Firm Level Attributes of Sustainability Disclosure Compliance: Moderating Role of Institutional Quality

Abstract:

Corporate Sustainability Disclosure Compliance (CSDC) has become increasingly important globally as stakeholders demand greater transparency and accountability from companies regarding their environmental, social and governance (ESG) practices. However, the extent to which companies comply with sustainability disclosure requirements can vary depending on the quality of the institutional environment in which they operate. In Nigeria, a country with a diverse economic landscape and varying levels of institutional quality, understanding how institutional factors influence firms' compliance with sustainability reporting guidelines is critical to promoting sustainable business practices and improving corporate governance standards. Therefore, the purpose of this study is to identify the factors influencing CSDC by examining the moderating effect of institutional quality using the rule of law as a proxy. Based on the theoretical framework of new institutionalism, a set of hypotheses was formulated and subsequently tested using a dataset of 118 listed companies from 2011 to 2017. The study found a statistically significant and positive relationship between the rule of law and CSDC in the Nigerian context. However, there was no statistically significant evidence to support the relationship between liquidity and the rule of law. In contrast, the relationship between industry type and the rule of law, as well as the relationship between leverage and the rule of law, were both positive and significant, suggesting better compliance with transparency in the presence of efficient legal systems. However, the interaction between taxation and the rule of law showed a negative relationship, highlighting the need for caution in interpreting its moderating role. This study contributes to existing knowledge, policy and practice by highlighting the moderating effect of the rule of law.

UNDER PEER REVIEW

Keywords: firm attributes; corporate governance; disclosure compliance; rule of law; sustainability

1. Introduction

"Corporate Sustainability Disclosure Compliance (CSDC) is the practice of companies releasing mandatory information at specified intervals to communicate their social, environmental, and governance activities to external stakeholders. The issuance of corporate governance codes has become more prevalent worldwide in response to corporate scandals and the need for effective corporate governance. In Nigeria, events such as the Cadbury Nigeria Plc. financial scandal have highlighted the importance of corporate governance reforms. Corporate governance codes provide guidelines for companies to follow in preparing their annual reports, with the aim of achieving a clear distinction of responsibilities between board members and ensuring disclosure related to economic, social, and environmental sustainability"[61,62,63,64]. Institutional quality, encompassing aspects like voice and accountability, regulatory quality, political stability, the rule of law, and control of corruption, plays a crucial role in shaping firm behavior and adherence to sustainability reporting guidelines.Therefore, this study proposed the following question. What is the impact of institutional quality, specifically the rule of law, on the relationship between corporate characteristics and CSDCin Nigeria?

To answer this question the study examines the moderating effects of institutional quality, specifically the rule of law, on the relationship between firm characteristics and CSDC in Nigeria. The rule of law is essential

for maintaining peace and security within a society, and its acceptance by the population is key to maintaining legitimacy and order. Despite the challenges in Nigeria's Rule of Law Index ranking, understanding the impact of institutional quality on CSDC is critical to promoting transparency and accountability in business practices. By examining how institutional quality influences the relationship between firm characteristics and CSDC, this study seeks to contribute to the existing knowledge base and provide empirical evidence on the role of legal and formal structures in shaping sustainability disclosure practices in Nigeria. The information provided highlights the significant challenges Nigeria faces in terms of fighting corruption and complying with rules and regulations. With a low ranking on the Transparency International Corruption Index and a high percentage of the budget allocated to education being diverted to bribe public officials, there is a clear indication of the pervasive nature of corruption in the country.

"Institutional quality is outlined in various facet which include; voice and accountability; regulatory quality, political stability, absence of violence, rule of law and control of corruption" (Howell (2011). Prior studies have examined the link between institutional qualities and a range of constructs, namely anti-corruption disclosures, firm productivity, corporate liquidity, environmental pollution control, and firm growth (Hearn, 2011, 2014; Issa & Alleyne, 2018; Krasniqi & Mustafa, 2016; Sarkodie & Adams, 2018), and have also considered bank growth as a moderating variable (Abuzayed & Al-Fayoumi, 2016) (Abuzayed& Al-Fayoumi, 2016). However, this study is designed to test the moderating effects of institutional quality on the relationship of firm attributes to CSDC and uses the rule of law as proxy.

The rule of law is considered to be a critical factor in the strong institutional quality of any nation. It is enforced in a society to promote peace and security in a country. UNDP (2018) developed "a holistic approach to strengthen institutions to address socio-political and economic marginalisation and human rights violations, among other challenges". According to Baldwin &Diperna (2007), "for the rule of law to be considered legitimate and representative, it must be willingly accepted by the people. Thus, the cure for anarchy in any given society is to adhere to the rule of law. Based on the rule of law index developed by the WJP (2017), Nigeria scored only 0.44 out of 1. The country ranked 97th in the world out of 113 countries. At the continental level, the country ranked 13th out of 18 African countries surveyed" .

The index presented in Figure 1, showing the extent to which agents have complied with rules in Nigeria, indicates a concerning trend with the country recording a relatively low index of -0.87 in 2017. This suggests that there is a lack of strong adherence to rules and regulations, which can have a negetive on governance, economic development, and overall societal well-being. Given the challenges posed by corruption and weak rule adherence, the role of institutional quality, particularly the rule of law, becomes even more critical in promoting transparency, accountability, and sustainable business practices. Understanding how institutional quality influences corporate behaviour and sustainability disclosure practices can provide valuable insights for policymakers, businesses, and stakeholders seeking to address these issues and improve governance standards in Nigeria.

Figure 1: Nigeria Rule of law index
Source of Data: The Global Economy (2019)

The study we have outlined focuses on the impact of institutional quality, specifically the rule of law, on Corporate Sustainability Disclosure Compliance (CSDC) in Nigeria. By examining the relationship between

firm attributes and CSDC with the moderating effect of the rule of law, the research aims to contribute to the understanding of how legal structures influence corporate governance practices in the country. Drawing on the theoretical framework of new institutionalism, the study develops and tests hypotheses using a dataset of 118 publicly traded firms from 2011 to 2017. The findings reveal a positive and significant relationship between the rule of law and CSDC in Nigeria. While liquidity did not show a statistically significant relationship with the rule of law, industry type and leverage were found to have a significant relationships with the rule of law. Furthermore, the study highlights the importance of industry-specific strategies and financial management practices in promoting compliance with sustainability disclosure guidelines. In additionally, the negative relationship between taxes and the rule of law underscores the need for careful consideration of tax policies in influencing disclosure behaviour. Managers possess the flexibility to customize industry-specific methods and financial management practices in order to promote compliance with sustainability disclosure policies, while also taking into account the potential influence of tax policies on individuals' behavior in terms of disclosure.

The paper is structured to include a literature review and hypothesis development in section two, followed by a discussion on data, research variables, and methodology in section three. Section four presents the research findings and discussions, while section five concludes the study and discusses its implications. By shedding light on the interplay between institutional quality, firm attributes, and CSDC, the study provides valuable insights for policymakers, managers, and stakeholders seeking to enhance corporate governance practices in Nigeria.A key point to note is that, any country with a record of weak institutional quality which led to ineffective law enforcement and deterioration in rule of law. As such, the findings from the test above, have further explored the danger of weak rule of law in reducing the level at which companies comply with the corporate sustainability disclosure requirements as contained in the country's CG Code.

