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Article

Impact of Board Committee Characteristics on Social Sustainability Reporting in Sub-Saharan Africa: Moderating Role of Institutional Ownership

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Abstract: The corporate strategic planning of businesses in sub-Saharan Africa (SSA) largely focuses on immediate financial performances with minimal credence to social sustainability. Thus, studies on the linkage between corporate governance and sustainability reporting have focused on developed economies. This study therefore investigated the role of institutional ownership in the impact of board committee characteristics on social sustainability reporting. The study involved strongly balanced panel data with 1,969 observations of 275 publicly listed non-financial firms in SSA within the timeframe of 2012 to 2021. Data was analyzed using STATA 14.1. The hypotheses were tested using the two-step system of the generalized method of moment (GMM) using the Arellano-Bond dynamic panel-data estimation method. The rate of social sustainability reporting was 39.4%. Relatively, Mauritius and South African firms had the most effective board committee characteristics and higher levels of social sustainability reporting. Institutional ownership had no significant effect on social sustainability reporting. Institutional ownership moderated the effect of sustainability committee independence and sustainability committee gender diversity on social sustainability reporting negatively. The paper presents a new perspective on corporate governance and social sustainability literature by examining the effect of institutional ownership on board committee characteristics and social sustainability reporting in SSA.

Keywords: corporate governance; board committee; social sustainability reporting; sub-Saharan Africa (SSA)

1. Introduction

In many parts of the world, there is an increasing demand for sustainability reporting among stakeholders due to climate change, changing consumer preferences, and environmental accidents (Dienes et al. 2016). There is maximum growth in issues of sustainability reporting in the US, Europe, and Asia (Matta 2017). However, in the developing world, especially in sub-Saharan Africa, participation in sustainability reporting is a recent phenomenon (Adjin-Tettey et al. 2021). In every industry, sustainability has emerged as more and more crucial for businesses. 62% of business leaders believe that a sustainability strategy is essential for competitiveness today, and another 22% believe that it will be in the years to come (Haanaes 2016). In a survey conducted by McKinsey in February 2010, although companies actively managing sustainability are reaping the benefit of superior shared value, most companies fail to manage sustainability actively (Krechovská and Procházková 2014). In a nutshell, sustainability is a business strategy that considers an organization's operations in the ecological, social, and economic spheres in order to create long-term value. The foundation of

sustainability is the idea that creating these kinds of tactics encourages business their continued existence. Although sustainability reporting is persistently becoming prevalent in the developed world, its practice and embracement are still extremely low in developing countries, especially, among businesses in sub-Saharan Africa (Marquis and Qian 2014). The corporate strategic planning of businesses in SSA largely focuses on immediate financial performances with minimal credence to sustainability.

There are few studies on corporate governance and sustainability reporting in Sub-Saharan Africa (SSA), largely because of the low level of sustainability reporting among enterprises in the region as a result of the underdeveloped capital market. As a result, the majority of research on corporate governance and sustainability focuses mostly on companies in Western, industrialised countries like the USA, Canada, the UK, and Australia. (Tkachenko, Pervukhina and Sokolovskaya 2020; Dienes et al. 2016). It is not unexpected that these studies concentrate on industrialised countries, since an increasing number of governments in Europe and North America require sustainability reporting, particularly for certain kinds or sizes of firms. In Asia, developed or recently developed nations like China (Marquis and Qian 2014), Japan (Fukukawa and Moon 2004), and Pakistan (Sharif and Rashid 2014) have been the focus of the majority of sustainable development reporting research studies. Also, notwithstanding the increasing importance of sustainability in every aspect of human life and all sectors of the global economy, studies in sub-Sahara Africa on corporate governance have largely emphasized its relation with firm performance with limited emphasis on sustainability (Tilt et al. 2020). During their examination of sub-Saharan Africa's company sustainability reporting situation, Tilt et al. (2020), reported a struggling state. Also, notwithstanding the importance of institutional characteristics like ownership structure to the practice of corporate governance (Hashim, et al. 2015). There are few research on how ownership structure influences the relationship between corporate responsibility and sustainability.

The importance of institutional ownership to sustainability has been vital in business practice, regulations, and research since the 2008–2009 financial crises (Faller and zu Knyphausen-Aufseß 2018). With the perceived greater experience and resources of institutional block holdings, their level of influence on corporate strategies is relatively greater than the other forms of block holdings (Klettner 2021). Since the institutions are more cognizant of the public interest, they monitor the investment corporations' boards of directors and put pressure on leadership to step up corporate sustainability initiatives (Basse Mama and Mandaroux 2022). According to Kordsachia et al. (2021), the majority of sustainable investors who have signed the United Nations Principles for Responsible Investment (PRI) or comparable voluntary networks are institutional investors. Thus, in comparison to other kinds of equity ownership, organisational block holdings typically require more corporate sustainability information and efficient leadership tools, and they are likely to put pressure on management to improve their sustainability performance. Apart from the restricted focus of earlier research on the mitigating function of ownership arrangements, limited emphasis is particularly accorded to the role of institutional investment in moderating the influence of board committee characteristics on sustainability disclosure, particularly in sub-Saharan Africa. This study therefore investigated the moderating role of institutional block-holding ownership structure in the effect of the level of board committee characteristics of businesses in sub-Saharan Africa in the promotion of sustainability reporting. This research is important because it clarifies the necessity of sustainable information disclosure on the ownership and corporate governance structures in SSA.

