

Hasanuddin Economics and Business Review 03:3 (2020) 103-111

Impact of Governance on Financial Development in West African Countries

Yahaya Ibrahim Abubakar^{a,*}, Rafiu Ayobanji Mustapha^a, Emmanuel Shola Ajiboye^a

^aDepartment of Economics, Al-Hikmah University. Ilorin, Kwara State. Nigeria

Abstract

The study explores the impacts of governance on financial development in West African countries. Data for the study were obtained from the World Bank Database covering the period from 2006-2017. The variables for governance comprise the six world governance indicators while financial development was represented by the ratio of bank deposit to GDP and domestic credit to the private sector. The control variables included in the model are interest rate, inflation, GDP per capita and trade openness. The findings from the study revealed that political stability and absence of violence and regulatory quality have significant effects on both proxies of financial development. Also, voice and accountability, trade openness and interest rate show significance on the ratio bank deposit to GDP while government effectiveness (negative), rule of law, and control of corruption show significance on domestic credit to the private sector. Thus, improving the quality of governance through strengthening legal and institutional frameworks, enforcement of standards and empowering of supervisory agencies, introducing an efficient regulatory environment to facilitate financial inclusion will play significant roles in the pace of financial development in the West Africa region.

Keywords:

financial development, West African region, political stability, absence of violence, regulatory quality

1. INTRODUCTION

Financial development represents among others one of the major preludes to economic growth and poverty eradication. It promotes financial deepening and facilitates access to capital and other financial services through ensuring the efficiency of the financial sector and the effectiveness of financial intermediation. Given these, one of the factors that could contribute significantly to these ends is governance. The quality of governance determines the efficiency of institutional regulation and amelioration of frictions such as information asymmetry, high transaction cost and adverse selection problems in the financial sector. Therefore, the present study intends to explore the relationship between these two factors since such studies remained largely deficient in Africa especially among West African countries with constant policies changes and abandon by different government regimes and evident political instabilities. Furthermore, financial operations such as contracts, loans, etc., involve complex and risky transactions that require institutional framework which will guide against opportunism, shirking and cheating behaviors to promote financial stability.

*Author in correspondence,

*Email address: emmysholly@gmail.com (Yahaya Ibrahim Abubakar)

ISSN: 2549-3221 (Print) 2549-323X (Online)

DOI: 10.26487/hebr.v3i3.2055

Most of the countries in West Africa fall under developing economies and financial development being an engine or lubricant for growth can play positive roles through several channels that are important for the region. First, it can act as an enzyme for catalyzing savings into more usable forms and promote efficient capital allocation and maximization of total factor productivity. Second, it can permit diversification and management of risks. Third, it can minimize information asymmetries and transaction and monitoring costs. Fourth, it can limit the fluctuation in the economy through the availability of varieties of instruments and information to help consumers and firms cope with adverse shocks through consumption and investment smoothening (IMF, 2016). The African countries have made considerable progress in financial development over the past decade, but there is still scope for further improvement, especially compared with other regions. With the exception of the middle-income countries in the region, the financial market depth and institutional development are lower than in other developing regions. Furthermore, the financial development report of the World Economic Forum (2012) based on an extensive examination of the seven financial development pillars among 62 leading countries/economies showed that the West African countries included in the analysis occupied bottom positions in most of the indicators.

One of the factors that could contribute to the current state of financial development in the region is the institution environment, otherwise known as governance. Governance comprises both formal rules (property rights, constitutions, and laws) and informal constraints (unwritten taboos, customs, traditions and codes of conduct). Problems related to institutional quality may translate into an increased degree of uncertainty that sends misleading signals to the market, thus affecting the productive economic process such as the proper functioning of the financial sector (Siong et al., 2008).

Governance plays a vital role in the formulation and implementation of effective policies that can facilitate and strengthen the financial sector. Governance pertains to the economic, political, and administrative authority required to manage a country's affairs at all levels. It is the ability of the administration to formulate and implement effective policies, to keep the bureaucratic system stable, to maintain strong law and order, to minimize corruption, and to improve the capital market and investment climate. The policymakers which are the mechanism within which governance operates are responsible for dictating choices about the rate of interest, operation and cessation of financial institutions and intermediaries, and the administrative and regulatory structure of the financial system. Thus, good governance can be an important determinant of the quality of the financial system. The state of governance in most West African countries is comparatively appalling given the crawling rate of social, economic and political development. The rate of development is being marred by general political instability, inconsistent policy formulation and unproductive implementation, staggering and widespread corruption, and bureaucratic bottleneck.