2. Literature Review

2.1 Overview of Institutional Quality Literature

The concept of institutional quality provides information regarding the legal, political and economic indicator that shows how both public and private sectors are governed within a country. Corruption is considered to be a global problem in the last three decades (UN, 2017). "It is also a challenge to sustainable development goals (SDG) of ending extreme poverty by the year 2030"(World Bank, 2018). Previous literature has established empirical evidence on the role of institutional qualities on various constructs.

Some researchers have considered the issue of anti-corruption in the context of corporate disclosure. Issa& Alleyne (2018) examined "corporate reports from Gulf countries, with the aim of elaborating the extent of anti-corruption information in annual reports. The results of the content analysis of the 2014 sustainability reports provided detailed information that the disclosure of compliance with codes of conduct was related to the anti-corruption practices of GCC companies". Similarly, Lasagni, Nifo, &Vecchione (2015) examined "the role of institutional quality on the productivity of 4000 private firms in Italy between 1998 and 2007. The results provided evidence of the relationship between institutional quality and firm productivity". Hearn &Piesse (2013) also examined "the impact of governance characteristics on the liquidity of 12 firms in 12 sub-Saharan African (SSA) countries. The random effect result also shows a direct impact of liquidity on institutional quality, particularly on variables such as rule of law and regulatory quality, among others".

In a similar vein, Healy &Serafeim (2015) investigated "whether or not the disclosure of 408 firms reflects actual efforts to fight corruption. Using Transparency International's anti-corruption reporting scoring index, they found that strong enforcement parameters such as laws and regulations, industry corruption risk, use of Big 4 auditors, and board independence all predictably influenced the extent of anti-corruption reporting made by firms". Similarly, Branco& Matos (2016) analysed"the anti-corruption statements made by companies as reported in the sustainability reports of some selected companies in Portugal. The results of the study showed that firms with a high perception of the risk of corruption disclosed more information in order to protect their corporate image".

In another effort to test the need for robust corporate accountability and foreign direct investment (FDI). Bokpin, Mensah, &Asamoah (2017) examine how legal and other institutional qualities attract FDI to some African countries. The result of the study shows a significant negative relationship between institutional quality and FDI for the South African Development Community (SADC) and ECOWAS. In contrast, Shan, Lin, Li, & Zeng (2018) in a recent study show that voice and accountability significantly influence the at-

UNDER PEER REVIEW

traction of Chinese FDI in Africa. The result was obtained using panel regression analysis for 22 countries in the region for the period between 2008 and 2018.

Furthermore, the role of institutions in economic growth and firm development is considered. Krasniqi& Mustafa (2016) used "a questionnaire survey of 1,606 Kosovar entrepreneurs, which empirically showed that corruption is an institutional quality variable that has a significant impact on firm growth". More specifically, institutional quality affects the maturity of long-term debt, as shown by Tresierra& Reyes (2018) in a study of firms in Peru and Brazil, which aimed to determine the extent to which national institutions determine the time horizon of debt maturity.

Kwabi, Boateng, &Adegbite (2018) further investigate that strict trading laws and institutional quality affect the cost of capital (COC). These findings show that portfolio and investment decisions and COC can be influenced by the quality of an institution in a country. On the other hand, Galinato&Chouinard (2018) claim that strict compliance with environmental regulations is often achieved due to higher government institutions in a country.

Recent research have further query diverse approaches to institutional quality studies, by focusing on the interaction effect of national institutional qualities on various paradigms. Abuzayed & Al-Fayoumi (2016) delve into the impact of institutional quality of the relationship between economic growth and banking sector concentration. The study extrapolate on the argument that institutional quality is a crucial matter of economic growth among the fifteen Middle East and North Africa (MENA) countries considered.

Similarly, Lin, Cheng, & Zhang (2017) examine 1438 observations and thus the results of the institutional quality index reveal that in areas with low institutional quality, the majority of firms that fail to pay taxes represent their corporate image to the wider society as being socially responsible. Thus, low institutional quality leads to a decline in the level of corporate compliance with laws and regulations. In addition, Sathyamoorthy& Tang (2018) advance the mediating effect of institutional quality on export-led growth (ELG). Using both fixed and random effects model, the research concludes that institutional quality mediates the relationship between middle-income group and ELG.

Given the above review, it is therefore evident that prior research has thoroughly investigated institutional quality and linked it to concepts such as economic growth, environmental regulations, FDI, firm and bank development. However, prior research has failed to investigate the moderating effect of institutional quality in exploring the determinants of CSDC with CG code in Nigeria. Conducting such test will further contribute to the theoretical and empirical evidence on the extent to which legal and formal structures influence the level of compliance with CSDC in the country.

It is therefore evident that previous research has examined institutional quality and linked it to concepts such as anti-corruption disclosure, environmental regulation and economic growth, among others. However, researchers pay less attention to the moderating effect of institutional quality when examining the firm characteristics (using liquidity, industry type, leverage and taxation) that influence CSDC with a CG code. The study also contributes theoretically by providing empirical evidence on the extent to which legal and formal structures influence the level of CSDC in the case of Nigeria.

The current study focuses on coercive isomorphism institutionalism and aims to contribute to the theory by examining the moderating effect of institutional quality, using corruption control and rule of law as proxies to identify the firm-level determinants that support CSDC with the Nigerian Corporate Governance Code. The concept of coercive isomorphism has been applied in a number of previous studies (Craig Deegan, 2002; Eltaib& Complete, 2012; Eze, Nweze, &Enekwe, 2016; Mohd Said et al., 2014; Scott, 2014; Willmott, 2015). "The fact that organisations are seen as an integrated part of a larger institutional environment may change their reporting behaviour, as it is influenced by shared beliefs and practices in a particular system" (Atwood, et al., 2012). "In addition, higher levels of trust in government lead to higher levels of compliance with rules and regulations. These factors together motivate firms to behave in a more sensitive, socially and environmentally responsible manner" (Torgler, 2004).Thus, the level of trust in government is a determinant of sustainability outcomes in an economy.

2.2 Theoretical Underpinning

The theory of new institutionalism (neo-institutional theory) is now widely accepted and has been used in a number of studies to understand the reasons behind some corporate practices and disclosures (Issa& Alleyne, 2018). In contrast, the old institutionalism was developed by classical economics, which focuses on the formal institution of government. "On the other hand, the neo-institutional theory has been developed with a

PEER REVIEW

focus on deeper and more resilient aspects of social structure.The theory considers the processes by which structures, including schemes, rules, norms and routines, become established as authoritative guidelines for social behaviour.The theory also integrates policy making, with an emphasis on the legal and formal aspects of government structures" (Powell, 1988).