2. Theoretical Underpinning and Hypothesis Development

The agency theory and the legitimacy theory are two of the main theories that guide this research. The agency hypothesis, which Jensen and Meckling (1976), established, proposed that conflicting of interest among a company's directors, shareholders, and key debt financing sources form the basis of a business's governance. According to agency theory, companies represent their shareholders' interests. In other words, when shareholders invest in corporate ownership, they are entrusting the administration of the corporation's directors and officers with their resources (Kumar et al. 2022). In larger companies, the interests of officers and stockholders in the short and long terms

can diverge dramatically. The short-term need for profits and the information asymmetry between officers and directors and shareholders are the main causes of this. Officers and directors may become disengaged from shareholder interests, and it is believed that this divide in interests affects their decisions and actions. Thus, it is believed that the agency conflict between management and shareholders results from the decentralisation of ownership as well as authority in the open financial system. According to the agency theory, corporate governance can lessen the principal-agent dilemma by establishing effective board committees with efficient and effective qualities. This could then result in a higher standard of sustainability reporting.

Additionally, as the legitimacy theory emphasises, corporate social responsibility carried out at the community level can help establish legitimacy, which in turn helps improve sustainability reporting. Within the subject of sustainability reporting research, legitimacy theory is one of the most well-established theoretical lenses of study (Montechia et al. 2016; Gavana et al. 2017). In the literature on social and environmental accounting, it has been the most often used theoretical framework for analysing the disclosure of social and environmental information (Crane and Glozer 2016). Although there is a considerable diversity of theoretical viewpoints, experts generally agree that the primary incentive for firms to reveal social information is the pursuit of legitimacy (Montechia et al. 2016). Suchman (1995), provided the most often cited and likely most common definition of legitimacy, which is defined as a generalised perception or presumptions that an entity's actions are desirable, proper, or appropriate within a socially constructed set of norms, values, beliefs, and definitions. The idea that a company should act in a way that society considers socially acceptable and that it is required to express such behaviour is one way that the legitimacy theory lens of analysis explains corporate social responsibility (CSR) and the reporting of it. This suggests that companies that seek societal approval must carry out certain community-based corporate social responsibilities. The effectiveness of a company's corporate social responsibility (CSR) efforts depends on the formation of robust board committees, especially corporate social committees that manage CSR strategy, execution, and reporting. Consequently, this means that in order to encourage a higher standard of socially sustainable reporting, institutional block holdings must establish board committees with the right qualities.

2.1. Hypotheses Development

2.1.1. Board Committee Characteristics and Sustainability Reporting

According to Boone, Field, Karpoff, and Raheja (2007), board committees are now a more official and regulated part of the board of directors in the corporate sector. In order to ensure that management decisions align with shareholder interests, the board of directors is expected to carry out oversight and monitoring responsibilities (Alhossini et al. 2021). Certain responsibilities, like risk management, audits, and compensation, may call for specialised knowledge. Boards began forming committees to assess key aspects of the businesses they run in this environment. Following the passage of the Sarbanes-Oxley Act (SOX) in 2002, the major stock exchanges, NASDAQ and NYSE, required that companies establish compensation, audit, nomination, governance, as well as compensation boards in addition to social, investment, executive officer, and financial committees (Bansal and Singh 2022). Nonetheless, it has been noted that established board committee qualities are important for the disclosure of sustainability (Subramaniam et al. 2017). Board committees should have no more than four members, as this is considered the optimal number for effective operation (Agyemang 2020). Additionally, it is advised that the audit committee have more than 50% of independent directors in order to strengthen the committee's independence (Saeed et al. 2022). A number of studies in the body of research on corporate governance have found a strong correlation between sustainability and the characteristics of the board committee (Ame et al. 2017). The board committees under discussion in this study's context were the audit and CSR/ESG committees. There has been discussion and conjecture on the attributes of these committees, including their size, independence, meetings, and gender diversity.

2.1.2. Board Committee Size and Sustainability Reporting

In general, a board committee of four members is considered sufficient for good sustainability reporting performance (Anyigbah et al. 2023). The existing literature acknowledges that the size of board committees influences the efficacy of the committees' functions in terms of sustainability reporting (Okere et al. 2021). Agyemang et al. (2020) found that the size of a company's board committees had a beneficial impact on social sustainability reporting. Rabi (2021) and Kumari et al. (2022) found that board committee size had a beneficial influence on sustainability disclosure. A larger board committee size is often interpreted as implying higher duty allocation, variety, and a lower level of burden, all of which improve stakeholder representation (Jizi et al. 2013). Thus, the larger the size of board committees, the higher the level of social sustainability reporting (Kumari et al. 2022). As a result, a larger board committee size is more representative of stakeholders (Jizi et al. 2016) and more aware and effective in meeting social duties (Kumari et al. 2022). As a result, higher board committee sizes are likely to be more closely related to social sustainability reporting. Based on this context, it is hypothesised that:

H1: *Board committee size is positively and significantly associated with SSR.*

2.1.3. Board Committee Independence and Sustainability Reporting

It is often known that having a larger proportion of independent directors effectively improves sustainability reporting by requiring a higher degree of monitoring management (Liao, et al. 2015). The amount of pressure on management to disclose sustainability rises exponentially when there is a greater percentage of independent directors on board committees (Shamil et al. 2014). It is common knowledge that independent directors are knowledgeable individuals who can oversee management, monitor it, and offer sage counsel and recommendations about social transparency (Khairiddine et al. 2020). According to Almaqtari et al. (2022), the body of existing literature indicates that board committee independence has a beneficial impact on sustainability reporting. A substantial favorable association between board independence and social reporting was also reported by Aliyu (2019). Greater board independence helps a company become more socially sustainable, and social performance and board independence have a strong and favourable relationship (Ortiz-de-Mandojana, et al. 2016). Additionally, a number of studies have shown a positive and significant correlation between the performance of social and corporate sustainability and the proportion of independent directors on board committees (Kumari et al. 2022). Independent directors are more likely than other members of the board committees to enforce a higher level of sustainability reporting (Ammer, et al. 2020). Accordingly, social sustainability reporting is more likely to be reported when board committees have higher representation from independent board directors. This study therefore hypothesizes that:

H2: *Board committee independence is positively and significantly associated with SSR*

2.1.4. Board Meetings and Sustainability Reporting

Effectiveness is indicated by a board committee meeting four times a year on average (Perego and Kolk 2012). Advocates of the agency theory viewpoint contend that increased board meeting frequency is linked to improved oversight and could, thus, have a favourable impact on the companies' disclosure of sustainability (Shamil et al. 2014). A key metric for assessing the level of executive oversight and board activity is the frequency of meetings (Ioana and Mariana 2014). Regular board meetings are seen to improve the board's engagement in company operations and motivate managers to take into account the interests of all parties involved, not just shareholders (Liu and Zang 2017). There is a claim that regular board meetings enhance supervision duties, which could have an effect on the calibre of corporate reporting (Karamanou and Vafeas 2005). According to Jizi et al. (2013), there is general agreement that holding regular board meetings improves coordination, communication, and agency expenses. Notwithstanding the reported importance of board committee meetings to the general performances of organizations, there is scanty empirical literature on the

linkage between board committee meetings and sustainability reporting, especially in sub-Saharan Africa. However, limited studies have largely reported a positive effect of board committee meetings on social sustainability reporting (Bansal and Singh 2022). In the study of 92 Indian software companies from 2011 to 2018, Bansal and Singh (2022) reported that board meetings increase the level of social sustainability reporting. Based on the reviewed literature, this study hypothesizes that:

H3: *Board committee meetings positively and significantly affect SSR*

2.1.5. Gender Diversity and Sustainability Reporting

Gender diversity on boards is a notion that has garnered attention from academics and corporations alike, as it is believed to improve the effectiveness of boards in good governance. Additionally, research examining the correlation between gender diversity and reporting on sustainability revealed a favourable link (Katmon et al. 2017). According to this research, gender diversity has a major impact on sustainability disclosures, demonstrating the value of female directors to companies (Tilt et al. 2021). Because women's perspectives differ from men's, gender diversity therefore promotes balanced decision-making (Bakar et al. 2019). Moreover, women are known to support rational decisions that could enhance the sustainability strategies and, as a result, the sustainability reporting of the organisations (Al-Shaer and Zaman, 2016; Bakar et al. 2019). According to Al-Shaer and Zaman (2016), female directors exhibit better sensitivity to sustainability concerns, generosity towards problems in the community, and stakeholder orientation as they pay greater consideration for the environment. According to research by Al-Shaer and Zaman (2016), gender diversity on boards improves social sustainability reporting in the United Kingdom. According to earlier research, there is a strong positive correlation between board gender diversity and social sustainability reporting (Harjoto et al. 2015; Ibrahim and Hanefah, 2016; et al. 2013; Malaysia). This study makes the following assumptions based on the body of existing literature demonstrating the relevance of female directors from the standpoint of legitimacy theory:

H4: *Board gender diversity in committees positively and significantly affects SSR*

