Governance Transparency of Tax Revenue Performance in West Africa

http://doi.org/10.21272/bel.6(1).14-24.2022

Ramat Titilayo Salman, ORCID: https://orcid.org/0000-0001-7786-4577

FCTI, PhD, Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria

Peter Sanni, ORCID: https://orcid.org/0000-0003-1098-5889

M.Sc., Department of Accountancy, Kogi State Polytechnic, Lokoja, Kogi, Nigeria

Taiwo Azeez Olaniyi, ORCID: https://orcid.org/0000-0003-4265-8217

ACA, PhD, Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria

Khadijat Adenola Yahaya, ORCID: https://orcid.org/0000-0002-2840-5750

ACA, PhD, Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin, Kwara State, Nigeria

Abstract

This paper summarizes the arguments and counterarguments within the scientific discussion on the issue of governance and taxation revenue performance. The main purpose of the research is to examine the influence of management on tax revenue performance in West African countries. Specifically, the study aimed to investigate the impact of regulatory quality (political stability) and (voice and accountability) on tax revenue performance in West African countries; and to assess the effect of governance efficiency (the rule of law and control of corruption) on the performance of tax generation of West African countries. Secondary data were sourced from Governance indicators which cover 2005 to 2017. Regression analysis was employed to test the research hypotheses: regulatory quality does not significantly influence tax revenue performance in West African countries; and government efficiency does significantly affect tax revenue in West African countries. Sixteen West African countries were purposively chosen because of governance issues such as political instability and government ineffectiveness. The paper presents the results of an empirical analysis, which showed that regulatory quality, political stability and absence of violence, and voice and accountability have insignificant impacts (p-value > 5% level of significance) on tax revenue performance. Moreover, government effectiveness, the rule of law and control of corruption have positive and significant impacts (p-value < 5%level of significance) on tax revenue performance in West African countries. The study concludes that governance affects tax revenue performance in West African Countries; thus, the study recommends, among others that government should come up with realistic policies that will increase public and civil service quality.

Keywords: Governance, Performance, Taxation, West Africa.

JEL Classification: G3, M21.

Cite as: Salman, R.T., Sanni, P., Olaniyi, T.A., Yahaya, K.A. (2022). Governance Transparency of Tax Revenue Performance in West Africa. Business Ethics and Leadership. 6(1). 14-24. http://doi.org/10.21272/bel.6(1).14-24.2022.

Accepted: 2022

Received: 16 January 2022

Published: 2022

Copyright: © 2021 by the author. Licensee Sumy State University, Ukraine. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/ 4.0/).

Introduction

 \odot

The revenue generation may depend on its sufficient capacity to tax more and have more. There has been a growing concern about financing Africa's future development in recent years. Mobilizing domestic income through tax revenue is identified as a top policy priority. However, the extent of such a revenue generation scheme is a function of the willingness and ability of the people to pay taxes. The gamut of institutional problems associated with revenue generation in developing countries reduces tax revenue (Awotomilusi,



Akintoye, & Adegbie, 2019). The quality of governance has become a general concern to citizens, particularly when they consider the benefits accrued from government institutions. It is believed that tax revenue generation is mainly influenced by governance quality because a country seeking to enhance tax collection should improve its ability to govern. Institutional climate and governance quality are emphasized in the literature as essential determinants of tax revenue in many countries (Andersson, 2017; Frey & Torgler, 2007).

The presence of government institutions that are responsible, accountable, fair, and able to meet citizens' and firms' needs could help people be more tax compliant. Hussain, Ilahi and Muqeem ul Islam (2016) opined that improved governance could be harnessed as an optimal solution to low tax revenue and the continued inability to meet tax targets. Good governance tends to prevail in countries with low corruption rates and shared characteristics. It includes press freedom, transparency through accessible public information, a high level of integrity, and an efficient judiciary system. Meanwhile, poorly policy implementation and weak government institutions like the judiciary and police are likely pointers of poor governance (Transparency International, 2017). The dominant theory focused on the perception of fair governance and a developed tax system in the tax literature. It is because a good tax system is associated with the quality of governance (Ajaz & Ahmed, 2010). Moreover, good governance triggers a good tax system and increases tax revenue generation. However, lack of clarity and transparency, political instability and governance of tax incentives aggravate tax base erosion. Therefore, good governance, to a large extent, ensures a good tax system and reduces tax base erosion.

In the past few decades, many developing countries have experienced fiscal crises. The Organisation for Economic Co-operation and Development countries (OECD) have a relatively high-income tax compared to low-income countries. Income tax of OECD countries accounted for 12.9% of Gross Domestic Product (GDP); it accounted for 3.5% of GDP in countries with low income. Hence, low-income countries have excessively low-income taxes (IMF, 2017). About 45% of the GDP in developed countries is obtained through taxes, while developing countries realize only 24 percent of their GDPs from taxes (OECD, 2019). Placing focus on Africa, in a report of the United Nations Commission for Africa (UNECA, 2019), continental pictures remain challenging with GDP's weighted tax revenue ratio as 14.6 percent in 2018. This has therefore led to a serious issue, particularly as the tax performance could be declining on account of governance challenges.