"Institutional theory has come to the fore as a popular and powerful explanation of both individual and organisational behaviour. It is a vibrant theory that has been synthesised and contrasted with a number of other approaches. Although its scope has certainly been broadened, institutional theory has often been criticised for being largely used to explain both the persistence and homogeneity of phenomena" (Dacin, Goodstein, & Scott, 2002). "The institutional theory literature has long posited that firms are segments of a larger social structure, which includes both formal (e.g., government regulations and laws) and informal (e.g., cultural norms and practices) institutions that significantly shape firm behaviour and further influence firm outcomes" (Campbell, 2007). "Institutions within the broader social structure are key indicators of social and environmental performance" (Krasniqi& Mustafa, 2016).

The two well-known strands of institutional theory are old and new institutionalism. DiMaggio & Powell (1991) developed a new perspective in sociology and organisation theory, which they called 'new institutionalism', which rejects the original actors of the classical economic model. Williamson (2000) argues that neoclassical economics takes institutions for granted by assuming that laws and courts exist to enforce contracts and protect the property rights of the parties to a transaction.The new dimension of institutional economics posits that an organisation's survival depends on how it coordinates its activities to conform to the prevailing rules and belief system in an environment (Scott, 2014).The new institutionalism posits that organisations operate within an open environment, known as the institutional environment. Institutions operating in such environments are subject to peer pressure.Thus, survival within the institutional environment depends mainly on how organisations adhere to rules, norms and the prevailing belief system (P. DiMaggio & Powell, 1983).However, there are differences in the statutory environmental laws faced by firms in different industries, which may be due to differences in regulations and law enforcement agencies (Galinato&Chouinard, 2018). .

The two broad dimensions of the new institutionalism are decoupling and isomorphism. Decoupling as a form of institutionalism gained popularity in the mid-1970s, where organisations distinguish between corporate practices and formal structures (Meyer & Rowan, 1977). On the other hand, isomorphism institutionalism argues that institutions evolve in different ways. However, such institutions grow to be similar and have similar characteristics.DiMaggio& Powell (1983) outlined three mechanisms of institutional isomorphism, namely: normative, mimetic and coercive.Normative isomorphism emphasises the individual as the unit of analysis while mimetic and coercive mechanisms consider the organisation as the unit of analysis (Mohd Said, Sulaiman, & Ahmad, 2014).Under normative isomorphism, the main source of organisational-harmonisation is derived from formal educational processes and professional networks (DiMaggio & Powell, 1983).Under mimetic isomorphism, organisations imitate or emulate the practices of other organisations in order to gain competitive advantage. Coercive isomorphism refers to the focus of organisations on the external influences of critical and powerful stakeholders, such as government policy and shareholder pressure, among others (Deegan &Samkin, 2009).

The current study focuses on coercive isomorphism institutionalism and aims to contribute to the theory by examining the moderating effect of institutional quality, using the rule of law as a proxy, to determine the firm-level determinants that support CSDC with the Nigerian Corporate Governance Code. The concept of coercive isomorphism has been applied in a number of prior studies (Craig Deegan, 2002; Eltaib& Complete, 2012; Eze, Nweze, &Enekwe, 2016; Mohd Said et al., 2014; Scott, 2014; Willmott, 2015). "The fact that organisations are seen as an integrated part of a larger institutional environment may alter their reporting behaviour, as it is influenced by shared beliefs and practices in a particular system" (Atwood, et al., 2012). "In addition, higher levels of trust in government lead to higher levels of compliance with rules and regulations. Together, these factors motivate firms to behave in a more rational, socially and environmentally responsible manner" (Torgler, 2004).

2.3 Hypotheses Development on the Moderating Effect of Institutional Quality on the Influence of Firm Attributes on CSDC

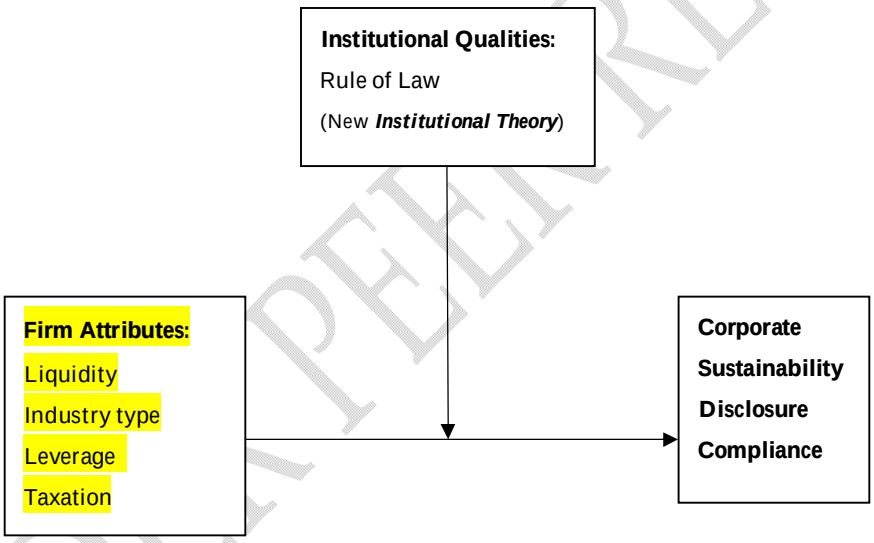
The current study found that the economic situation of a country can have a significant impact on the amount of information that companies disclose in a given period and, to a greater extent, on the level of

compliance. It has also been shown that a specific rate of economic growth would influence the level of social and environmental disclosure within a particular country (Ding, Hope, Jeanjean, &Stolowy, 2007). Based on the new institutional theory, legislation is dependent on the sector in which a company operates, and hence there may be differences in enforcement policy, although better institutions would be expected to facilitate the implementation of legislated rules and regulations set by the constituted authorities (Acemoglu, Johnson, Robinson, &Thaicharoen, 2003).

Furthermore, on the issue of rule of law, the World Justice Project (2017) states that effective rule of law reduces poverty and protects people from injustice. It is needed as a foundation for peace, sustainable development and respect for fundamental human rights. In addition to the existence of a legal structure, the rule of law entails equality before the law (Akanbi&Shehu, 2012). In simple terms, this means that people and corporations, irrespective of their status, are subject to the law of the land. Empirically, Kwabi, Boateng, &Adegbite (2018) provide evidence that strengthening institutional quality through improving the rule of law and controlling corruption leads to a reduction in the cost of capital at the country level. Furthermore, Shan, Lin, Li, & Zeng (2018) find a significant negative relationship between corruption as an institutional quality as a determinant of Chinese FDI in Africa. However, the researcher further shows that the preservation of the rule of law negatively influences the decision of Chinese FDI in Africa. Thus, the empirical evidence on the impact of institutional quality at the firm and national level is mixed. Therefore, the current study will further test the following hypothesis:

H_1: The effect of firm attributes on CSDC is strengthen with the rule of law.

Figure 2. Error! No text of specified style in document.



The above framework shows that the institutional quality of the model serves as a moderator. The new institutional theory uniquely shows how to nurture and maintain societal expectations that have been earned through the institutionalisation of rules and norms (Uwuigbe&Uadiale, 2011). The current study is designed to test the interaction effect of corruption control and rule of law on the relationship between firm characteristics (independent variable) and CSDC (dependent variable). The relationship is supported by the new institutional theory, which posits that organisations operate within the segment of the wider social structure (Campbell, 2007), and that this structure affects the behaviour and performance of an organisation.