2.1.6. Institutional Ownership as a Moderator

The percentage of a company's accessible shares held by endowments, mutual or pension funds, insurers, investment firms, private foundations, or other sizable organisations that look after other people's money is known as institutional ownership (Ismail et al. 2020). Numerous scholars have examined institutional investors' function as watchdogs over corporations. The reason for this is the high expense of monitoring; only substantial shareholders, such institutional investors, can profit sufficiently to warrant the need for monitoring (Grossman and Hart 1980). Compared to board members, who might have little to no capital invested in the company, significant shareholders might have greater motivation to keep an eye on managers. In addition, big institutional investors possess the chance, means, and capacity to oversee, control, and sway managers (Shleifer and Vishny 1986). According to Smith (1996), Del Guercio and Hawkins (1999), and other researchers, managers may become more focused on the company's accomplishments as a result of institutional investors' monitoring of the company, rather than on opportunistic or self-interested behaviour. An institutional owner may be able to keep a close eye on management and push them to reveal additional information, including social information, according to the agency theory (Ntim et al. 2013). The more influential qualities of an institutional owner have an impact on the board's decision-making from a social standpoint, as any opposition to such a perspective may destroy opportunities for firms to invest and increase operating expenses, as demonstrated by the BP oil spill in the Gulf of Mexico in 2010 and the Exxon oil spill in 1989 (de Villiers et al. 2011). According to Faller and Zu Knyphausen-Aufseß (2016), institutional investors have the ability to select directors who possess experience and a strong resource base. These directors will be more receptive to the organization's strategic choices about its social policies and strategies. The conversations thus imply that the degree

of institutional ownership in a company determines the extent to which board committee attributes impact the quality of social sustainability reporting (ESR). As a result, this research suggests that:

H5: *IO moderates the link between board committee characteristics and SSR*

3. Materials and Methods

3.1. Data Set and Source

The study population comprises all non-financial firms listed on the Stock Exchanges of sub-Saharan African countries as of 31 December 2021. The inherent nature of the data gives rise to a panel data framework, characterized by both time-series and cross-sectional dimensions. The final dataset used in this study was manually extracted listed companies from Nigeria, Ghana, Kenya, South Africa, Zimbabwe, and Mauritius as of 31 December 2021. The selection of these countries and the years selected were driven by the availability of the requisite data. There were three critical conditions that the firms met before they were included in the sample. First, the firm should have issued a report and have all the required data from 2012-2021. Second, the firm should have been listed on the stock exchange from the selected countries. Third, the issued report should be written in English language. Firm that did not meet the above criteria were excluded from the sample. Finally, 197 firms from the six selected countries were included in the study.

3.2. Model Specification

Multiple periods across a multiplicity of firms provided characterized the paper. Thus, the paper relies on paneled data for the analysis. This form of data permits the modeling of variations in the behavior of different firms over time. The general regression model defining the relationship between the independent variable, the assumed moderator, control variables (firm-specific characteristics), and the dependent is shown in Equation 1.

$$Y_{it} = \beta_0 + \sum_{n=1}^k \beta X_{it} + \sum_{n=1}^k \beta v_{it} + \sum_{n=1}^k \beta \psi_{it} + \mu_{it} \quad \text{Equation (1)}$$

Where;

Y_{it}	=	Social sustainability Reporting of the i th firm at time period t
β_0	=	Intercept
X_{it}	=	firm-specific characteristics of i th firm at time period t
v_{it}	=	board committee characteristics of i th firm at time period t
Ψ_{it}	=	Institutional Ownership of i th firm at time period t
B	=	coefficient of the independent variables
μ_{it}	=	error or the disturbance term
$n = 1, \dots, k$	=	from the first variable to the k th variable
$i = 1, 2, 3, \dots, N$	=	firm index or the cross-sectional dimension
$t = 1, 2, 3, \dots, N$	=	times series dimension

This study employed the generalized moment method (GMM) estimation technique. This method is designed for data with a 'small' T , and large N panels (Phillips 2019), a condition met by the data of this study as there are few periods ($T = 10$) and many individuals ($N = 667$ listed non-financial firms). Due to their correlation with potential current and historical errors, the independent variables are not strictly exogenous. Resolving the fixed individual effect problems in the existing data also requires addressing the large number of individual-specific factors. In panel data, there are additional issues with autocorrelation and heteroscedasticity inside individuals but not between them; and hence the need to employ a more robust method like the GMM estimation method. GMM is built on two sets of equations. These sets of equations are the original equation (2) and the

transformed equation (3). GMM system uses both the first differencing transformed equation and the level equation.

$$\begin{aligned} SSR_{it} = & \delta SSR_{it-1} + \beta_1 MBV_{it} + \beta_2 DTA_{it} + \beta_3 AUDSize_{it} + \beta_4 AUCIndep_{it} + \beta_5 AUDMeet_{it} \\ & + \beta_6 Csrsize_{it} + \beta_7 Scind_{it} + \beta_8 Csrbmt_{it} + \beta_9 Scgd_{it} + \beta_{10} INST_{it} + \sigma_i + \mu_{it} \end{aligned} \quad \text{Equation (2)}$$

The deduced original equation (2), or level, is assumed to be a random walk model with a persistent dependent variable. Thus, equation (2) is expressed in level form with first differences (FDs) as instruments. In this equation, the introduced lag dependent (SSR_{it-1}) is assumed to correlate with the fixed effect (σ_i), or the unobserved specific individual characteristics and the error term (μ_i). Individual-specific patterns of heteroskedasticity and serial correlation may be present in the idiosyncratic disturbances (those that are not related to the fixed effects) (Roodman, 2009). The problem of correlation between the fixed effect and the lag dependent is resolved through the first differencing GMM. However, considering the evaluation of the moderation concept, Equations 3, 4, 5, and 6 were developed in line with the first differentiation.

