- Oke, M. A., & Onaolapo, O. A. (2022). Effect of Corruption on Economic Growth in Nigeria. *African Journal of Management and Business Research*, 3(1), 115-132.
- Saied, A. E., & Awad-Allah, M. M. (2020). The impact of corruption on financial development in Africa. *Noble International Journal of Economics and Financial Research*, 5(2), 32-39.

- Sanusi, K. A., Meyer, D., & Ślusarczyk, B. (2017). The relationship between changes in inflation and financial development. *Polish Journal of Management Studies*, 16(2), 253-265.
- Sharma, C. (2021). Does corruption sand the wheels of financial sector development? Evidence from global panel data. *Journal of Financial Management, Markets and Institutions*, 9(02), 1-32.
- Sharma, C., & Mitra, A. (2019). Corruption and economic growth: Some new empirical evidence from a global sample. *Journal of International Development*, 31(8), 691-719.
- Slesman, L., Baharumshah, A. Z., & Azman-Saini, W. N. W. (2019). Political institutions and finance-growth nexus in emerging markets and developing countries: A tale of one threshold. *The Quarterly Review of Economics and Finance*, 72, 80-100
- Son, T. H., Khanh, H. C. G., & Liem, N. T. (2020). Credit information sharing, corruption and financial development: International evidence. *Cogent Business & Management*, 7(1), 1-15.
- Song, C. Q., Chang, C. P., & Gong, Q. (2021). Economic growth, corruption, and financial development: Global evidence. *Economic Modelling*, 94, 822-830.
- Timipere, E. T., Peter, E. G., & Johnny, N. (2020). Effect of Corruption on Corporate Financial Performance; A Study of the Banking Industry in Nigeria (1996-2014). *International Journal of Latest Research in Humanities and Social Science*, 1(8), 96-119.
- Yaroson, E. (2013). Corruption and financial sector performance: empirical evidence from Nigeria. *International Journal of Multidisciplinary Thought*, 3(2), 507-519.