The lack of quality governance in most West African countries has contributed to small and shallow financial systems with limited outreach and financial intermediation. Furthermore, inadequate policy planning and implementation posed significant challenges to the deepening and strengthening of the financial sectors. Given the challenges in the financial sector especially towards its development, the relative lack of consideration on the role of governance in West African countries calls for immediate attention. This is because it's up to the discretion of policy-makers which financial system they allow growing and flourish. This does not infer that the government will take over the sector. Instead, the government can take necessary actions or steps to make the financial system more efficient. The complementary role of governance in financial development requires continuous attention to gauge the extent of the effectiveness of certain policies while aiming towards financial development. This study explores the relationship between the World governance indicators and financial development in the West African Region using the most recent data (2006 to 2017). This will reveal information that can inform future policy interventions towards financial development. However, this study seeks to find answers to the questions on the extent to which governance impact domestic credit to the private sector and bank deposits to GDP in West African Countries?

This research work employs the use of macro-economic data which is design to cover 2006-2017; a period of eleven years and 16 countries were selected due to data availability. Furthermore, the study employs only two proxies for financial

development which are domestic credit to the private sector and the ratio of bank deposit to GDP. Finally, governance is only represented using the six world governance indicators.

2. LITERATURE REVIEW

2.1. Concept of Financial Development

Financial development pertains to factors, policies, and institutions that are necessary for the realization of effective financial intermediation and markets, as well as deep and broad access to capital and financial services (World Economic Forum, 2012). It constitutes a scenario of improvement whereby the financial sector meliorates or eventually overcomes the costs incurred in the financial system, leading to refinements that facilitate trade, mobilization of savings, allocation of capital, monitoring of firms, the fluidness of exchange of goods and services and diversification and management of risk. Thus, financial development enhances the financial stability of nations and provides extensive and considerable access to capital and other financial services by revamping the efficiency of the financial sector and the effectiveness of financial intermediation. In addition to the improvement in the financial sector, the performance and the long-term economic growth of a nation depends significantly on its degree of financial development (Inter-American Development Bank, 2015). The degree of financial development of a country can be examined by adopting factors such as depth, size, access, and the efficiency and stability of its financial system, which encompasses its markets, intermediaries, range of assets, institutions and judicial directives (La Porta et al., 1997). The development in these factors will permit diversification of risk through greater availability of financial services. This diversification, in turn, enhances the interest and prosperity of producers and consumers that have access to financial services (Levine, 2004).

In addition to financial stability, financial development involves a higher degree of effectiveness in the financial markets and intermediaries. Economists believed that financial markets and intermediaries exist due to two market frictions (information costs and transaction costs). In response to these roles, they facilitate trading, hedging, diversification, and pooling of risk; initiate insurance services; mobilize and allocate savings and resources to the appropriate investment projects. Consequently, all these contribute to capital accumulation, technological innovation, and productivity growth, further promoting economic growth and welfare (WEF, 2012). Financial development especially the financial market and intermediaries also benefits consumers and firms in other ways that are not directly connected to economic growth. Access to the financial market such as banking services and loans for the producers and consumers can reduce poverty. Access to credits by consumers mitigates against deficiency in basic needs over time through borrowing and /or lending and also maintain consumer welfare during temporary shocks to wages and income. The smooth operation of the insurance services also ensures confidence against a variety of risks encountered by individuals and firms (Feyen et al., 2011).

2.2. The State of Financial development in West Africa

The West Africa region is part of Sub-Saharan Africa in which the financial landscape is dominated by the banking system, followed by the pension fund, while the stock exchanges are generally underdeveloped and illiquid. The financial depth in the region has increased over the year but has not caught up with that of other developing nations partly due to the prevailing lower average income (IMF, 2016). The private sector credit to GDP has also increased but remains about half the size of that in the Middle East, and North Africa, East Asia, and Latin America and the Caribbean due to the high number of low-income countries in the region. The systematic expansion of banks has contributed to stronger competition for loans and deposits. Many banks are committed to deploying mobile banking services and web-based technologies and have become progressively more involved in the provision of syndicated loans for infrastructure projects, where the region still faces large financing needs (Claessens, 2015).

Even though the financial market is still nascent in most West African countries (with few exceptions such as Ghana and Nigeria), there are some positive milestones worth acknowledging. Apart from government securities, there is a noticeable rise in project bonds that finance infrastructural investment. Furthermore, there is a comparative increase in the share of marketable instruments, enabling countries to institute more liquid benchmarks for future corporate issuance (WEF, 2012).