$$\begin{aligned} SSR_{it} - SSR_{it-1} = & SSR_{it-1} - SSR_{it-2} + \beta_1 MBV_{it} - MBV_{it-1} + \beta_2 DTA_{it} - DTA_{it-1} \\ & + \beta_3 AUDSize_{it} - AUDSize_{it-1} + \beta_4 AUCIndep_{it} - AUCIndep_{it-1} + \\ & \beta_5 AUDMeet_{it} - AUDMeet_{it-1} + \beta_6 Csrsize_{it} - Csrsize_{it-1} + \beta_7 Scind_{it} - Scind_{it-1} \\ & + \beta_8 Csrbmt_{it} - Csrbmt_{it-1} + \beta_9 Scgd_{it} - Scgd_{it-1} + \beta_{10} INST_{it} - INST_{it-1} + \sigma_i - \sigma_{i-1} + Interactions + \mu_{it} - \mu_{it-1} \end{aligned} \quad \text{Equation (3)}$$

The first differencing is achieved by transforming the original equation (2). Consequently, levels are used as instruments in the FD form of equation (3). Hence, system GMM uses more instruments than FD GMM. The differencing eliminates the fixed effect (σ_i) as this component does not vary over time. In estimating, unlike the FD GMM, the differential and level equations are both used by the GMM system. Heteroscedasticity and serial autocorrelation are present when the Windmeijer standard error option is used (Windmeijer 2005). Not to mention, the standard system GMM estimator employs both the levels and differenced data. Instead, if and just if the instrument's requirement in the theorem is met, system GMM estimates can use the levels data and forward orthogonal deviations (Phillips 2019). Notwithstanding the elimination of the fixed effect, due to the lag in the dependent variable, there is still a chance that it will be endogenous. (SSR_{it-1}) in equation (3) in the term $SSR_{it-1} = SSR_{it-1} - SSR_{it-2}$ could correlate with the μ_{it} in the term $\Delta \mu_{it} = \mu_{it} - \mu_{it-1}$. The predefined variables in equation (3), which are not necessarily exogenous, have the potential to become endogenous due to their potential relationship with μ_{it-1} . Hence, unlike the mean-deviation transformation, larger lags of the regressors stay orthogonal to the error and available as instruments (Bover and Arellano 1995).

It subtracts the means of all upcoming accessible observations of a variable, as an alternative to subtracting the previous observation from the concurrent observations. Because it is computable for all observations, with the exception of the last for each individual, regardless of the number of gaps, this second transformation minimises data loss. Lagged observations are confirmed as instruments but do not enter the equation in forward orthogonal transformation. A number of GMM tests in dynamic data models are carried out to guarantee effective and reliable estimators of the system GMM. Among these tests are the Arellano-Bond test of serial correlation; the Sargan/Hansen test of over-identification restrictions; and the differences in the Sargan/Hansen test of exogeneity (Roodman 2009). The first serial correlation tests the appropriateness of the data for the dynamic model, whereas the second serial correlation tests the goodness of the lag dependent as an instrument. A test for the validity of the instruments is the Sargan/Hansen test of over-identification constraints. Checking for exogenous subsets of instruments in the level's equations is another function of the Sargan/Hansen test of exogeneity. These steps are necessary to justify adopting the system GMM and the 2SLS estimation methods.

4. Results

4.1. Board Committee Characteristics

Table 1 show that the average size of the audit committees (Acsiz) of the listed SSA businesses was 4.6 members. Listed businesses in Nigeria have the highest audit committee size of 5.5 members whereas Ghanaian listed businesses have the lowest audit committee size of 3.7 members. The only country with listed firms that failed to adhere to the recommended audit committee size of 4 members was Nigeria. With a 95.1 percent average, the listed businesses in Mauritius have the highest audit committee independence (Acind), and Nigerian listed businesses with 52.2 percent have the lowest audit committee independence. The audit committees were characteristically independent as about 81 percent of 100 of the members were independent directors. The average annual number of meetings of the audit committees of the listed SSA businesses was 4 times. Listed businesses in Mauritius have the highest audit committee meetings (Acmt) of 4.8 times annually relative to the lowest of 3.5 times in Ghana.

Table 1 demonstrates that social sustainability and corporate social responsibility governance committees are absent from listed companies in Ghana and Nigeria. In South Africa, there is a greater prevalence of listed companies with social sustainability and CSR committees.

Table 1. Board committee characteristics of sub-Saharan Africa.