Hence, there is a need to investigate tax revenue performance from an institutional point of view. Therefore, the sole aim of the work is to examine the interaction of governance quality and performance of tax revenue in West African countries. Specifically, the study objectives are to:

- investigate the impact of regulatory quality (RTQ) (political stability and absence of violence; (PS) and voice and accountability (VOC)) on tax revenue performance of countries in West Africa; and
- assess the effect of governance efficiency (GOE) (the rule of law (RUL) and control of corruption (COC) on the performance of tax generation of West African countries.

The other parts of the work are organized as follows: Review of literature is in the second section, followed by methodology in third section, presentation of results in section four, while the last section covers the conclusion.

Literature Review

Tax Revenue Performance and Governance. Tax is imposed by a controlling body (usually government) on profits, wages, products, services, or property of individuals and corporations, trusts, and settlements. This tax is used to carry out government operations when collected, i.e., maintenance of law and order, infrastructure supply, healthcare, and public education, or as a fiscal instrument for economic regulation (Obara & Nangih, 2017). Taxation is the method of tax administration and collection (Adeniran, Alade, & Oshode, 2013). It is one of the viable means by which any government can raise revenue to fulfill citizens' needs. For the survival of the developed and the developing countries, tax revenues are critically important. First of all, taxation is an essential source of central government revenues, as collecting taxes is necessary and routine and can ensure income stability. Second, taxes are structured by delivering public goods and services to meet social and public needs. Third, to ensure the protection and justice of society, the government requires tax income to build the security forces and the legal systems (Nightingale, 2002).

A low tax/GDP ratio in many emerging countries prevents them from implementing aggressive spending programs. Therefore, a rapid fall in domestic income and a related increase in government services are a policy priority (Bird & Zolt, 2014). Tax revenues vary from country to country, and patterns in income do not remain uniform; in some countries, the tax revenue shares have risen continuously, while tax income is low in some countries. What is an ideological and technical problem is the optimal level of the tax-GDP relationship.

Governments of different policies may have other public spending targets, which need different levels of taxation. Indeed, the ratios between tax revenue and GDP differ significantly between regions. West Africa's propensity to share tax revenues is misleading, and domestic income has fallen dramatically since 2004 (OECD, 2019)

Maintaining the low performance of taxes in many developed countries is also a key factor behind fiscal corruption and governance issues (Everest-Phillips & Sandall, 2009). It is also clear that steps to eliminate such issues can be expected to raise tax revenues dramatically (Gupta, 2007). According to the Cambridge English Dictionary, governance is the way organizations or nations are operated at the highest level and the process for upholding the highest standards of management. It is the 'governing' approach which is proposed for the achievement of lasting economic, social, and institutional growth, for the promotion of a healthy environment between state, society, and the financial market, and the specific establishment of active citizen participation to this end.

Revenue generation depends on government efficiency. Effective governance offers a good tax administration and legitimacy for the state. The willingness of taxpayers to pay tax(es) and the performance of the tax administrators are pillars of good governance. The nation provides people with a sound tax system with good governance, providing people better what they want, allowing people to pay tax(es) for efficient public services (Hossain, 2014). There is no need to talk about the problems of revenue mobilization when a nation is governed democratically and openly (Haldenwang & Ivanyna, 2010). If the government is regarded as responsible, people will pay their taxes voluntarily, which decreases coercion requirements and generally reduces the cost of tax collection. On the other hand, if governments are seen as irresponsible, it would be more likely that government demands for (new or higher) fiscal charges that are expensive (Modugu, Eragbhe, & Izedonmi, 2012).

Strong governance offers an effective tax structure and tax system (Ajaz & Ahmed, 2010). An effective tax system relies on efficient governance. A fair domestic tax system facilitates good governance because an effective tax system encourages people to pay equally (Everest-Phillips & Sandall, 2009). For careful planning and effective revenue generation, the standard of governance is essential. Thus, tax evasion and corruption of public officials are widely considered to hurt tax revenue and economic growth and development (Ajaz & Ahmed 2010). The precondition for an adequate level of tax effort in developed nations and high-income nations is a more legitimate and sensitive state. For developing countries, tax hikes are not successful in increasing tax revenue and are more viable in developing their governing institutions (Torgler, 2003). Countries may increase their tax revenue by improving the governance system, i.e., institutions so that a country's tax efforts are highly responsive to the governance structure or institution.

Indicators of Good Governance. There are six (6) governance metrics which are grouped into three categories by Kaufmann, Kraay and Mastruzzi (2003). The groups are as follows:

1. The Process by which Governments are Selected, Monitored and Replaced

> Voice and Accountability. The political process, democratic freedoms, and political rights are evaluated by voice and accountability. Voice and Transparency is a sub-component that reminds us of people's inclusiveness and degree of freedom in political decisions. It captures views of the degree to which citizens of a country can engage in their government's choice, as well as freedom of expression, freedom of association, and freedom of the media (Amadou, Maty, & Abebe, 2019). Countries believed to be accountable to their people typically enjoy higher tax revenue (Kaufmann, Kraay, & Mastruzzi, 2003).

 \succ Political Stability and Absence of Violence. It tests to recognize the likelihood of the overthrow/destabilization of the government. The threat of politically motivated violence and terrorism is not supposed to result in political stability and the absence of violence. Joshua and Jinjarik (2008) presumed that increased fragmentation and political uncertainty in a country would reduce tax collection efficiency and thus decrease compliance. Tedds (2007) suggested that in politically stable countries, there is a high degree of regulatory compliance.