Apart from the widespread low-income level in the region, the depth and breadth of financial markets in West African countries are generally limited and varies greatly across the countries. This implies low financial intermediation by formal institutions, which is tasked for matching of idle funds with investment opportunities by channeling money from lenders to borrowers. Particularly, the banking systems, which are the dominant financial institutions, are small and the range of financial institutions is narrow (Karikari, 2010). Furthermore, the challenges in accessing credit facilities contribute to low agricultural productivity in rural areas, limits the impact of small-and medium- enterprises to private sector development, and can slow the deepening of the banking sectors in oil-exporting countries since declining export revenues affect their foreign

To this end, IMF (2016), put forward some policies, if appropriately calibrated for sub-Saharan Africa (in which West Africa belongs), could accelerate financial development. These include (1) Providing strong legal and institutional frameworks and promoting sound corporate governance: strengthening legal and institutional frameworks, including safeguarding the interest of minority shareholders and promoting contract enforcement and judicial independence, is essential for ensuring an environment in which the financial sector can develop and strive. Also, ensuring international best practices in financial operations such as accounting, auditing and reporting financial operations would help to minimize the negative gap to the financial development benchmark.

(2) The enforcement of prudential standards remains weak in some countries. Thus, strengthening supervision with more enforcement power and improving the capacity of the supervisory agencies should come to the fore of the agenda. Furthermore, enhancing the harmonization of regulations and supervisory procedures and closing gaps in crisis management should also be appropriately addressed. Instituting a suitable means for resolving enviable bodies and ensuring adequate functioning of deposit insurance schemes would become critical in mitigating the potential risks of spillovers.

(3) Lastly, introducing an efficient regulatory environment to facilitate financial inclusion. Generally, low transaction costs and technological innovations such as mobile transactions play a significant role in ensuring greater participation in the financial system. At the same time, the risk related to the innovations and complexity of transactions needs to be well regulated to strengthen the protection of scarce funds. Encouraging competition among banks is also essential for making financial services more affordable and positively contributes to the higher efficiency of the financial system. Since the main drivers of competition are policies related to entry (regulations on licensing) and exit (resolution regimes), enacting policies that permit the entry of well-capitalized and well-managed institutions and the timely exit of insolvent ones are necessary prerequisites for catalyzing a competitive environment in the sector.

Most of the recommendations highlighted above are associated with the quality of governance which can be regarded as a framework that encompasses the traditions and institutions by which authority in a country is exercised (Sayılır et al., 2018). When the rules change persistently or are not respected, when corruption is widespread and rule enforcement is fragile, or when property rights are not well-defined, there is likely to be a problem with the quality of the institutions. Challenges related to the quality of governance may translate into an increased degree of uncertainty that sends confusing signals to the market, thus affecting the productive economic process such as the proper functioning of the financial sector (Siong et al., 2008).

2.3. What is Governance?

The word "governance" came from the Latin verb "gubernare," or more originally from the Greek word "kubernaein," which means "to steer." Base on its etymology, governance refers to the manner of steering or governing, or of directing and controlling, a group of people or a state. Governance can be defined as the exercise of power or authority by political leaders for the well-being of their country's citizens or subjects (Wikipedia, 2019). It is the complex process whereby some sectors of the society wield power and enact and promulgate public policies that directly affect human and institutional interactions and economic and social development. The power exercised by the participating sectors of the society is always for the common good, as it is essential for demanding respect and cooperation from the citizens and the state. According to the United Nation Development Programme (2011) (People-centred Development Empowered lives. Resilient nations. 2012), governance describes the exercise of economic, political, and administrative authority required to manage a country's affairs at all levels. It comprises mechanisms, processes, and institutions through which citizens

and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences.

Despite the popularity of the concept of governance among policymakers and scholars, there is as yet no generally accepted single definition of governance or institutional quality. According to the (Kaufmann et al., 2008), governance embodies the traditional and institutional fabrics within which a nation operates. This involves the process by which governments are elected, evaluated and changed; the ability of the administration to formulate and implement effective policies; the respect for the citizens and constitution; and the state of the institutions within which social and economic interactions manifest. Hence, good governance means strong government capacity to keep the bureaucratic system stable, to maintain strong law and order, to minimize corruption, and to improve the capital market and investment climate. Effective governance is a major contributor to the social integrity of any country. It includes the social structures and processes internal to a community that forms the foundation upon which all economic progress relies. It enhances the quality of budgetary and financial management; the efficiency of revenue mobilization; the efficiency of public expenditures; and transparency, accountability and corruption (Miningou, 2019).

Good governance encompasses the role of public authorities in instituting the framework in which economic operators function and in determining the distribution of benefits as well as the relationship between the ruler and the ruled. As detailed in the World Bank experience (1994), good governance is epitomized by predictable, open and enlightened policy-making; a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions, and a strong civil society participating in public affairs, and all behaving under the rule of law. On the other hand, Poor governance is characterized by arbitrary policy-making, unaccountable bureaucracies, unenforced or unjust legal systems, the abuse of executive power, a civil society unengaged in public life, and widespread corruption. Thus, better governance requires political renewal. That is a concerted effort towards eradicating/minimizing corruption from the highest to the lowest level. This can be achieved by setting a good example, by fostering accountability, by encouraging public debate, and by nurturing a free press. It also encompasses strengthening grassroots and non-governmental organizations such as farmers' associations, co-operatives, and women's groups.