Country	Audsize	Aucindep (%)	Audmeet	csrsiz	Scind (%)	Scgd (%)	Csrbmt
Ghana	3.7(1.1)	90.7(14.4)	3.5(.7)	0	0	0	0
Kenya	4.3(1.3)	95.6(12.4)	4.4(1.8)	0.0(0.5)	0.6(7.3)	0.3(2.9)	0.0(0.4)
Mauritius	3.8(1.2)	95.1(14.4)	4.8(1.4)	0.1(4.0)	0.5(4.0)	0.0	0.0(0.2)
Nigeria	5.5(1.0)	52.2(19.2)	3.9(0.9)	0.0	0.0	0.0	0.0
South Africa	4.4(1.7)	90.6(19.0)	3.9(1.5)	3.5(2.1)	46.5(34.6)	18.8(22.3)	2.0(1.5)
Zimbabwe	3.9(1.2)	88.8(17.9)	3.6(1.2)	0.3(1.1)	1.8(9.1)	5.8(22.9)	0.1(0.5)
Total	4. 6(1.5)	81.2(24.9)	4.0(1.3)	1.6(2.2)	20.8(32.6)	8.9(18.8)	0.9(1.3)

Variables: audit committees (Acsiz), audit committee independence (Acind), audit committee meetings (Acmt), CSR/ESG sustainability board committee (Csrsiz), sustainability committee (Scind), sustainability committee gender diversity (Scgd), CSR/ESG sustainability board meeting (Csrbmt). Source: Extracted from Blay, (2024).

4.2. Social Sustainability Reporting of Sub-Saharan African Businesses

Table 2 shows the percentage of all social measurement items like community, health and safety, donation and gift, data protection and privacy, human rights, customer and complaints, educational sponsorship, public health sponsorship, and others disclosed or reported by sub-Saharan African businesses listed on the stock market is about 39 percent. The listed businesses that reported the highest proportion of their social disclosure measured items were Mauritius and South Africa. With 51.3 percent and 49 percent of social sustainability disclosure in Mauritius and South Africa respectively, these two countries have the highest level of social sustainability disclosure practices relative to Ghana, Kenya, and Nigeria. The high level of social sustainability reporting in these countries could be attributed to the mandatory measures instituted in these countries. For instance, the higher sustainability disclosure of South African listed firms could be attributed to the instituted mandatory reporting measure in the form of the King Reports on Corporate Governance and the B-BEE legislation in the country (Wachira and Berndt 2019). Although all the sub-Saharan African countries considered in this study have some form of regulation that both explicitly and implicitly encourage the issuance of sustainability disclosures, there are variations in the application of the regulations (Wachira and Mathuva 2022). There is evidence of the high level of mandatory

sustainability reporting demands in South Africa and Mauritius relative to the other countries (Wachira and Berndt 2019).

Table 2. Social sustainability reporting.

Country	Mean (%)	Std. Dev.
Ghana	21.9	26.2
Kenya	26.6	18.9
Mauritius	51.3	17.5
Nigeria	30.9	15.8
South Africa	49.0	23.5
Zimbabwe	30.2	25.5
Total	39.4	23.6

Note: Results are mean/averages plus or minus standard deviations. Source: Extracted from Blay, (2024).

4.3. Board Committee Characteristics and Social Sustainability Reporting

The GMM model was utilized to test the developed hypotheses related to board committee characteristics, institutional ownership, and social sustainability disclosure of sub-Saharan African businesses listed on the stock market. The considered dependent variable was social sustainability disclosure. The independent variable and the moderating variable were board committee characteristics and institutional ownership respectively. To test the developed hypotheses, the two-step system of the generalized method of moment (GMM) using xtabond2 in STATA 14.1. A strongly balanced panel data with 1,969 observations of 275 groups within the timeframe of 2012 to 2021 was modeled using the Arellano-Bond dynamic panel-data estimation method. In the estimated model, the utilized instrumental variables included Market to Book Value (Mbv) and Debt to Asset (DTA). The GMM type or conditions of estimation were no-levels, no-diffsargan, robust, two-step, and small. The results of the Arellano-Bond dynamic panel-data estimation two-step system GMM are presented in Table 3. The hierarchical regression modeling method involving three models was utilized in testing the moderation concept.

Table 3. Dynamic panel-data estimation, two-step difference GMM.

Social	Model 1	Model 2	Model 3
Controls			
Social (L1.)	.436(.043)***	.428(.044)***	.416(.043)***
Mbv	.002(.005)	.002(.005)	.001(.005)
Dta	.010(.023)	.005(.023)	.007(.022)
Independent			
AUDSize	1.078(.416)**	1.207(.437)***	2.492(1.23)**
AUCIndep	.067(.029)**	.078(.031)**	.097(.075)
AUDMeet	.944(.285)***	1.169(.417)***	1.615(1.51)
Csrsz	.354(.981)	.406(.970)	2.347(1.19)**
Scind	.009(.035)	.009(.036)	-.182(.082)**
Scgd	.007(.054)	.008(.053)	.333(.146)**
Csrbmt	-.246(.834)	-.201(.825)	.657(1.58)
Moderator			
Blkinsown		.001(.037)	.303(.242)

Interactions

AUDsize × INST			-.027(.024)
AUCIndep × INST			-.001(.002)
AUDMeet × INST			-.007(.029)
csrsize × INST			-.041(.026)
scind × INST			.004(.002)**
scgd × INST			-.006(.003)**
csrbmt × INST			-.023(.038)
<hr/>			
Number of obs	1957	1934	1934
Number of instruments	370	370	370
F-Statistics	13.66	10.56	9.45
Prob > F	0.000	0.000	0.000
AR(2) in first difference	z = 2.86, P=0.004	z = 2.89, P=0.004	z = 2.82, P=0.005
Sargan test	χ ² = 408, P=.041	χ ² = 413, P=.024	χ ² = 389, P=.086

Note: Standard Errors in the Parentheses, *** and ** denotes significance at 1%(0.001) and 5%(0.05) respectively. **Control variables:** Market-to-Book Value (Mbv) and Debt-to-Asset Ratio (Dta); **Independent Variables:** audit committees (Acsize), audit committee independence (Acind), audit committee meetings (Acmt), CSR/ESG sustainability board committee (Csrsize), sustainability committee (Scind), sustainability committee gender diversity (Scgd), CSR/ESG sustainability board meeting (Csrbmt); **Moderating Variables:** Block Institutional Ownership (Blkinsown); **Dependent Variable:** Social Sustainability Disclosure (Sodisclos). Source: Extracted from Blay (2024).