2. The Capacity of the Government to Effectively Formulate and Implement Sound Policies

 \succ Government Effectiveness. These are inputs needed for the government to create effective policies, provide public goods, and enforce them. The effectiveness of the government measures perceptions of the quality of public services offered, the quality of the civil service and the degree of its independence from political restrictions, the quality of policy formulation and implementation, and the credibility of the government's commitment to those policies (Ajaz & Ahmed, 2010; Hossain, 2014; Kaufman, Kraay, & Mastruzzi, 2010).



➤ *Regulatory Quality.* It focuses mainly on regulations, such as market/unfriendly policy, effect perceptions of the pressures exerted by overregulation (Torgler & Schneider, 2009). The Regulatory Quality subcomponent is more related to private sector promotion and captures perceptions of the government's ability to formulate and enforce sound policies and regulations for private sector growth (Amadou, Maty, & Abebe, 2017; Kaufman et al., 2010). Torgler and Schneider (2009) indicated that since they are more likely to attract foreign investment, countries with enabling laws that protect both individuals and companies appear to enjoy increased tax revenue.

3. Respect of Citizens and the State for the Institutions that Govern Economic and Social Interactions

 \succ *Rule of Law.* It is a metric for evaluating the degree of trust of agents in and compliance with society's laws. It tests the progress of a community in creating an atmosphere in which equal and predictable laws form the basis of economic and social interactions, Kaufmann et al. (2003). The Rule of Law (RL) captures the views of the degree to which agents have faith in and comply with the laws of society and for the standard of contract compliance, property rights, police, and courts.

 \succ *Control of Corruption.* It tests the alleged abuse, that is, the exercise, for personal benefit, of public powers. Corruption regulation captures the degree to which political authority, including small and large forms of corruption, is exercised for personal benefit. In addition, Torgler (2003) argued that it could help regulate the issue of tax non-compliance by battling corruption. Uslaner (2007) suggested that greater tax enforcement would benefit from less corruption.

Theoretical Framework

The fundamental theoretical background for this study is the benefit received theory of taxation since it supports the six (6) governance metrics developed by Kaufmann, Kraay, and Mastruzzi (2003) and as used in this study. This theory emphasized that if there is good governance (supply of public goods and services), there is a high likelihood that taxpayers would willingly pay their taxes.

Theory of Benefit Received. Benefit Received Theory of taxation principle was developed by Wicksell in 1896. This principle suggests that the payment of tax is contingent on the benefit obtained from the government, which means that the tax burden on the economic entity is directly proportionate to the benefit received by the economic entity. The taxation theory of public finance bases taxes on a politically revealed ability to pay for incentives earned or spending on public goods. The goal is to precisely determine the optimum amount of money that can be spent on public goods.

Musgrave (1959) emphasized that the benefits of taxation principles play a double role in functioning since a cumulative justice theory is based on the contract of ties between the state and people. On the other hand, it introduces the tax equality principle that makes citizens pay taxes equal to the number of benefits earned by the state. Taxpayers can only pay taxes if they have been given the same value of public goods. In complementing Musgrave's study, Kaufmann et al. (2003) developed six (6) governance metrics that can boost public confidence in the government and thus increase tax compliance. In their research, Nawaz (2010) proved that tax non-compliance occurred when the respondent was taxed at a higher level than other taxpayers and did not obtain public goods equal to the tax charged. The greater the tax return received, the greater the degree of tax enforcement, that is, if the democratic process is viewed as fair and legitimate (Akpu & Ohaka, 2017). Likewise, more citizens would voluntarily pay taxes if they perceived government to be efficient. Therefore, governance affects every aspect of human activities, willingness to pay tax inclusive. Thus, the power of governance cannot be overemphasized in enhancing tax revenue performance (Olaniyi & Akinola, 2020).

Empirical Review

Various functions, such as income allocation, public goods provision, and the credibility of tax systems, are subject to administrative and governance shocks. In addition, governance affects tax revenue stability, their degree of predictability, provision of public services, and proper functioning of tax systems. Some past studies have been conducted by scholars including Arif and Rawat (2018); Awotomilusi, Akintoye, and Adegbie (2019); Epaphra and Massawe (2017); Faizal, Palil, Maelah, and Ramli (2017); Salam (2019); Sebhat and Mohammed (2019); Olaniyi & Akinola (2020) among others. Hussain, Ilahi and Islam (2016) evaluated the effect of institutional efficiency and governance on the tax-GDP ratio. Six World Bank governance metrics, namely corruption, political stability, the rule of law, government effectiveness, regulatory efficiency and voice and transparency were utilized. Regression analysis further suggested a positive relationship between the tax-to-GDP ratio and the six-governance metrics.

Epaphra and Massawe (2017) analyzed corruption, governance and tax revenues in Africa using regression analysis. The results showed that corruption and governance in African countries are the main determinants of less tax revenue. Corruption showed a significant negative influence on tax revenues. At the same time, governance appears to improve tax revenue generation when evaluated in terms of government efficiency, quality regulatory, the rule of law and voice and accountability. In the same vein, Arif and Rawat (2018) examined the effect of corruption on tax collection in developing economies. It was also revealed that corruption and governance affect the collection of tax revenues, as indicated by the studies of Potanlar, Samimi, and Roshan (2010); Ajaz and Ahmed (2010).