2.4. Indicators of Good Governance

There are various indicators of governance among which, the Worldwide Governance Indicators (WGI) by (Kaufmann et al., 2008) are widely emphasized. The WGI is a project of the World Bank and the Brookings Institute that assesses the quality of governance in 213 countries and territories worldwide. The WGI rates every country's governance status for (a) the process by which governments are selected, monitored and replaced; (b) the government's capacity to effectively formulate and implement sound policies; and (c) the respect of citizens and the state for the institutions that govern economic and social interactions among them. The measure of governance correspond-

ing to these three areas results in a total of six dimensions of governance:

- (a) The process by which governments are selected, monitored and replaced
 - 1. Voice and accountability (VA): this is the perception of the extent to which a nation's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and freedom of media. Participation is essential because it enables the active involvement of all in the decision-making process. It provides an enabling environment wherein pertinent information is effectively disseminated and people could respond in an unconstrained and truthful manner. It also ensures gender equality, recognizing the vital roles of both men and women in decision-making.
 - 2. Political Stability and Absence of Violence/Terrorism (PV): this is the perception of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism. Violence and instability shift the government's priorities and interrupt the planning process and implementation.
- (b) The capacity of the government to effectively formulate and implement sound policies:
 - 1. Government Effectiveness (GE): this is the perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Concrete effectiveness demands enhancement and standardization of the quality of public service delivery consistent with international standards; professionalization of bureaucracy; focusing of government efforts on its vital functions, and elimination of redundancies or overlaps in functions and operations; a citizencentered government; and an improved financial management system.
 - Regulatory Quality (RQ): this is the perception of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Sound regulations promoting the financial sector are essential for facilitating financial deepening and market development.
- (c) The respect of citizens and the state for the institutions that govern economic and social interactions among them:
 - 1. Rule of Law (RL): this is the perceptions of the extent to which agents have confidence in and abide by the rules of the society and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. It is through the law that people express their will and exercise their sovereignty. That the government is of law and not of men is an underlying democratic principle which puts no one, however rich and powerful, above the law. Not even

the government can arbitrarily act in contravention of the law. The rule of law demands that the people and the civil society render habitual obedience to the law. It also demands that the government acts within the limits of the powers and functions as prescribed by the law. The absence of the rule of law is anarchy. Anarchy happens when people act in utter disregard of law and when the government acts whimsically or arbitrarily beyond their powers. What the law seeks to promote is justice and when the actors of governance can minimize, if not eliminate injustices, then there is said to be rule of law.

2. Control of Corruption (CC): this is the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Corruption undermines the legitimacy of government, democratic values, human rights and respect for the rule of law (Anassi, 2004). It enables grave violations of socio-economic rights, condemns people to extreme levels of poverty and often leads to social unrest. Thus, curbing corruption is critical to the achievement of good governance.

The concept of governance is a broader term in the context of government. While governance is traditionally associated with the public sector (state actors and institutions), it also includes the private sector (households and companies), and the civil society (non-governmental organizations) working hand in hand for the achievement of a common goal. Thus, the essence of governance is the way that state-society relations are being structured and managed (Hyden et al., 2003). Governance basically consists of two processes: decision-making and implementation of the decision. In broad terms, decision-making is the process by which a person or group of persons, guided by a socio-political framework, select a decision involving their individual and societal needs and wants.

Implementation pertains to the process that logically follows the decision; it involves the realization or manifestation of the plan or decision. Governance is not just decision-making as a decision without implementation is self-defeating. Neither is it just implementation because a decision or plan is required before implementation. Thus, the two processes necessarily go hand-in-hand in and are constitutive of governance. Based on this, the government is the main actor in governance and its role centers primarily on the provision of an enabling environment for the other actors of governance to participate and respond to the mandate of the common good. All actors other than the government are called the "civil society." The civil society includes non-governmental organizations, and other community-based and sectoral organizations, such as the association of farmers, charitable institutions, cooperatives, religious communities, political parties, and research institutes. These bodies are private in nature but have public objectives (Overseas Development Institute, 2003).