3. Methodology

The current study is an exploratory study designed to identify the determinants of CSDC using a longitudinal data collected from listed companies in Nigeria. According to Collis and Hussey (2009), the population consists of all conceivable elements, respondents or observations relating to a particular phenomenon of interest to the researcher. For the purpose of this study, the population is made up of 170 (one hundred and seventy) companies as provided by SEC (2017). Furthermore, the element is considered as an individual

UNDER PEER REVIEW

member within a population (Sekaran&Bougie, 2016). The element in the current study is represented by each listed company in Nigeria.

The sample frame is a list containing all the elements from which the sample is drawn. The sample frame is closely related to the population in that it contains a complete list of the members of the population. Thus, the selection of sample size for this study is based on and supported by Krejcie and Morgan (1970). For the purpose of this study, a sample size of 118 (one hundred and eighteen) listed companies in Nigeria from different industries was selected. The sample was selected from different industries. Proportionate stratified sampling technique was used to select the various industries. The data used in this study covers a period between 2011 and 2017. The first mandatory corporate governance code was issued by Securities and Exchange Commission in the year 2011 (SEC, 2011), hence the choice of 2011 as the base year.

Models 1 to 5 respectively test the moderating effect of rule of law on the CSDC.

$$lcsdc_{it} = \alpha_0 + \beta_1 lliqd_{it} + \beta_2 indt_{it} + \beta_3 lleve_{it} + \beta_4 ltaxa_{it} + \beta_5 lfsize_{it} + \beta_6 lfage_{it} + \beta_7 lrlaw_t + \lambda_i + \varepsilon_{it} \quad (1)$$

$$lcsdc_{it} = \alpha_0 + \beta_1 lliqd_{it} + \beta_2 indt_{it} + \beta_3 lleve_{it} + \beta_4 ltaxa_{it} + \beta_5 lfsize_{it} + \beta_6 lfage_{it} + \beta_7 lrlaw_t + \beta_8 (lliqd_{it} \times lrlaw_t) + \lambda_i + \varepsilon_{it} \quad (2)$$

$$lcsdc_{it} = \alpha_0 + \beta_1 lliqd_{it} + \beta_2 indt_{it} + \beta_3 lleve_{it} + \beta_4 ltaxa_{it} + \beta_5 lfsize_{it} + \beta_6 lfage_{it} + \beta_7 lrlaw_t + \beta_8 (indt_{it} \times lrlaw_t) + \lambda_i + \varepsilon_{it} \quad (3)$$

$$lcsdc_{it} = \alpha_0 + \beta_1 lliqd_{it} + \beta_2 indt_{it} + \beta_3 lleve_{it} + \beta_4 ltaxa_{it} + \beta_5 lfsize_{it} + \beta_6 lfage_{it} + \beta_7 lrlaw_t + \beta_8 (lleve_{it} \times lrlaw_t) + \lambda_i + \varepsilon_{it} \quad (4)$$

$$lcsdc_{it} = \alpha_0 + \beta_1 lliqd_{it} + \beta_2 indt_{it} + \beta_3 lleve_{it} + \beta_4 ltaxa_{it} + \beta_5 lfsize_{it} + \beta_6 lfage_{it} + \beta_7 lrlaw_t + \beta_8 (ltaxa_{it} \times lrlaw_t) + \lambda_i + \varepsilon_{it} \quad (5)$$

3.1 Corporate Sustainability Disclosure Compliance

The current research objective is to examine the moderating effect of institutional quality in strengthening the impact of firm attributes on CSDC in Nigeria, using rule of law as a proxy as defined in Table 1. Eight different interaction variables were formulated between the firm attributes and the moderating variables. Specifically, the test for research model 1 to 5 is used to analyse the moderating effects of rule of law. The National Code of Corporate Governance was developed to mitigate cases of financial scandals, weak corporate governance practices and recent corporate failures in the country and also serves as a reference point for organisations in both the public and private sectors (SEC, 2016). The Committee was constituted by the Minister of Industry on 17 January 2013. Section 28 of the Code deals with sustainability issues related to social and environmental issues, which are to be complied with and disclosed in the annual report.

The CSDC is an unweighted index score of the CSDCit, with respect to company x. di = attribute analysis of a continuous variable that takes the value (1) if the dth item is disclosed by company i, in a given year, and zero (0) if not found. dj represents the maximum number of items a company can disclose, with a maximum of nine (9).

Table 1. Variable Definition.

Variables	Operational Definition	Source
Firm attributes		
Liquidity	Proportion of cash to Total Asset	Annual reports of sampled companies between 2011 to 2017
Industry Type	Dummy that takes on the value 1 for firms in the eight main industries: basic materials; oil and gas; industrial; customer goods; customer services; health care; technology and telecommunication and 0 for all other	"

UNDER PEER REVIEW

	industries	
Leverage	Computed as the ratio of book value of total debt to total assets	"
Taxation	Total amount of tax liability for the year.	"
Moderator		
Rule of Law	Rule of law index (-2.5 weak; 2.5 strong), normalise into percentage (%).	The Global Economy website
Control		
Firm size	Total asset (in million)	Annual reports of sampled companies between 2011 to 2017
Firm age	Natural log of the total number of years since a company was established	"

UNDER PEER REVIEW

4. Results and Discussions

In the current study,a series of panel regression models were developed to determine the moderating effect institutional quality on the relationship of firm attributes on CSDC. Regression model 1, discussed in the previous section,includes rule of law, which is the proxy to institutional quality without an interaction variable. However, interaction effects of rule of law with each firm attribute (liquidity, industry type, leverage and taxation) are presented in models 2 to 5 of Table 2.

4.1 Descriptive Statistics

Table 2 presents details of descriptive statistics for the CSDC (dependent variable), board attributes (independent variables), financial performance (moderating variables) and control variables. The CSDC expressed as a percentage, has a mean (standard deviation) of 66.49 (19.03). Liquidity (liqd) varies between -3.130 and 1342.029 with a mean of 19.347 and a standard deviation of 67.783. Industry type, denoted by 'indt', has a minimum value of 0 and a maximum value of 1, with a mean of 0.297 and a standard deviation of 0.457. Leverage (leve) ranges from 0.179 to 5448.298, with a standard deviation of 313.416 and a mean of 100.771. Taxation (taxa) ranges between -37569.3 and 85342, with a standard deviation of 6147.607 and a mean of 1647.233. The descriptive statistics for the control variables show that the average enterprise size is 275012.5 (million) and the minimum is 98 (million). The age of the sampled enterprises ranges from 1 to 94 years.