Furthermore, Amadou, Maty, and Abebe (2019) investigated the impact of corruption on tax morale of 36 African countries using an afrobarometer survey. Findings showed that the standard of governance, such as a low level of corruption, greater productivity and responsiveness, a strict rule of law, and a strong voice and accountability, had a significant influence on tax enforcement. Indeed, people living in countries and regions with strong governance quality are likely to be tax-compliant relative to those living in countries with poor governance quality. Olaniyi and Akinola (2020) examined the national culture and tax performance of ten (10) African countries from 2010 to 2016. Panel Corrected Standard Error was employed to test the strength of the variables. The study revealed that indulgence was positively influenced tax performance, while the power distance, individualism and long-term orientation have a significant negative influence on the tax performance of selected African countries.

Some studies utilized primary data in tackling the same issues. Such studies include, Ali, Fjeldstad and Sjursen (2014); Faizal, Palil, Maelah and Ramil (2017), and Salam (2019). Based on the rewarding scheme, Ali, Fjeldstad, and Sjursen (2014) reported that people who are more pleased with public service are likely to have a tax-compliant attitude. However, Syadullah and Wibowo (2015) revealed that corruption regulation, voice and accountability, and political stability substantially negatively affected the tax ratio. In Malaysia, perceptions of justice, trust, and tax performance were examined by Faizal, Palil, Maelah and Ramli (2017). The regression results revealed that government trust has a considerable effect on the perceived fairness of the tax system and that tax efficiency could increase the perception of procedural justice in tax systems and tax credentials. In the same vein, Salam investigated the standard of public governance and compliance with personal income tax in Ilorin, Kwara State, Nigeria, using OLS. The findings suggested a relationship between the standard of public governance, corruption regulation, and personal income tax compliance. From the above empirical evidence, the need for good governance and better policy interventions could be an antidote to the low tax-to-GDP ratio.

Methodology and Research Methods

The *ex-post-facto* analysis design was used to examine the relationship between governance and tax performance to achieve the study objectives. This method was employed because archive data were retrieved and thus cannot be changed. Secondary data collected were analyzed using the regression technique. Sixteen Western African countries (including Nigeria, Benin, Burkina Faso, Cape Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Senegal, Sierra Leone, and Togo) were included in the population of this study. West Africa was considered because, over the years, countries have reported low tax collection therein, and this continues to have an inverse effect on the quality of social services that governments can offer to their citizens. Therefore, the study hypothesized that:

 H_1 : Regulatory quality (political stability and absence of violence; voice and accountability) does not significantly influence tax revenue performance in West African Countries.

 H_2 : Governance effectiveness (rule of law; and control of corruption) does not significantly influence tax revenue performance in West African Countries.

Model

The functional model is specified thus:

$$TRP = f(GOV_{it}, \mu)$$
(1)

Where: TRP is tax revenue performance; GOV is governance (measured by GOE, RUL, RTQ, COC, V0C & PAV)

The panel data model can be restated in an econometric form as:

 $TRP_{it} = \beta_0 + \beta_1 GOE_{it} + \beta_2 RUL_{it} + \beta_3 RTQ_{it} + \beta_4 COC_{it} + \beta_5 VOC_{it} + \beta_6 PAV_{it} + \beta_7 AGRIC_{it} + \beta_8 EDE_{it} + \mu_{it}.$ (2)

Where: GOE = government effectiveness; RUL = rule of law; RTQ = regulatory quality; COC = control of corruption; VOC = voice and accountability; PAV = political stability and absence of violence; AGRIC = share of agriculture (control); EDE = economic development (control); μ = unobserved determinant of tax performance; *A priori* expectation based on extant literature and theoretical framework: $\beta_1, \beta_2, \dots, \beta_6 > 0$.

This study used data from multiple countries, and their features were observed over similar periods. Panel data regression technique was applied on the panel estimates of tax revenue and governance quality. The variance inflation factor (VIF) test was also carried out to test for multicollinearity. The Breusch Pagan Lagrange Multiplier (LM) test was also conducted to test for random effects in the models. Likewise, the Hausman test was conducted to test whether the random-effects model is more consistent than the fixed effects model. Lastly, Pesaran's Cross-sectional Dependence (CD) test of cross-sectional dependence tests was performed to indicate whether residuals are cross-sectionally dependent on the model or not.

Variables/ Type	Description	Measurement	Supporting Studies	A priori Expectation
TRP (Dependent)	Performance of tax revenue			
GOVERNAN (Independent)				
GOE	Government efficiency	Worldwide governance indicator.	Awotomilusi et al. (2019); Ajaz & Ahmed (2010); Hossein (2014); Hussain et al. (2016); Syadullah & Wibowo (2015)	γ ₁ >0
RUL	The rule of law	Worldwide governance indicator.	Awotomilusi et al. (2019); Ajaz & Ahmed (2010); Torgler & Schneider (2009)	$\gamma_{2} > 0$
RTQ	Regulatory quality	Worldwide governance indicator.	Ajaz & Ahmed (2010); Hossein (2014); Hussain et al. (2016)	γ ₃ > 0
COC	Control of corruption	Worldwide governance indicator.	Syadullah & Wibowo (2015); Torgler & Schneider (2009)	$\gamma_{4} > 0$
VOC	Voice and accountability	Worldwide governance indicator.	Ajaz & Ahmed (2010); Syadullah & Wibowo (2015); Torgler & Schneider (2009)	γ ₅ > 0
PAV	Political stability & Absence of violence	Worldwide governance indicator.	Hossein (2014); Hussain et al. (2016); Syadullah & Wibowo (2015)	$\gamma_6 > 0$
CONTROLS				•
EDE	Economic development	GDP per capita	Bird, Martinez-Vazquez & Torgler (2007); Tsakunis et al. (2007); Epaphra &Massawe, 2017	γ ₁₄ > 0
AGRIC	Agriculture	Agriculture-to-GDP ratio	Epaphra & Massawe, 2017; Arif & Rawat, 2017; Gupta, 2007	γ ₁₅ < 0