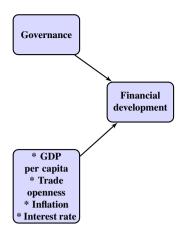


Figure 1: Conceptual Framework

2.5. Conceptual Framework

The study intends to investigate the determinants of financial development by testing the role of governance. Following S. H. Law and W. N. W. Azman-Saini (2012), Anila and Alvina (2016), Karikari (2010), and Abubakr and Hooi (2017), the study will adopt two proxies for financial development: (i) domestic credit to private sector as a share of GDP (this measures the role of financial intermediation in channeling funds to the private sector) and (ii) Bank deposits to GDP (this equals the demand, time and saving deposits in deposit money banks and other financial institutions as a share of GDP). The WGI by Kaufmann et al. (2008) will be adopted as governance indicators. The WGI dataset was constructed based on information gathered through a wide variety of cross-country surveys and expert polls. Kaufmann et al. (2008) used a model of unobserved components, which enabled them to achieve levels of coverage of approximately 212 countries for each of their indicators. They constructed six different indicators, each representing a different dimension of institutional quality and governance: (i) voice and accountability, (ii) political stability and lack of violence, (iii) government effectiveness, (iv) regulatory quality, (v) rule of law, and (vi) control of corruption. The study will also include four control variables that have been widely emphasized to influence financial development. (i) GDP per capital Colombage (2009), Yang and Yi (2008) and S. H. Law and W. N. W. Azman-Saini (2012). (ii) Trade openness Braun and Raddatz (2008), S. Law and W. Azman-Saini (2008), S. H. Law (2009) and H.Baltagi et al. (2009), S. H. Law and W. N. W. Azman-Saini (2012). (iii) Inflation Boyd et al. (n.d.) and B. H. (2016) and (iv) interest rate B. H. (2016).

2.6. Theoretical framework

This study intends to adopt the endowment theory by Robinson et al. (2005). The endowment theory opined that the variations in economic institutions are the main determinants of the level of economic and financial development. The assumption holds that in countries where legal systems enforce private property rights, support private contractual arrangements, and protect the legal rights of investors, financial markets develop rapidly and are able to support real activity. On the other

hand, when institutions fail to protect minorities and disadvantaged parties against powerful elites, financial development will be impeded through poor contract enforcement which mainly takes the form of enforcement costs resulting from too much "legal formalism". To capture institutional quality as a proxy for governance, the six world governance indicators (voice and accountability, government effectiveness, regulatory quality, political stability and absence of violence, rule of law and control of corruption) will be selected.

2.7. Gap in Literature

A number of studies have explored the relationship between governance and financial development. However, none of these works provide a specific focus on West African countries. Given the regional variation in the institutional arrangement and the recent relative stability of political dispensations in West African countries, this study will shed light on the resulting impacts and contributes to the literature the specific findings therein.

2.8. Model Specification

This study intends to assess the relationship between financial development and governance among West African countries using the multiple regression model adopted from Demetriades and Hussein (1996). The equation is as specified below:

Financial Development = f(GOV, GDP, INF, TO, RINT)

 $FD_{it} = \alpha_{it} + \beta GOV_{it} + \lambda X_{it} + \mu_i,$

i:1,2...N, t:1,2....N

Where:

 FD_{it} : financial development in country i at time t;

 GOV_{it} : governance in country i at time t;

 X_{it} : a vector of control variables such as GDP per capita, inflation (INF), trade openness (TO) and interest rate (RINT);

 α_{it} : the unobserved country specific fixed effects;

 μ_i : the error term.

The financial development proxies include the Ratio of Bank deposit to gross domestic product (BD2GDP) and Domestic Credit to the private sector (DC2PS). The governance variables are; voice and accountability (VA), political stability and absence of violence (PV), government effectiveness (GE), regulatory quality (RQ), rule of law (RL), and control of corruption (CC). The study will be estimated using two models where financial development proxies will be the dependent variable for model one (ratio of deposit to GDP) and model two (domestic credit to the private sector) respectively while the explanatory remain unchanged for both models.

3. PRESENTATION AND ANALYSIS OF RESULT

3.1. Correlation Matrix

The correlation matrix attempts to highlight the relationships existing between variables used in the study. The correlations between the independent variables (Governance factors) and the dependent variables (financial development proxies) were checked. The result of the correlation matrix is as presented in Table 1.

Source: Output from Stata 13

As displayed in Table 1, the result shows that there is no high correlation between any of the variables. That is, the variables are not significantly correlated since the variables identified are less than (0.4) which is in line with the threshold cited by Fox (1991). This further indicates the likely absence of multi-collinearity among variables as none of the variables is highly correlated to the other. Thus all the variables can be used for further analysis.

3.2. Hausman Test

In choosing the most effective method for analyzing panel data, the Hausman test is commonly employed for selecting between fixed or random effect method. The test evaluates the significance of an estimator versus an alternative estimator. The Hausman test conducted is as shown in Table 2.

The result obtained from the hausman test shows that model onehas a probability value of 0.0392 which is below 5% (0.05) and model twohas a probability value of 0.92 which is above 5% (0.05). This informed the decision for the selection of fixed effect regression for model one and random effect regression method for model two.However, it is important to conduct heteroskedasticity using Breusch–Pagen to understand the behaviour of the independent variables.

3.3. Heteroskedasticity Test

The heteroskedasticity test was conducted on the explanatory variables to ascertain the most appropriate regression method to select for the study. The result of the heteroskedasticity is as displayed in Table 3.