Model 1 in Table 3 demonstrates that the audit committee size (AUDSize) is positively and significantly correlated with the degree of social sustainability disclosure ($\beta=1.078$, $P<.05$) in the absence of ownership considerations for the listed enterprises. Therefore, there is a correlation between the extent of sustainability disclosure or reporting and the membership size of audit committees of publicly traded companies in sub-Saharan Africa. Also, without the consideration of ownership of the listed businesses, the audit committee independence (AUCIndep) is positively and significantly associated with the level of social sustainability disclosure ($\beta=.067$, $P<.05$). Thus, a higher degree of independence of the audit committees of publicly listed businesses in sub-Saharan Africa is associated with increasing level of sustainability disclosure or reporting. With no particular consideration to ownership of the listed businesses, the amount of social sustainability disclosure is positively and strongly correlated with the number of audit committee meetings (AUDMeet) held each year ($\beta=.944$, $P<.01$). Thus, increasing number of meetings held by the audit committees of publicly listed businesses in sub-Saharan Africa is associated with increasing level of sustainability disclosure or reporting.

Model 2 of Table 3 further revealed that the audit committee features of publicly traded institutional block-holding companies are positively and significantly related to the amount of social sustainability disclosure. Model 2 indicates a positive and substantial correlation ($\beta=1.207$, $P<.01$) between institutional block holding firms' audit committee size (AUDSize) and their level of social sustainability disclosure. The degree of social sustainability disclosure is positively and strongly correlated with the audit committee independence (AUCIndep) of institutional block holding companies ($\beta=.078$, $P<.05$). Additionally, there is a positive and substantial correlation ($\beta=1.167$, $P<.01$) between the total number of audit committee meetings (AUD Meet) held by institutional block holding corporations and the level of social sustainability disclosure. Model 2 makes clear that companies classified as institutional block holders have a comparatively larger marginal influence on sustainability reporting or disclosure due to the features of the audit committees of publicly traded companies.

Additionally, Model 3 of Table 3 demonstrated that the audit committee size (AUD Size) is positively and significantly correlated with the degree of social sustainability disclosure in the presence of the moderator and interactions ($\beta=2.492$, $P<.05$). Additionally, model 3 demonstrated a positive and substantial correlation between the size of the CSR/ESG sustainability board committee (Csrsize) and the degree of social sustainability disclosure ($\beta=2.347$, $P<.05$). Model 3 further demonstrated a positive and substantial correlation ($\beta=.333$, $P<.05$) between the level of social sustainability disclosure and the gender diversity of the sustainability committee (Scgd). Model 3 revealed that the amount of social sustainability disclosure is significantly and adversely correlated with the independence of the sustainability committee (Scind) in the presence of the moderator and interactions ($\beta=-.182$, $P<.05$). Model 3 showed that institutional block holding significantly and positively moderates the effect of sustainability committee independence (Scind) on the level of social sustainability disclosure ($\beta=.004$, $P<.05$). Also, institutional block holding significantly and negatively moderates the effect of sustainability committee gender diversity (Scgd) on the level of social sustainability disclosure ($\beta=-.006$, $P<.05$).

5. Discussion and Implications

Although there is an increasing concern and stakeholder interest in sustainability reporting, the level of sustainability reporting as envisaged in the extant literature is still limited. Thus, the evidence from this study shows that the social sustainability reporting level of 39.4 percent in sub-Saharan African businesses is still low since is far below 53.5 percent in developed countries (Bhatia and Makkar 2020). In developed countries, sustainability reporting is mandatory and required by regulations and legislature (Wachira and Mathuva 2022). South Africa and Mauritius seemingly stand above the rest of the sub-Saharan African countries in terms of social sustainability reporting due to the mandatory requirement, and the existence of strong regulations in these countries like the developed countries (Wachira and Mathuva 2022). According to Tankiso (2014), listed South African corporations are required by the Johannesburg Stock Exchange (JSE) to generate an integrated report that combines environmental, social, and economic disclosures into a single, all-inclusive document. However, the practice of sustainability reporting is optional and not standardised or controlled at the national level in other nations, such as Ghana, Nigeria, Zimbabwe, and Kenya (Wachira and Berndt 2019), and as a result, it is relatively low. Aside from the fact that sustainability reporting is optional in most of sub-Saharan Africa, many publicly traded companies in the region have inadequately characterised board committees because many of them don't even have sustainability committees at all.