Table 1. Variables Measurement

Source: Authors' computation (2019)

Results and Discussion

Table 2.	Summary	Statistics
----------	---------	------------

Variable	Mean	Min.	Max.	Sum
TRP	13.08	1.48	22.74	2707.742
GOE	24.32	2.93	65.05	5058.96
RUL	29.47	1.88	74.52	6129.78
RTQ	30.54	3.92	56.40	6352.01
COC	30.60	2.88	80.29	6364.45
VOC	37.49	8.87	77.34	7798.95
PAV	31.92	0.97	79.71	6639.49
AGRIC	29.08	5.99	66.03	6047.96
EDE	1026.99	250.04	3670.43	210344.59

Source: Authors' computation (2019)

Table 2 shows that the mean tax revenue as a ratio of GDP is 13.08%. It insinuates that tax revenue performance is low and far below average as taxation contributes less to overall revenue generation in West African countries. The mean value of government effectiveness in West African countries is 24.32 percent which implies that, on average, public services quality, civil service quality, and policy formulation and implementation quality are low in West Africa.

Furthermore, regulatory quality on average shows a value of 30.54 percent, which implies that the ability of West African governments to handle private sector development through proper and sound policies is low. In the same vein, the rule of law in West African countries has an average of 29.47 percent. It implies that the confidence in government institutions and adherence to a set of rules for the West African society is considerably low on average.

Moreover, control of corruption shows an average of 30.60 per cent, a minimum value (2.88) per cent, with a maximum value of 80.29 per cent in West African countries. The mean value of voice and accountability is 37.49%. The maximum and minimum values of voice and accountability in West Africa are 77.34% and 8.87%, respectively. Also, the mean value for the absence of violence and political stability is 31.92%. The maximum and minimum values of an absence of violence and political stability in West Africa are 79.71% and 0.97%, respectively in the period under review.

Preliminary Diagnostic Test

This shows the report for the multicollinearity test and Breusch Pagan Lagrange Multiplier (BP-LM) test.

Test for Multicollinearity

Multicollinearity will occur when there is a strong relation among independent variables in the regression models.

Variable	VIF			
	Without Control	With control		
GOE	2.326	3.212		
RUL	4.461	4713		
RTQ	1.083	1.541		
COC	1.699	1.206		
VOC	1.131	1.197		
PAV	5.044	4.012		
AGRIC		1.319		
EDE		1.101		

Table 3. Test for Variance Inflation Factors (VIF)

Source: Authors' computation (2019)

The test for multicollinearity is achieved by conducting the variance inflation factors (VIF) test. The study utilized the VIF technique to determine if multicollinearity exists within independent variables. In table 3, the results of the VIF test are shown. All the independent variables in the study have VIF that is less than 10, which means the variables in the study are not strongly correlated with each other.

The Breusch Pagan Lagrange Multiplier (BP-LM) Test

The Breusch Pagan Lagrange Multiplier (BP-LM) test was carried out to test for the presence of random effects in two models, that is, with and without control models.

Test	Null Hypotheses	Statistics	
		Without control	With control
Breusch-Pagan Test	No effect	193.2263 (0.0000)	192.9402 (0.0000)
Hausman Test	No effect	39.7144 (0.0000)	39.0918 (0.0000)
Pesaran's CD Test	No cross-sectional dependence	5.0822 (0.0000)	4.7916 (0.0000)

Table 4. BP-LM, Hausman and Pesaran's CD Tests

Source: Authors' computation (2019)

The null hypothesis is that no effect occurs. In other words, there is no difference in the unobserved fixed effects. If the BP-LM test result is important at the 5% significance level, it implies that the null hypothesis is rejected. The BP-LM test in Table 4 reveals a figure of 193.2263 (p-value = 0.0000 < 0.05 significance level) for the model without control, and 192.9404 (p-value = 0.0000 < 0.05 significance level) were obtained for the BP-LM model with a control variable. These findings showed that the null hypothesis is dismissed since it is significant at a 5% value. It means that, in support of the random effects alternative for the model, the low p-value counts against the null hypothesis that the pooled OLS model is sufficient.

Hausman tests have been carried out to determine whether the random effects model is more reliable than the fixed effects model. The null assumption is that the model of random effects is more consistent. The rule of decision is that we reject the null hypothesis if the Hausman Test is significant at a 5 percent significance level.



Thus, in Table 4, the Hausman test reveals the chi-square statistics of 39.7144 (*p*-value = 0.0000 < 0.05 significance level) for the model without control, while 39.0918 (*p*-value = 0.0000 < 0.05 significance level) is for the model that takes the control variable into account. The rejection of the null hypothesis showed that this finding was important at the 5 percent significance level. It suggests that the low p-value favors the fixed-effects model against the null hypothesis that the random-effects model is consistent. A cross-sectional dependency (CD) test developed by Pesaran was employed. The results of the preliminary diagnostic tests showing that the Pesaran CD test indicates that the residuals are not cross-sectionally dependent on the model.