Table 2. Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Csdc	826	66.49	19.03	0	100
Liqd	826	19.347	67.783	-3.130	1342.029
Indt	826	0.297	0.457	0	1
Leve	826	100.771	313.416	0.179	5448.298
Taxa	826	1647.233	6147.607	-37569.3	85342
Rlaw	1*	29.057	2.054	26.4	32.6
Fsize	826	275012.5	810666.5	98	6800000
Fage	826	34.38	19.33	1	94

Country level data related to Nigeria

4.2 Diagnostic checks

Multicollinearity: A situation where two or more variables related to each other in a regression model, leading to a multicollinearity problem. The implication of having a multicollinearity problem results in one or more variable being neglected in the model. The standard errors and R square in the estimation may be overstated. Hence, according Gujarati & Porter (2009) where two or more variables are highly correlated in a regression model, it is crucial to drop one of the collinear variables to resolve the issue, accordingly.

Furthermore, the table presents the model estimates for the moderating effect of the rule of law as outlined in models 1 to 5. Based on the result, there is no evidence of the multicollinearity problem in model 1 as the VIF, test result shows a mean of 1.95. Conversely, correlation test for model 2 shows a mean vif of 594.51, with very strong relationship between liquidity (lliqd) and the interaction variable (liqd*rlaw), hence liquidity was excluded from the model. Similarly, there exists a multicollinearity problem in model 3, between industry type (indt) and interaction variable (indt*rlaw), revealing a very strong vif of 583.20, hence the problem led to Industry type being dropped from the model estimations. Furthermore, model 4 and 5 reveal a very strong correlation. Therefore, leverage and taxation were excluded from each model respectively, due to high levels of vif (mean of 589.72 for model 4 and 563.46 for model 5). Finally, a second test for multicollinearity reveal a mean vif of 1.95 (for model S8 to S11) as presented in Table 2.

Serial Correlation: Table 2 presents the Wooldridge test for autocorrelation in the panel. The results for moderating effect of rule of law show that all results of the Wooldridge test show a p-value greater than 0.05, providing evidence that the null hypothesis that the model is free of serial correlation is not rejected.

Heteroscedasticity: Wald test for group-wise heteroscedasticity was applied to verify that the residuals in model 1 to 5 were not correlated with the explanatory variables, and provided evidence of heteroscedasticity in all models ($p < 0.05$) based on the result (refer to Table 2). Hence, the robust standard errors were used in all models to correct the problem.

Test for Outlier: Prior to the model estimation, a test for outliers was conducted on models 1 to 5. The cook's distance test for outliers was employed to automatically identify and remove a set of outliers from the list. As a result, the number of observations decreased to 801, as indicated in table 4.

Table 3: Diagnostic test for the moderating effect of institutional quality models

		RULE OF LAW				
		Model 1	Model 2	Model 3	Model 4	Model 5
Diagnostic	Test	No interaction	lliqd*lrlaw	indt*lrlaw	lleve*lrlaw	ltaxa*lrlaw
Multoclinearity	Vif 1 (mean)	1.95	594.51	583.20	589.72	563.46
	Vif 2 (mean)	-	1.95	1.95	1.95	1.95
Serial correlation	Wooldridge test	Prob> F = 0.7715	Prob> F = 0.7753	Prob> F = 0.8062	Prob> F = 0.7715	Prob> F = 0.7719

UNDER PEER REVIEW

Heteroscedasticity	Modified Wald	Prob>chi2 = 0.0000	Prob>chi2 = 0.0000	Prob>chi2 = 0.0000	Prob>chi2 = 0.0000	Prob>chi2 = 0.0000

Table 4: Result for the moderating effect of rule of law

DV: lcsdc	Model 1	Model 2	Model 3	Model 4	Model 5
Indpendent Variables:	(RE)	(RE)	(RE)	(RE)	(RE)
Constant	1.395***	1.395***	1.410***	1.443***	1.399***
lliqd	0.0078	0.000	0.0078	0.0079	0.0078
indt	0.0484***	0.0484***	0.000	0.0484***	0.0484***
lleve	0.0274***	0.0274***	0.0274***	0.000	0.0274***
ltaxa	-0.0063	-0.0063	-0.0063	-0.0063	0.000
lfsize	0.0314***	0.0315***	0.0315***	0.0312***	0.0314***
lfage	0.0290	0.0289	0.0291	0.0291	0.0290
lrlaw	0.186**	0.186**	0.176**	0.154*	0.183**
lliqd*lrlaw		0.0052			
indt*lrlaw			0.0331***		
lleve*lrlaw				0.0185***	
ltaxa*lrlaw					-0.0044*
No. of obs.	801	801	801	801	801
R-sq	0.2693	0.2693	0.2693	0.2690	0.2694
Model fit	Wald chi2= 61.06***	Wald chi2 =61.12***	Wald chi2 = 61.04***	Wald chi2 = 60.60***	Wald chi2 = 61.07***
Breusch& Pagan	Prob> chibar2 =0.0000	Prob> chibar2= 0.0000	Prob> chibar2 = 0.0000	Prob>chibar2=0.0000	Prob> chibar2 =0.0000
Hausman	Prob>chi2 = 0.2351	Prob>chi2 = 0.2240	Prob>chi2 =0.3728	Prob>chi2 =0.2312	Prob>chi2 = 0.2373
SE	Robust	Robust	Robust	Robust	Robust

4.3 Regression Results for the Moderating Effect of Rule of Law

The panel regression model testing the moderating effect of the institutional quality is presented in Table 3, where the rule of law is considered as a proxy for institutional quality in the current research. Models 1 to 5 are designed to determine the moderating effect of the rule of law in strengthening the relationship of firm attributes on the level of corporate sustainability disclosure compliance (CSDC) in Nigeria. The interpretation of the regression result for model 3 and 5 shall be based on random effect (RE) model based on the Hausman test result (P-value >0.05), while model 2 and 4 shall be based on the fixed effect (FE) model. Moreover, the explanatory variable in each model is statistically significant (at the 1 % significance level) to explain the extend CSDC, which is evident from the model fit test (Chi square (X^2) and F statistics) results as presented in Table 3.

Model 1 in Table 3 estimates the direct influence of the independent variables on CSDC, and the result shows a positive influence (at the 5% level of significance) of the rule of law before the introduction of the interaction variable in the model. This suggests that a strong legal institution in a country is critical to CSDC. Using stepwise regression analysis, four (4) different interaction variables (lliqd*lrlaw, indt*lrlaw, lleve*lrlaw and ltaxa*lrlaw) were introduced in models 2 to 5 respectively. The moderating effect of the rule of law was tested using the interaction variables in the models. The interaction between liquidity and rule of law (model 2) shows a positive relationship with the dependent variable (CSDC), but the result is not statistically significant. Regarding the second interaction between industry type and rule of law (indt*lrlaw) presented in model 3 of Table 3. The random effects (RE) model shows that the interaction variable is statistically significant at 1%. The result implies that the twofold efforts to improve disclosure compliance in environmentally sensitive industries and effective rule of law strengthen the association between firm characteristics and CSDC in Nigeria.