Table 3 shows the result of the Heteroskedasticity Test. The probability of the Breusch-Pagan Test was not significant at 5% which reject the hypothesis of heteroskedasticity and accept the hypothesis of the presence of homoskedasticity. The study can proceed with the Hausman description as shown in Table 2.

3.4. Presentation of the Regression Results

The fixed effect regression method was adopted for model one (ratio of bank deposit to GDP)and the random effect regression was employed for model two (domestic credit to private sector) as indicated by the Hausman Test result in Table 2 Table 4 shows the result of the fixed and random effect regression analyses.

Voice and accountability (VA) shows significant and positive effect (at 5%) on ratio of Bank deposit to gross domestic product(BD2GDP) and no significant effect on domestic credit to private sector (DC2PS) which implies that holding other variables constant, a unit change in voice and accountability will lead to 26% increase in Bank deposit to gross domestic product and no significant effect on domestic credit to private sector. Trade openness (TO) also shows significant and positive effect (at 5%) on ratio of Bank deposit to gross domestic product(BD2GDP) and no significant effect on domestic credit to private sector (DC2PS) which implies that holding other variables constant, a unit change in trade openness will lead to 174% increase in Bank deposit to gross domestic product and no significant effect on domestic credit to private sector.

Table 1: Output of correlation matrix

	RINT	ТО	GDP	INF	DC2PS	BD2GDP	VA	PSNV	GE	RQ	RL	CC
RINT	1.00											
TO	-0.06	1.00										
GDP	-0.08	0.12	1.00									
INF	0.02	0.27	0.06	1.00								
DC2PS	0.25	-0.02	-0.09	-0.19	1.00							
BD2GDP	-0.05	-0.06	0.13	0.25	0.00	1.00						
VA	-0.25	-0.04	-0.05	-0.31	-0.10	-0.34	1.00					
PSNV	-0.37	-0.25	0.00	-0.32	-0.30	-0.14	0.26	1.00				
GE	-0.22	0.00	0.01	-0.30	-0.03	-0.08	0.18	0.13	1.00			
RQ	-0.31	0.00	0.06	-0.34	0.03	-0.14	0.24	0.05	0.02	1.00		
RL	-0.31	-0.09	0.02	-0.31	-0.12	-0.04	0.12	0.29	0.28	0.32	1.00	
CC	-0.23	-0.05	0.01	-0.32	-0.02	-0.07	0.10	0.13	0.20	0.29	0.04	1.00

Source: Research Computation

Table 2: Output of Hausman test

Hausman Test						
	Model (BD2GDP	1	Model (DC2PS)	2		
Test Summary	Chi-Sq. Statistic	Prob	Chi-Sq. Statistic	Prob		
Cross-section random	50.49	0.039	0.46	0.92		
Decision	Fixed effe	ect re-	Random effect regression			
Ho = Prob. < 0.05 = Fixed Effect H1 = Prob. > 0.05 = Random Effect						

Source: Research Computation

Table 3: Output of heteroskedasticity and serial correlation test

Breusch-Pagan Test for Heteroskedasticity					
Chi2	7.34				
Chi 2 probability	0.6931				
Decision: Absence of Heteroskedasticity					

Source: Research Computation

Similarly, interest rate (RINT) reveals significant and positive effect (at 5%) on ratio of Bank deposit to gross domestic product(BD2GDP) and no significant effect on domestic credit to private sector (DC2PS) which implies that holding other variables constant, a unit change in interest rate will lead to 37% change in Bank deposit to gross domestic product and no significant effect on domestic credit to private sector. These findings show that active participation of the citizen in the decision-making process, efficient dissemination of pertinent information, freedom of expression, freedom association, freedom of media, gender equality and others will contribute positively to

financial development. Consistent with S. H. Law and W. N. W. Azman-Saini (2012) and G. and C. (2014), trade openness and voice and accountability do not show a significant effect on domestic credit to private sectors.

On the other hand, government effectiveness (GE) shows the significant and negative effects (at 5%) on domestic credit to the private sector (DC2PS) and no significant effect on the ratio of Bank deposit to gross domestic product (BD2GDP). This implies that a unit change in government effectiveness will lead to 172% change in domestic credit to the private sector and no significant effect on Bank deposit to gross domestic product. This result can be due to bureaucratic bottleneck, inadequate civil service system, and corruption laden administrative departments that manage the affairs of governments in most African countries. Rule of law (RL) also shows significant but positive effect (at 5%) on domestic credit to private sector (DC2PS) and no significant effect on ratio of Bank deposit to gross domestic product (BD2GDP) which implies that a unit change in rule of law will lead to 29% increase in domestic credit to private sector and no significant effect on Bank deposit to gross domestic product.