Model Estimation Result

TRP	Without control	With control		
Variable	Coefficients	<i>p</i> -value	Coefficients	<i>p</i> -value
Constant	-7.8316	0.0000	-8.4379	0.0000
GOE	0.1084	0.0143	0.0304	0.0012
RUL	0.1206	0.0001	0.2101	0.0000
RTQ	-0.0269	0.3267	-0.0156	0.2801
COC	0.3381	0.0000	0.4261	0.0000
VOC	0.0344	0.4113	0.0614	0.3631
PAV	0.0573	0.2125	-0.0807	0.1844
AGRIC			-1.1401	0.001
EDE			1.0316	0.000
Model Diagnostics				
F-statistic	72.5543 (0.000)		78.2602 (0.000)	

Source: Authors' computation, (2019)

With or without considering agriculture and economic development as control variables in the model, the signs and impacts of governance variables on West African countries' tax revenue performance remain consistent, except for political stability and absence of violence that had a negative and negligible effect on the performance of tax revenue. That is, government effectiveness, the rule of law, and corruption control have a positive and significant impact on West African tax revenue performance; regulatory quality has negative and negligible effects on countries' tax revenue, while voice and accountability remain positive and insignificant in West African countries' tax revenue performance.

As revealed in Table 5, the effectiveness of governance showed a significantly positive impact of 0.0304 percent (*p*-value = 0.0012 < 0.05 significance level) on tax revenue performance in West Africa. It implies that a 1 % increase in the perception of the government's ability to come up with realistic policies that will boost the quality of public services quality in the region (that is, West Africa) will increase tax revenue performance (that is, tax to GDP ratio) by 0.0304 percent. The rule of law showed a significantly positive impact of 0.2101 (p-value = 0.0000 < 0.05 level of significance) on tax revenue performance of West African countries. It means that a percentage rise in perceptions of the degree to which citizens trust and adhere to rules of society will increase West Africa's tax revenue output by 0.2101. Also, control of corruption has a significantly positive impact of 0.4261 (*p*-value = 0.0000 < 0.05 significance level) on tax revenue performance for the selected countries. It implies that an increase in measures towards control of corruption (and adherence from using public powers for private gain) will increase the level of revenue generated through the administration of taxes in the West African sub-region by 0.4261.

Regulatory quality showed an insignificant negative impact of -0.0156 percent (*p*-value = 0.2801>0.05 significance level) on tax revenue performance in West Africa. It means that no increase or decrease in the perception of the government's ability to develop and execute policies for the growth of the private sector in the region would substantially affect the performance of tax revenues. Voice and accountability indicated non-significant but a positive effect on tax revenue performance of 0.0614 (p-value = 0.3631>0.05 significance level). It means that neither an increase nor a decrease in the degree to which citizens of a nation can engage in the selection of their government and the exercise of their basic human rights would have a substantial impact on the performance of tax revenue in West African countries at a level of significance of 5 percent. Meanwhile, the absence of violence and political stability has a non-significant and negative impact of -0.0807 percent (*p*-value = 0.1844>0.05 significance level) on tax revenue performance in West Africa. It connotes that neither an increase nor a decrease of the absence of violence and political stability of the selected countries will significantly affect tax revenue performance at a 5% level of significance.

Discussion

Findings have shown that governance in West African countries has a substantial effect on tax revenue performance. It is consistent with Epaphra and Massawe's (2017) finding that governance in Africa is a significant determinant of tax revenue. It is also reinforced by the benefit theory that taxpayers only pay taxes when the government has given them the precise value of public goods. Specifically, the rule of law has a significant impact on tax revenue performance in countries in West Africa. It suggests that tax revenue performance among West African countries increases as people have more confidence in and comply with society's laws. In tandem with Arif and Rawat (2017); Hussain, Ilahi, and Muqeem (2016), corruption control offers more tax revenue enhancement options. This result is also consistent with the *a priori* expectation.

In the same way, corruption control has a significant effect on the tax performance in West African countries. It explains that an increase in measures against corruption increases the level of revenue generated through tax administration in West Africa. It conforms with Torgler, Schaffnera and Macintyrea (2009) findings that corruption control significantly affected tax morale and tax performance. Government efficiency also directly influences the tax performance in West African countries. It suggests that the perception of the ability of the government to develop practical policies that will improve the quality of public services in the region (i.e., West Africa) will boost the tax performance. This submission is also consistent with Epaphra and Massawe (2017)'s findings that government efficiency will increase the output of tax revenue. It is also in line with the a *priori* expectation.

Voice and accountability do not contribute to tax revenue performance in West African nations. It shows that governments' obligation to interfere with the freedom of the press and association does not affect tax performance. Thus, this finding contrasts with Torgler, Schaffnera, and Macintyrea (2009) that voice and transparency have a positive effect on tax revenue performance. The evidence does not suggest that regulatory quality substantially affects tax revenue performance. It has much to do with the fact that in West African countries, the government's capability to formulate and execute practical policies for private sector development has little to do with their economic prosperity. It contradicts the finding of Ajaz and Ahmed (2010) that good governance and regulatory quality affect tax collection positively. Policy results can directly affect taxpayers whether they are paying or evading taxes. The absence of violence and political stability show no significant effect on tax revenue performance in West African nations. It entails that government uncertainty would not adversely impact tax revenue performance in West African nations; thus, contrary to empirical evidence that tax revenue typically plummets in politically insecure circumstances (Ali et.al., 2014).