UNDER PEER REVIEW

Also at the 1% significance level, the random effects results in model 4 show a significant and positive interaction between a firm's leverage and the rule of law (lleve*lrlaw). This suggests that a proportionate increase in the sources of debt financing for Nigerian firms and an improved rule of law significantly improves the level of corporate sustainability disclosure in Nigeria. The final interaction between taxation and the rule of law (ltaxa*lrlaw), included in Model 5, shows a negative relationship. The result is explained by the need for caution, as the result is significant at the 10% significance level, providing evidence for the moderating role of rule of law in strengthening the link of the effect of firm attributes on CSDC in Nigeria. Therefore, based on the static panel regression analysis above, the results show a number of statistically significant interactions of the firm as such the alternative hypothesis is hereby accepted, and thus conclude that institutional quality has significant moderating effect on the relationship between firm characteristics and CSDC.

Nigeria has consistently exhibited low levels of adherence to the rule of law throughout its history (The Global Economy, 2019). In systems characterized by weak institutions and low levels of trust, there is typically a lack of adherence to rules, regulations, and norms. Neo-institutional theory elucidates this phenomenon by highlighting the significance of the institutional context in influencing organizational behavior.

Neo-institutional theory suggests that organizations are impacted by the wider institutional framework, encompassing legal regulations, social conventions, and cultural expectations. Insufficient institutional framework leads to a lack of external pressures on enterprises, which in turn results in inadequate compliance with rules and low adherence to social and environmental standards. This theory posits that the quality of institutions, namely the robustness of the rule of law, has a substantial influence on the behavior and adherence of corporations to regulatory obligations.

The relationship between firm attributes (such as industry type, leverage, and taxation) and the rule of law in Nigeria highlights the necessity of enhancing the legal system to enhance CSDC. The neo-institutional theory posits that robust institutions establish a structure that motivates companies to conform their actions to meet social expectations and legal obligations. Ensuring this congruence is essential for improving adherence to social and environmental norms.

The results indicating that the quality of institutions influences the relationship between firm characteristics and CSDC are consistent with the assertions of neo-institutional theory. According to the idea, the amount of legislation and enforcement policy is determined by the industry in which a company operates. However, strong institutions are necessary for the successful implementation of these laws (Acemoglu et al., 2003). This assertion is substantiated by empirical research indicating that robust governmental institutions are necessary for ensuring adherence to legal, social, and environmental laws (Galinato&Chouinard, 2018).

Furthermore, a robust adherence to legal principles is seen as an essential condition for substantial development and stability in a nation (Shan et al., 2018). Robust legal structures guarantee that corporations are held accountable, resulting in enhanced compliance and improved practices in CSDC. The previous research conducted by Abuzayed& Al-Fayoumi (2016), Galinato&Chouinard (2018), Sathyamoorthy& Tang (2018), and Shan et al. (2018) supports the idea that institutional quality plays a significant role in promoting compliance and stimulating economic growth.

Ultimately, the utilization of neo-institutional theory in the Nigerian setting emphasizes the crucial requirement for well-established institutions, namely a resilient court system, to bolster regulatory adherence and enhance the effectiveness of the CSDC. Enhancing the enforcement of legal principles will create essential institutional incentives for companies to comply with social and environmental regulations, thus promoting sustainable development and economic expansion.

Nigeria has over the years recorded weak levels of rule of law (The Global Economy, 2019). Institutionally weak systems with low levels of trust lead to poor compliance with rules, regulations and codes. Therefore, the above interaction between business attributes (industry type, leverage and taxation) and rule of law provides evidence of the need to further strengthen the judicial system in Nigeria, which will inevitably improve the level of CSDC. The above findings are further supported by the New Institutional Theory, which argues that the level of legislation and enforcement policy depends mainly on the sector in which a firm operates. However, strong institutions facilitate the implementation of legislated rules and regulations set by the constituted authorities (Acemoglu et al., 2003).

The results on the moderating effect of the rule of law provide evidence that institutional quality moderates the impact of firm characteristics on CSDC. The above findings confirm the contention that compliance with legal social and environmental regulations requires strong government institutions (Galinato&Chouinard, 2018).Thus, rule of law through a strong legal system is considered a prerequisite for meaningful growth and stability of a country (Shan et al., 2018). Moreover, the findings are supported by previous studies on the role of institutional quality in straightening the level of compliance and economic growth (Abuzayed& Al-Fayoumi, 2016; Galinato&Chouinard, 2018; Sathyamoorthy& Tang, 2018; Shan et al., 2018).

5. Conclusion

The study deviated from common methodological designs by examining the moderating effect of institutional quality, particularly the rule of law, on corporate sustainability disclosure compliance. This approach provided a deeper understanding of how institutional factors, such as the rule of law, influence firm characteristics related to CSDC. The findings shed light on the interrelationship between different structures within the formal institutional environment and how a strong rule of law can influence firm behaviour in terms of sustainability disclosure compliance. The findings also provide important theoretical and empirical insights to support future studies. The fact that the findings further provide a deeper understanding of the interrelationship between various structures within the formal institutional environment and how actions within the larger institutions through corruption control and strong rule of law can influence corporate behaviour in the area of corporate sustainability disclosure compliance.

In addition, regulators and policymakers need to take action to improve the rule of law in Nigeria, particularly by strengthening the legal system. The study identified these factors as critical to sustaining the private sector in the country. Therefore, the authorities should develop mechanisms to improve transparency and justice in the system, as this is crucial to increase compliance with corporate sustainability disclosure. Furthermore, the findings of this research could also serve as empirical evidence to be used by policy makers such as the Nigerian SEC, CBN, FRCN in designing a mechanism to improve the financial performance and revenue generation of listed companies. If government at all levels designs policies aimed at promoting profitability of the private sector, such policies could invariably lead to a significant increase in the level of compliance with corporate disclosure requirements.

6. Implications

The study's focus on addressing gaps in the area of sustainability disclosure compliance in Nigeria is critical to advancing knowledge and filling gaps in the existing literature. By improving corporate sustainability compliance, companies can enhance their legitimacy and promote goal congruence among stakeholders, which ultimately benefits overall corporate performance and sustainability. The findings of the study suggest that regulators and policymakers should prioritise the adoption of policies aimed at improving institutional qualities in Nigeria, particularly by strengthening the legal system to ensure an effective rule of law. In addition, companies themselves can help improve compliance with sustainability disclosure requirements by engaging in more sustainable activities. This proactive approach can lead to higher levels of corporate sustainability disclosure compliance, thereby promoting transparency and accountability in the business environment. The study's contributions highlight the importance of regulatory interventions, firm-level actions and institutional improvements in promoting sustainability disclosure compliance in Nigeria. By addressing these issues, stakeholders can work towards improving the overall sustainability and performance of companies in the country.

7. Novelty, Limitations and Future Recommendations

Despite the significance of this research being the first attempt to test moderating role of rule of law within the context of CSDC, this study has a number of limitations. First, it is contextualized within Nigeria.

UNDER PEER REVIEW

Future researchers could improve generalizability by performing comparison studies in other African countries and focusing on both developed and developing nations. Second, the study's data ranged from 2011 to 2017; therefore, upgrading it to 2024 would provide more recent findings. Third, data gathering was based on annual reports; future research could benefit from using a variety of databases (Bloomberg, Asset4) and sources to conduct a more comprehensive study.