Similarly, control of corruption shows significant and positive effect (at 5%) on domestic credit to private sector (DC2PS) and no significant effect on ratio of Bank deposit to gross domestic product (BD2GDP) which implies that a unit change in control of corruption will lead to 61% increase in domestic credit to private sector and no significant effect on Bank deposit to gross domestic product. These results show that confidence in the rules of the society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence, have a significant effect on financial development. These findings are consistent with Law and S. H. Law and W. N. W. Azman-Saini (2012)Azman (2008) and G. and C. (2014) where significant relationships were found between government effectiveness, rule of law, control of corruption and domestic credit to the private sector.

Considering joint effects, political stability and absence of

Table 4: Output of the Regression Analysis

	Dependent variables						
Independent variable	BD2GDP(R)	E)	DC2PS(RE)				
•	Coefficient	P-Value	Coefficient	P-Value			
VA	0.259	0.010	(0.672)	0.646			
PSAV	0.813	0.015	1.779	0.004			
GE	(0.456)	0.519	(1.721)	0.050			
RQ	1.041	0.021	(0.702)	0.007			
RL	(0.821)	0.359	0.290	0.044			
CC	(0.510)	0.534	0.610	-			
RINT	0.370	0.020	0.108	0.668			
TO	1.742	0.037	(0.479)	0.126			
INF	0.537	0.115	0.617	0.297			
GDP	0.329	0.165	(0.030)	0.942			
Constant	0.610	0.159	100.051	0.176			
R2		0.876		0.827			
Wald Chi		98.520		52.950			
P (chi)		0		0			

Source: Research Computation

violence (PSAV) shows the significant and positive effects (at 5%) on both Bank deposit to gross domestic product (BD2GDP) and domestic credit to the private sector (DC2PS). This implies that a unit change in political stability and absence of violence will lead to 81% and 177% unit increase in Bank deposit to gross domestic product (BD2GDP) and domestic credit to the private sector (DC2PS) respectively. Similarly, regulatory quality (RQ) shows significant and positive effect (at 5%) on Bank deposit to gross domestic product (BD2GDP) and significant and negative effect on domestic credit to private sector (DC2PS) which implies that a unit change in regulatory quality will lead to 104% and 0.70% change in Bank deposit to gross domestic product (BD2GDP) and domestic credit to private sector (DC2PS) respectively. This shows that sound regulations promoting the financial sector are essential for facilitating financial deepening and market development.

Furthermore, political stability will ensure the uninterrupted planning process and implementation have a significant positive impact on financial development. These findings are consistent with Roe and Siegel (2008), who find that political instability impedes financial development, and political stability is a primary determinant of differences in financial development around the world. S. Law and W. Azman-Saini (2008) also noted that a high-quality institutional environment is important in explaining financial development, specifically for the banking sector.

Finally, the probability values for both model 1 (one) and model 2 (two) are significant (at 5%) which indicate that both models are of a good fit. The r-squared of 0.90 (model 1) and 0.84(model 2) indicate that the model accounts for 90% and 84% of the dependent variables respectively. Findings from this study show that governance, trade openness and interest rate have significant effects on financial development while inflation and GDP per capita have no significant effects on finan-

cial development. The result of significant relationship between governance and financial development is consistent with past studies such as S. H. Law and W. N. W. Azman-Saini (2012) S. Law and W. Azman-Saini (2008), S. H. Law (2009), G. and C. (2014), Z. B. H. and Zribi G. (2014), Anila and Alvina (2016), and Doğan and Soud (2018).

4. CONCLUSION AND RECOMMENDATION

Based on these findings, it can be concluded that improving the quality of governance through strengthening legal and institutional frameworks, enforcement of standards and empowering of supervisory agencies, introducing an efficient regulatory environment to facilitate financial inclusion will play significant roles in the pace of financial development. In addition, regime stability, ensuring social, economic and political tranquility, the security of saving and dividends will go a long way in promoting financial deepening. The following recommendations are put forward:

- Policy should be enacted to promote accountability, enhance institutional quality, curb violence and ensure the stability of the political dispensation.
- Trade openness through free trade agreements should be encouraged to facilitate financial deepening.
- Policies that maintains order in the society, ensure financial inclusion through innovations that will reduce transaction cost and information asymmetries, encourage savings, and facilitates credit availability, accessibility and affordability will contribute significantly to the development of the financial system.