Conclusion and Recommendations

The findings conclude that governance variables influence tax revenue performance in West African countries as proposed by benefit received theory. It is worthy of note that respect of citizens and the institutions of the state governing economic and social interactions being a governance division best explains tax revenue performance in West Africa since such variables as government effectiveness, the rule of the law and corruption control positively affect tax revenue performance. However, voice and accountability, political stability and regulatory quality have an insignificant effect on tax revenue performance.

Recommendation

Based on the findings, the study thus recommends that:

- > Tax policymakers should prioritize good governance, especially when designing tax revenue legislation.
- Governments of West African countries should make efforts to foster citizens' respect and public reference for economic and social interaction institutions.
- The government should boost their ability to come up with realistic policies that will increase public and civil service quality.

Future Research

This study suggests that future study can be carried on the effect of governance on taxation of all the West African countries since this study only covered sixteen West African Countries.

Author Contributions: Conceptualization: Ramat Titilayo Salman; data curation: Peter Sanni; formal analysis: Peter Sanni; investigation: Taiwo Azeez Olaniyi; methodology: Peter Sanni; project administration: Khadijat Adenola Yahaya; resource: Taiwo Azeez Olaniyi; software: Khadijat Adenola Yahaya; supervision:



Ramat Titilayo Salman; validation: Ramat Titilayo Salman; visualization: Taiwo Azeez Olaniyi; writing-original draft: Peter Sanni; writing-review editing: Khadijat Adenola Yahaya.

Funding. This research received no external funding.

References

- 1. Adeniran, S.A., Alade, S.O., & Oshode, A.A. (2013). The impact of tax audit and investigation on revenue generation in Nigeria. *European Journal of Business Management*, *5*, 171-175. Available at: [Link]
- Aizenman, J. & Jinjarak, Y. (2008). The collection efficiency of the value-added tax: theory and international evidence. *Journal of International Trade and Economic Development*, 17(3), 391-410.
 [Google Scholar] [CrossRef]
- 3. Ajaz, T. & Ahmed, E. (2010). The effect of corruption and governance on tax revenue. *The Pakistan Development Review*, 49(4), 405-417. [Google Scholar] [CrossRef]
- 4. Akpu, U.G. & Ohaka, J. (2017). Tax compliance strategy and tax revenue yield. *Pyrex Journal of Taxation and Accounting Management*, 1(2), 9-23. Available at: [Link]
- Ali, M., Fjeldstad, O.H., & Sjursen, I.H. (2014). To pay or not to pay? Citizens' attitudes toward taxation in Kenya, Tanzania, Uganda, and South Africa. *Journal of Accounting, Finance and Auditing*, 8(9), 828-842. [Google Scholar]
- Amadou, B., Maty, K., & Abebe, S. (2019). Corruption and tax morale in Africa. Working paper of Maastrich Economic and Social Research Institute on Innovation and Technology UNU-MERIT, 1-31. Available at: [Link]
- 7. Andersson, P.F. (2017). Democracy, urbanization, and tax revenue. *Comparative Economic Studies*, 59(1), 1-22. [Google Scholar] [CrossRef]
- 8. Arif, I. & Rawat, A.S. (2018). Corruption, governance and tax revenue: Evidence from EAGLE countries. *Journal of Transnational Management*, 23(2), 119-133. [Google Scholar] [CrossRef]
- 9. Awotomilusi, N.S., Akintoye, I.R., & Adegbie, F.F. (2019). Influence of voice and accountability on tax revenue in Nigeria. *International Journal of Research and Innovation in Social Science*, *3*(4), 81-89. Available at: [Link]
- 10.Bird, R.M. & Zolt, E.M. (2014). Redistribution via taxation: The limited role of the personal income tax in developing countries. *Annals of Economics and Finance*, *15*(2), 625-683. Available at: [Link]
- 11.Epaphra, M. & Massawe, J. (2017). The effect of corruption on foreign direct investment: A panel data study. *Turkish Economic Review*, 4(1), 19-54. [Google Scholar] [CrossRef]
- 12. Everest-Phillips, M. & Sandall, R. (2009). Linking business tax reform with governance: How to measure success. The investment climate in practice; No. 2. Business taxation note. Washington, DC: World Bank. Available at: [Link]
- 13.Faizal, S.M., Palil, M.R., Maelah, R., & Ramli, R. (2017). Perception of justice, trust and tax performance in Malaysia. *Kasetsart Journal of Social Sciences*, 38, 226-232. Available at: [Link]
- 14.Frey, B.S. & Torgler, B. (2007). Tax morale and conditional cooperation. *Journal of Comparative Economics*, 35(1), 136-159. [Google Scholar] [CrossRef]
- 15.Gupta, S. (2007). Determinants of tax revenue efforts in developing countries (IMF Working Paper 07/184). Washington, DC: IMF, 1-39. Available at: [Link]
- 16.Haldenwang, C. & Ivanya, M. (2010). Assessing the tax performance of developing countries. *Procedia Social and Behavioral Sciences*, *1*(13), 38-44. [Google Scholar]
- 17.Hossain, M. I. (2014). The quality of governance and tax effort: evidence from developed and developing countries. Research Report prepared for Case Study 5140143: International Political Economy and submitted to the Institute of Social Science and Graduate School of Public Policy, the University of Tokyo, 1-30. Available at: [Link]
- 18.Hussain, W.N., Ilahi, A., & Muqeem ul Islam, M. (2016). The impact of institutional quality and governance on tax-GDP ratio: a cross-country analysis. *Journal of Managerial Sciences*, *10*(2), 183-203. [Google Scholar]
- 19.Imam, P.A. & Jacobs, D.F. (2007). Effect of corruption on tax revenues in the Middle East. (IMF Working Paper No.07/270). Washington, DC: IMF. Available at: [Link]
- 20.IMF (2017). World Economic and Financial Surveys Regional Economic Outlook: Sub-Saharan Africa Restarting the Growth Engine. Washington, DC: International Monetary Fund. Available at: [Link]
- 21. Jimenez, P. & Iyer, G.S. (2016). Tax compliance in a social setting: the influence of social norms, trust in government, and perceived fairness on taxpayer compliance. *Advances in Accounting, incorporating Advances in International Accounting, 34*, 17-26. [Google Scholar] [CrossRef]