The characterized audit and sustainability committee sizes of the publicly listed businesses were positively and significantly associated with social sustainability reporting. These findings suggest that the effective and efficient size of both audit and sustainability committees of publicly listed businesses is associated with a higher level of social sustainability reporting. These results corroborate the hypothesised (H1) favourable and noteworthy impact of board committee size on social sustainability reporting in sub-Saharan Africa. This result confirms previous research showing that board committee size affects how well the committees do their duties in terms of sustainability reporting (Okere, et al. 2021). The size of the board committees of companies was reported in the study of Agyemang et al. (2020) to positively influence social sustainability reporting. The research conducted by Rabi (2021) and Kumari et al. (2022) underscored the beneficial impact of board committee size on sustainability disclosure. The main explanation is that a larger board committee size results in a higher degree of duty allocation, variety, and a lower level of burden, all of which improve stakeholder participation (Jizi, et al. 2013). Consequently, a larger board committee size is more effective and mindful of its social duties (Kumari et al. 2022). It is also more representative of stakeholders (Jizi et al. 2016). Social sustainability reporting was favourably and strongly correlated with the gender diversity of the sustainability committees of the listed companies. This implies that increasing diversity of the gender of the corporate social sustainability committee of the listed businesses is associated with an increasing level of social sustainability reporting. This finding

supports the hypothesis (H4) that board committees' gender diversity positively and significantly affects social sustainability reporting.

Numerous studies in the body of existing literature corroborate this conclusion, commenting similarly on the favourable and noteworthy impacts of gender diversity on board committees on social sustainability reporting (Katmon et al. 2017). According to Tilt et al. (2021), these studies demonstrate the importance of female directors in the corporate world. Because women's perspectives differ from men's, gender diversity therefore promotes balanced decision-making (Bakar et al. 2019). Furthermore, women have a reputation for endorsing sensible choices that might improve the companies' sustainability strategies and, consequently, sustainability reporting (Al-Shaer and Zaman 2016; Bakar et al. 2019). However, social sustainability reporting was adversely and significantly correlated with the corporate social responsibility committee's independence. This suggests that a higher level of independence of the corporate social sustainability committee is associated with a decreasing level of social sustainability reporting. This finding therefore contradicts the hypothesis (H2) that board committee independence is positively and significantly associated with social sustainability reporting. This result also runs counter to the body of research that shows board committee independence has a favourable and substantial impact on social sustainability reporting (Almaqtari, et al. 2022). According to this research, the corporate social sustainability committees' strategic and business decisions are not always impacted by the participation of independent directors.

The discussions suggest that some major characteristics of the board committees of institutional block-holding firms listed in sub-Saharan Africa significantly matter to the degree of social sustainability reporting. Although the characteristics of the firms as institutional block holding do not significantly matter, institutional block holding characteristics of the firms moderated the significant effect of corporate social sustainability committee independence and gender diversity on social sustainability reporting in sub-Saharan Africa. This suggests that in larger institutional investment firms, a higher level of corporate social committee independence is associated with more social sustainability reporting, whereas a higher different level of gender diversity is affiliated with less social sustainability reporting.

6. Conclusions

The social sustainability reporting of 39 percent is relatively lower than the 53.5 percent in developed countries (Bhatia and Makkar 2020). Except in South Africa, social sustainability reporting is largely voluntary, unstandardized, or unregulated at the national level in sub-Saharan Africa. This finding implies that all stock exchanges in the sub-Saharan African region should follow the South African example by also making the production of comprehensive integrated sustainability report that incorporates social, economic, and environmental information. Policymakers like legislative bodies in sub-Saharan Africa can standardize, regulate, and mandate comprehensive sustainability reporting in sub-Saharan Africa.

In sub-Saharan Africa, some traits of the board committees of publicly traded companies are critical to the degree of sustainability reporting or disclosure. Effective audit committee size, corporate social committee size, and independence have the potency to enhance or stimulate a higher level of social sustainability reporting. This implies that the regulatory bodies and policy makers should therefore ensure that all publicly listed firms have an efficient membership size of 4 and also at least an independent member to seek the interest of the public. The establishment of independent board committees with gender diversity is particularly important in institutional investment firms, since institutional shareholding moderates the effect of corporate social committee independence and gender diversity on social sustainability reporting. The regulatory bodies should also ensure that all publicly listed firms have established corporate social committees to design and implement corporate sustainability strategies, including social sustainability reporting.

7. Limitations and Areas for further Studies

With the reliance of the study on secondary and predetermined data, the researchers' selection of variables was limited or defined by the primary source of the study. The limitation of the researcher to the variables defined by the primary source of the data led to the exclusion of nomination committee characteristics as corporate governance characteristics. Additionally, this study was restricted to sub-Saharan African nations whose companies had stock market listings between 2012 and 2019. This suggests that the study did not include any sub-Saharan African nations with stock markets or those that created their stock markets after 2019. Notwithstanding that there are many countries in sub-Saharan Africa with young stock exchanges or without stock exchanges, the emphasis of this study on publicly listed businesses implies that the defined scope is representation enough to produce significant and representative findings.

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