Disclaimer (Artificial intelligence)

Option 1:

Authors hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

UNDER PEER REVIEW

Reference

1. Abuzayed, B., & Al-Fayoumi, N. (2016). Bank concentration, institutional quality, and economic growth: Empirical evidence from MENA countries. *Review of International Business and Strategy*, *26*(2), 219–231. https://doi.org/10.1108/RIBS-01-2014-0008
2. Acemoglu, D., Johnson, S., Robinson, J., & Thaicharoen, Y. (2003). Institutional causes, macroeconomic symptoms: volatility, crises and growth. *Journal of Monetary Economics*, *50*, 49–123.
3. Akanbi, M. M., & Shehu, A. T. (2012). Rule of Law in Nigeria. *Journal of Law, Policy and Globalization*, *3*, 1–8.
4. Atwood, T. J., Drake, M. S., Myers, J. N., & Myers, L. A. (2012). Home country tax system characteristics and corporate tax avoidance: International evidence. *The Accounting Review*, *87*(6), 1831–1860.
5. Baldwin Jr, F. N., & Diperna, T. A. (2007). The rule of law: An essential component of the financial war against organized crime and terrorism in the Americas. *Journal of Financial Crime*, *14*(4), 405–437. https://doi.org/10.1108/13590790710828145
6. Bokpin, G. A., Mensah, Lord, & Asamoah, M. E. (2017). Legal source, institutional quality and FDI flows in Africa. *International Journal of Law and Management*, *59*(5), 687–698. https://doi.org/10.1108/IJLMA-03-2016-0028
7. Branco, M. C., & Matos, D. (2016). *The fight against corruption in Portugal : evidence from sustainability reports*. *23*(1), 132–142. https://doi.org/10.1108/JFC-05-2014-0027
8. Buettner, T., & Grimm, V. (2016). Taxation , social norms , and compliance : Research questions and results. *Journal of Economic Behavior & Organization*, *124*, 1–6. https://doi.org/10.1016/j.jebo.2016.02.004
9. Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, *32*(3), 948–967.
10. Collis, J., & Hussey, R. (2009). *Business research: a practical guide for undergraduate and post graduate students* (3rd ed.). Hampshire, England: Palgrave Macmillan Publishers Limited.
11. Dacin, M. T., Goodstein, J., & Scott, W. R. (2002). Institutional theory and institutional change: Introduction to the special research forum. *The Academy of Management Journal*, *45*(1), 43–56.
12. Deegan, C. (2002). Introduction: The legitimising effect of social and environmental disclosures – a theoretical foundation. In *Accounting, Auditing & Accountability Journal* (Vol. 15). https://doi.org/10.1108/09513570210435852
13. Deegan, C., & Sam kin, G. (2009). *New Zealand financial accounting*. Sydney, Australia: McGraw-Hill Companies, Inc.
14. Demaki, G. (2017). 2011 Securities and Exchange Commission code of corporate governance and performance of deposit money banks in Nigeria. *Journal of Economics, Management and Trade*, *18*(3), 1–11. https://doi.org/10.9734/JEMT/2017/31537
15. DiMaggio, P. J., & Powell, W. W. (1991). The New Institutionalism and Organizational Analysis. In *Chicago: University of Chicago Press*. https://doi.org/10.2307/258726
16. DiMaggio, P., & Powell, W. (1983). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160.
17. Ding, Y., Hope, O., Jeanjean, T., & Stolowy, H. (2007). Differences between domestic accounting standards and IAS: measurement, determinants and implications. *Journal of Accounting and Public Policy*, *26*(1), 1–38.
18. Eltaib, E. E., & Complete, A. (2012). *Environmental accounting disclosures of Australian oil and gas companies*. University of Wollongong.
19. Eze, J. C., Nweze, A. U., & Enekwe, C. I. (2016). The Effects of Environmental Accounting on a Developing Nation: Nigerian Experience. *European Journal of Accounting, Auditing and Finance Research*, *4*(1), 17–27. Retrieved from https://www.arabianjbmr.com/pdfs/NGJSD_VOL_5_5/2.pdf
20. Galinato, G. I., & Chouinard, H. H. (2018). Strategic interaction and institutional quality determinants of environmental regulations. *Resource and Energy Economics*, *53*, 114–132. https://doi.org/10.1016/j.reseneeco.2018.04.001

UNDER PEER REVIEW

21. Garas, S., & ElMassah, S. (2018). Corporate governance and corporate social responsibility disclosures. *Critical Perspectives on International Business*, *14*(2–26), cpoib-10-2016-0042. https://doi.org/10.1108/cpoib-10-2016-0042
22. Gujarati, D. N., & Porter, D. C. (2009). *Basic Econometrics* (5th ed.). New York: MacGraw.
23. Gutierrez, H. P., Hlaciuc, E., Mates, D., & Maciuca, G. (2016). Empirical study of financial disclosure compliance with IFRS: Evidence from listed Romanian companies. *Journal of Accounting and Auditing: Research & Practice*, *2016*(July), 11. https://doi.org/10.5171/2016.794159
24. Healy, P. M., & Serafeim, G. (2015). An analysis of firms' self-reported anticorruption efforts. *The Accounting Review*, *91*(2), 489–511.
25. Hearn, B. (2011). The impact of corporate governance measures on the performance of West African IPO firms. *Emerging Markets Review*, *12*(2), 130–151. https://doi.org/10.1016/j.ememar.2011.02.004
26. Hearn, B. (2014). The political institutional and firm governance determinants of liquidity: Evidence from North Africa and the Arab Spring. *Journal of International Financial Markets, Institutions and Money*, *31*(1), 127–158. https://doi.org/10.1016/j.intfin.2014.03.006
27. Hearn, B., & Piesse, J. (2013). Firm level governance and institutional determinants of liquidity: Evidence from Sub Saharan Africa. *International Review of Financial Analysis*, *28*, 93–111. https://doi.org/10.1016/j.irfa.2013.02.004
28. Howell, L. D. (2011). *International country risk guide methodology*. NY.: PRS Group, East Syracuse,.
29. Issa, A., & Alleyne, A. (2018). Corporate disclosure on anti-corruption practice. *Journal of Financial Crime*, *25*(4), 1077–1093. https://doi.org/10.1108/JFC-05-2017-0045
30. Krasniqi, B. A., & Mustafa, M. (2016). Small firm growth in a post-conflict environment: the role of human capital, institutional quality, and managerial capacities. *International Entrepreneurship and Management Journal*, *12*(4), 1165–1207. https://doi.org/10.1007/s11365-016-0384-9
31. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*(3), 607–610. https://doi.org/https://doi.org/10.1177/001316447003000308
32. Kwabi, F. O., Boateng, A., & Adegbite, E. (2018). The impact of stringent insider trading laws and institutional quality on cost of capital. *International Review of Financial Analysis*, *60*(June), 127–137. https://doi.org/10.1016/j.irfa.2018.07.011
33. Lasagni, A., Nifo, A., & Vecchione, G. (2015). Firm productivity and institutional quality: Evidence from italian industry. *Journal of Regional Science*, *55*(5), 774–800. https://doi.org/10.1111/jors.12203
34. Latif, R. A., Nisham, K., Mohd, T., Kamardin, H., Husna, A., & Ariff, M. (2023). Determinants of Sustainability Disclosure Quality among Plantation Companies in Malaysia. *Sustainability*, *15*, 1–23.
35. Lin, K. Z., Cheng, S., & Zhang, F. (2017). Corporate Social Responsibility, Institutional Environments, and Tax Avoidance: Evidence from a Subnational Comparison in China. *International Journal of Accounting*, *52*(4), 303–318. https://doi.org/10.1016/j.intacc.2017.11.002
36. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*, 340–363.
37. Powell, W. W. (1988). Institutional effects on organizational structure and performance. *Institutional Patterns AndOrganizations: Culture and Environment*, 115–136.
38. Reuters. (2008). Nigeria fines Cadbury unit for false accounting. Retrieved May 9, 2020, from https://www.reuters.com/article/cadbury-nigeria-sec/nigeria-fines-cadbury-unit-for-false-accounting-idUSL1181158820080411
39. ROSC. (2008). Report on the Observance of Standards and Codes.
40. Said, R. M., Sulaiman, M., & Ahmad, N. N. N. (2014). Environmental information usefulness to stakeholders : empirical evidence from Malaysia. *Social Responsibility Journal*, *10*(2), 348–363. https://doi.org/10.1108/SRJ-10-2012-0131
41. Sarhan, A. A., & Ntim, C. G. (2018). Firm- and country-level antecedents of corporate governance compliance and disclosure in MENA countries. *Managerial Auditing Journal*, *33*(6–7), 558–585. https://doi.org/10.1108/MAJ-10-2017-1688