References

- Abubakr, Badeeb Ramez and Lean Hooi Hooi (2017). "Financial development, oil dependence and economic growth: Evidence from the Republic of Yemen". In: Studies in Economics and Finance 34.2. URL: https://doi.org/10.1108/SEF-07-2014-0137.
- Anassi, Peter (2004). Corruption in Africa: The Kenyan Experience: a Handbook for Civic Education on Corruption. Trafford Publishing.
- Anila and Alvina (2016). "Impact of Financial Liberalization and Governance on the Financial Development in Developing Countries". In: Archives of Business Research 4.6, pp. 122–144.
- Boyd, John. H., Ross Levine, and Bruce. D. Smith (n.d.). "The Impact of Inflation on Financial Sector Performance". In: *Journal of Monetary Economics* 47.2 (), pp. 221–248.
- Braun, M. and C. Raddatz (2008). "The politics of financial development: evidence from trade liberalization". In: *The Journal of Finance* 63.3, pp. 1469–1508
- Claessens, Stijn (2015). "An Overview of Macroprudential Policy Tools". In:

 Annual Review of Financial Economics 7, pp. 397—422. URL: http:
 //dx.doi.org/10.1146/annurev-financial-111914-041807.
- Colombage, S. R. (2009). "Financial markets and economic performances: Empirical evidence from five industrialized economies". In: *Research in International Business and Finance* 23.3, pp. 339–348.
- Demetriades, P. O. and K. A. Hussein (1996). "Does financial development cause economic growth? Time-series evidence from 16 countries". In: *Journal of development Economics* 51.2, pp. 387–411.
- Doğan, Özlem Sayılır Murat and Nahifa Said Soud (2018). "Financial development and governance relationships". In: Applied Economics Letters 25.20, pp. 1466–1470.
- Feyen, Erik, Rodney Lester, and Roberto Rocha (Feb. 2011). "What Drives the Development of the Insurance Sector? An Empirical Analysis Based on a Panel of Developed and Developing Countries". In: *Journal of Financial Perspectives* 1.
- G., Kaouthar and Mondher C. (2014). "The quality of institutions and financial development in mena countries: An empirical investigation". In: *Risk governance control: financial markets institutions* 4.1, pp. 65–80.
- H., Badry (2016). "Governance and Financial Development: Evidence from the Middle East and North Africa Region". In: Econometric Research in Finance 1
- H., Zrelli B. and T. Zribi G. (2014). "Finance, governance and inequality: A non parametric approach". In: *International Strategic Management Review* 2, pp. 31–38.
- H.Baltagi, Badi, Panicos O.Demetriades, and Siong Hook Law (2009). "Financial development and openness: Evidence from panel data." In: *Journal of Development Economics* 89.2, pp. 285–296.

- Hyden, G., J. Court, and K. Mease (2003). "Making Sense of Governance: The Need for Involving Local Stakeholder". Discussion Paper.
- IMF, International Monetary Fund (2016). West African Economic and Monetary Union (WAEMU): Staff Report on Common Policies of Member Countries IMF Country Report 16/96.
- Karikari, J. A. (2010). "Governance, Financial Liberalization, and Financial Development in Sub-Saharan Africa". In: African Economic Conference.
- Kaufmann, D., A. Kraay, and P. Zoido-Lobaton (2008). "Aggregate Governance Indicators". In: *World Bank Working Paper*.
- La Porta, R., F. Lopez-de-Silanes, A. Shleifer, and R. W. Vishny (1997). "Legal Determinants of External Finance". In: *Journal of Finance* 52, pp. 1131– 1150
- Law, S. H. (2009). "Trade openness, capital flows and financial development in developing economies". In: *International Economic Journal* 23.3, pp. 409– 426
- Law, S. H. and W. N. W. Azman-Saini (2012). "Institutional quality, governance, and financial development". In: *Economics of Governance* 13.3, pp. 217–236.
- (2008). "The Quality of Institutions and Financial Development". Working paper.
- Levine, Ross (Sept. 2004). Finance and Growth: Theory and Evidence. Working Paper 10766. National Bureau of Economic Research. URL: http://www.nber.org/papers/w10766.
- Miningou, Élisé Wendlassida (2019). Quality Education and the of Public Expenditure A Cross-Country Comparative Analysis. 9077.
- People-centred Development Empowered lives. Resilient nations. (2012). Annual Report. United Nations Development Programme. URL: https://www.undp.org/content/undp/en/home/librarypage/corporate/undp_in_action_2011.html.
- Robinson, James A., Daron Acemoglu, and Simon Johnson (2005). *Institutions as a Fundamental Cause of Long-Run Growth*. Vol. 1A, pp. 386–472.
- Roe, Mark and Jordan Siegel (June 2008). "Political Instability's Impact on Financial Development". In: *Public Choice* 87, pp. 387–223.
- Sayılır, Özlem, Murat Doğan, and Nahifa Said Soud (2018). "Financial development and governance relationships". In: *Applied Economics Letters* 25.20, pp. 1466–1470. URL: https://doi.org/10.1080/13504851.2018.1430311.
- Siong C. F. and Hongbin, Y., Z. Guangya, and L. Feiwen (2008). "Optofluidic variable aperture". In: *Optics letters* 33.6, pp. 548–550.
- Yang, Y. Y. and M. H. Yi (2008). "Does financial development cause economic growth? Implication for policy in Korea". In: *Journal of Policy Modeling* 30.5, pp. 827–840.