- 22.Joshua, A. & Jinjarik, Y. (2008). The collection efficiency of a value-added tax: Theory and international evidence. *Journal of International Trade and Economic Development*, *17*(3), 391-410. [Google Scholar] [CrossRef]
- 23.Kaufmann, D., Kraay, A., & Mastruzzi, M. (2003). Governance Matters III: Governance Indicators. Washington, DC: World Bank. Available at: [Link]
- 24.Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The worldwide governance indicators: A summary of the methodology, data and analytical issues. World Bank policy research Working Paper, No. 5430. Washington, DC: The World Bank. Available at: [Link]
- 25.Modugu, K., Eragbhe, E., & Izedonmi, F. (2012). Government accountability and voluntary tax compliance in Nigeria. *Research Journal of Finance and Accounting*, 2(5), 97-115. [Google Scholar]
- 26.Musgrave, R.A. (1959). The theory of public finance. McGraw Hill, New York. Pages. Available at: [Link]
- 27.Nawaz, F. (2010). Exploring the relationships between corruption and tax revenue. U4 Anti-Corruption Resource Centre, CMI. Available at: [Link]
- 28.Nightingale, K. (2002). Taxation theory and practices (4th ed). England: Pearson Education Ltd. Pages. Available at: [Link]
- 29.Obara, L.C. & Nangih, E. (2017). Tax compliance barriers and internally generated revenue in Nigeria: Empirical from small and medium enterprises in Port Harcourt metropolis. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(4), 169-176. [Google Scholar]
- 30.OECD (2019). Government at a Glance. Trust in Government, Policy Effectiveness and the Governance Agenda: General Principles and Approaches: Paris: OECD. Available at: [Link]
- 31.Olaniyi, T.A. & Akinola, B. (2020). National culture and tax performance in Africa. *Economic Horizons*, 22(1), 3-14. [Google Scholar] [CrossRef]
- 32.Potanlar, K., Samimi, A.J., & Roshan, A.R. (2010). Corruption and tax revenues: New evidence from some developing countries. *Australian Journal of Basic and Applied Sciences*, 4(9), 4218-4222. Available at: [Link]
- 33.Salam, M.O. (2019). Public governance quality and personal income tax compliance: Evidence from Ilorin metropolis, Kwara State, Nigeria. *International Journal of Accounting & Finance*, 8(2), 1-21. [Google Scholar]
- 34.Sebhat, W., & Mohammed, A. (2019). Analysis of tax performance and its determinants. *Journal of Accounting, Finance and Auditing Studies*, 5(1), 32-58. [Google Scholar] [CrossRef]
- 35.Syadullah, M. & Wibowo, T. (2015). Governance and tax revenue in Asian countries. *Journal of Social* and Development Sciences, 6(2), 76-88. [Google Scholar] [CrossRef]
- 36.Tedds, L.M. (2007). Keeping it off the books: An empirical investigation of firms that engage in tax evasion. Law and Accounting Conference. Canada: University of Victoria. Available at: [Link]
- 37.Torgler, B. & Schneider, F. (2009). The impact of tax morale and institutional quality on the shadow economy. *Journal of Economic Psychology*, *30*(2), 228-245. [Google Scholar] [CrossRef]
- 38. Torgler, B. (2003). Tax morale: Theory and analysis of tax compliance. Doctoral dissertation, University of Zurich, Switzerland. Available at: [Link]
- 39. Torgler, B., Schaffnera, M., & Macintyrea, A. (2007). Tax evasion, tax morale and institutions. *Centre for Research in Economics, Management and the Arts*, 1-36. Available at: [Link]
- 40. Transparency International (2017). FAQs on Corruption. Available at: [Link]
- 41. United Nations Economic Commission for Africa (UNECA, 2019). Available at: [Link]
- 42. Wicksell, K. (2000). Influence of Knut Wicksell on Richard Musgrave and James Buchanan. *Public choice*, *103*(1&2), 95-116. [Google Scholar]