UNDER PEER REVIEW

42. Sarkodie, S. A., & Adams, S. (2018). Renewable energy, nuclear energy, and environmental pollution: Accounting for political institutional quality in South Africa. *Science of the Total Environment*, *643*, 1590–1601. https://doi.org/10.1016/j.scitotenv.2018.06.320
43. Sathyamoorthy, V., & Tang, T. C. (2018). Institutional quality and export-led growth: an empirical study. *Journal of Economic Studies*, *45*(1), 193–208. https://doi.org/10.1108/JES-07-2016-0139
44. Scott, W. R. (2014). Institutions and Organizations. Ideas, Interests and Identities. *Management*, *17*(2), 136–140. https://doi.org/10.3917/mana.172.0136
45. SEC. (2011). *National Code of Corporate Governance 2011*. Retrieved from https://www.cscsnigeriaplc.com/documents/1118035/CODE OF CORPORATE GOVERNANCE.pdf%0A
46. SEC. (2018). Listed Cimpanies in Nigeria. Retrieved April 3, 2018, from http://www.nse.com.ng/Listings-site/listed-securities/listed-companies
47. Sekaran, U., & Bougie, R. (2016). *Research Methods for Business A Skill-Building Approach* (7th ed.). Retrieved from https://books.google.com.my/books?hl=en&lr=&id=Ko6bCgAAQBAJ&oi=fnd&pg=PA19&dq=sekaran&ots=2B6NS_PWqQ&sig=LJ--XjkzYapa6TVKao2mEuqS7cY&redir_esc=y#v=onepage&q=sekaran&f=false
48. Shan, S., Lin, Z., Li, Y., & Zeng, Y. (2018). Attracting Chinese FDI in Africa: The role of natural resources, market size and institutional quality. *Critical Perspectives on International Business*, *14*(2–3), 139–153. https://doi.org/10.1108/cpoib-11-2016-0055
49. The Global Economy. (2019). Business and economic data for 200 countries. Retrieved April 17, 2019, from https://www.theglobaleconomy.com/Nigeria/
50. Torgler, B. (2004). *Tax morale, trust and corruption: Empirical evidence from transition countries* (No. 2004–2005).
51. Trading Economics. (2020). Nigeria corruption rank. Retrieved from https://tradingeconomics.com/nigeria/corruption-rank
52. Tresierra, A. E., & Reyes, S. D. (2018). Effects of institutional quality and the development of the banking system on corporate debt. *Journal of Economics, Finance and Administrative Science*, *23*(44), 113–124. https://doi.org/10.1108/JEFAS-03-2017-0053
53. UN. (2017). *Corruption in Nigeria Bribery: public experience and response*. Retrieved from https://www.unodc.org/documents/data-and-analysis/Crime-statistics/Nigeria/Corruption_Nigeria_2017_07_31_web.pdf
54. UNDP. (2018). *2017 Global Programme Annual Report*. Retrieved from http://www.undp.org/content/dam/undp/library/Democratic Governance/Access to Justice and Rule of Law/AR2017/UNDP-2017-AnnualReport-14Aug_interactive-low-res.pdf
55. Uwuigbe, U., & Uadiale, O. M. (2011). Corporate Social and Environmental Disclosure in Nigeria : A Comparative Study of the Building Material and Brewery Industry. *International Journal of Business and Management*, *6*(2), 258–264. Retrieved from http://www.ccsenet.org/journal/index.php/ijbm/article/download/9263/6829
56. Villanueva-Villar, M., Rivo-López, E., & Lago-Peñas, S. (2016). On the relationship between corporate governance and value creation in an economic crisis: Empirical evidence for the Spanish case. *BRQ Business Research Quarterly*, *19*(4), 233–245. https://doi.org/10.1016/j.brq.2016.06.002
57. Williamson, O. E. (2000). The new institutional economics: taking stock, looking ahead. *Journal of Economic Literature*, 595–613.
58. Willmott, H. C. (2015). Why institutional theory cannot be critical. *Journal of Management Inquiry*, *24*(1), 105–111. https://doi.org/10.1177/1056492614545306
59. World Bank. (2018). Combating corruption. Retrieved November 20, 2018, from http://www.worldbank.org/en/topic/governance/brief/anti-corruption
60. World Justice Project. (2017). *Rule of Law Index 2017-2018*. https://doi.org/10.1111/j.1467-999X.1965.tb00328.x

UNDER PEER REVIEW

61. Ugbah , Andrew, A., Fidelis, U. Amahi, and Offor, Nkechi T. 2023. “Derivative Risk Information Disclosure Effect on Financial Reporting Quality Evidence from Selected Listed Deposit Money Banks in Nigeria”. Journal of Economics, Management and Trade 29 (11):1-11. https://doi.org/10.9734/jemt/2023/v29i111157.
62. Yunita ,Hesti. 2023. “Analysis of Financial Statement Preparation, Fiscal Reconciliation and Human Resources Competency on Corporate Income Tax of Sriwijaya Argo Sakti Company, Indonesia”. South Asian Journal of Social Studies and Economics 17 (3):43-52. https://doi.org/10.9734/sajsse/2023/v17i3640.
63. Subramanian S, Reddy VN. Corporate governance disclosures and international competitiveness: A study of Indian firms. Asian Business & Management. 2012 Apr 1;11:195-218.
64. Chan MC, Watson J, Woodliff D. Corporate governance quality and CSR disclosures. Journal of business ethics. 2014 Nov;125:59-73.

UNDER PEER REVIEW