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# GREEN BOARD COMMITTEE AND PROFITABILITY OF PUBLICLY TRADED OIL AND GAS COMPANIES IN NIGERIA

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## Abstract

The goal of this study was to provide a conceptual framework that illustrates the interdependence of the green board committee's financial performance and that of Nigeria's publicly traded oil and gas companies. The fundamental idea supporting the link between the green board committee and business performance is supported by agency and stakeholder theories. Based on a resource-based view theory, the moderating function of intellectual capital (IC) was presented in the entangled link between green board committees and business performance. The "green board committee index" is a new measurement index that this study suggests be used to gauge an organization's green operations. The four components of this index are sustainability, risk management, monitoring and control, and strategy and policy making. This study proposed that the green board

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committee and firm performance had a strong and favorable relationship. The green board committee's association with company performance was thought to be strengthened by the moderation effect of IC. It was suggested that the data for this study be collected using a Thomson Reuters DataStream terminal and a content analysis of the company's annual and embedded reports. By implying an integrated idea of green board committees and IC about firm performance, it contributes to the body of knowledge. The aforementioned conceptual framework conveys to legislators, regulators, policymakers, and practitioners' information on the crucial insights and actions of green board committees in formulating strategies and goals, addressing sustainability issues, establishing a rapport with stakeholders, and boosting the firm's value from business

operations. **Keywords:** Green governance; Green board committee; Stakeholder theory; Sustainability; Intellectual capital; Shareholder value-added

## 1. INTRODUCTION

Growing sustainability concerns have in recent years received significant and in-depth attention from investors and stakeholders across the globe. The long-term success of businesses is now substantially in jeopardy due to the societal and environmental problems that are only becoming worse. To acknowledge the significance of society and the environment, stakeholder pressure organizations have been established. Companies must implement green business strategies to enhance their sustainability performance in the management of sub-board committees in response to sustainability challenges. Shareholders and other stakeholders should be informed of a company's efforts to achieve sustainability. A group responsible for the company's sustainability strategy and performance is known as a "green board committee" (Junice, 2014). It plays a crucial role in integrating business and sustainability priorities so that the company can succeed in addition to being an essential component of good governance in any organization. Green board committees go by several names, including the environmental committee (Baalouch et al., 2019), corporate social responsibility (CSR) committee (Chen et al., 2018), green team (Dangelico 2015), sustainability committee (Uyar et al., 2020), and sustainability-themed committee (Li, 2017). Although it goes by several names, its goal is to increase business value and address sustainabilityrelated problems (Gennari and Salvioni 2019). (Biswas et al., 2018). The academic literature explains the social, environmental, and economic components of green governance (Li et al., 2018). A particular board committee deals with these three aspects. So, when referring to such a board committee, the word "green" is employed, and it is called a "green board committee." The corporate governance structure must include the green board committee (GBC). Corporate leaders may choose to overlook their responsibilities for sustainability in favor of short-term financial benefits. Green board committees have the power to persuade management to support socioeconomic initiatives in these situations. According to agency theory, management's actions are monitored and controlled by board-level committees. Green board committees are therefore essential for keeping an eye on overall operations and managing new problems that may require allocating resources from the business to speed up sustainability procedures for better stakeholder management (Hussain et al., 2018). It is essential since the GBC requires implementing CSR operations at the highest level, meeting stakeholder needs, and enhancing the company's reputation (Camilleri, 2015). According to Eberhardt-Toth (2017), a company with a green board committee can achieve good corporate social performance. A more recent conceptual study made the assumption that companies with green board committees might perhaps improve the community, environment, product, services, and business ethics, which would win them a positive reputation

and image (Pranugrahaning, 2021). Thus, having a good reputation could have financial advantages (Shad et al., 2019). A well-organized green board committee can help a company organization's corporate social responsibility (CSR) strategy become a competitive advantage in addition to serving as a crucial coordination function (Junice, 2014). There are various reasons why a sustainability committee is valuable. One of the major advantages of having a sustainability committee is that it may handle all business tasks, according to management literature. By its very nature, a CSR manager's job involves managing both business operations and support roles in order to steer the corporation toward a triple bottom line. The concept of considering a company's social and environmental factors in addition to economic profits, popularly known as the "3Ps" for people, planet, and profit, is one that is increasingly valued by multinational corporations in modern society (Shah et al., 2021). Parts of the organization that must report or implement change may resist if key decision makers do not provide enough support for the company's attempts to establish and maintain better environmental and social practices. The sustainability committee's members serve as a coordinating body and promote CSR throughout the organization. In reality, a strong coalition of coordinated executives, board level representatives, and non-executives can operate as a catalyst for top company leaders to truly engage with sustainability concerns. Despite the considerable economic contribution that oil and gas make, there hasn't been much empirical research on how risk management committees affect profitability. This study enhances past research by using data from 2010 to 2019 and addressing the question of whether there is a relationship between the green board committee and profitability. Hence, the scope of our investigation was limited to Nigerian listed oil and gas enterprises. Yet, it is believed to be beneficial for enhancing performance and policy in other sectors. The following null hypotheses were created as a result of these factors:

- **Ho1:** There is no significant relationship between green board committee presence and profitability of publicly traded oil and gas companies in Nigeria
- **Ho<sub>2</sub>:** There is no significant relationship between green board committee size and profitability of publicly traded oil and gas companies in Nigeria
- **Ho<sub>3</sub>**: There is no significant relationship between green board committee independence and profitability of publicly traded oil and gas companies in Nigeria
- **Ho4**: There is no significant relationship between green board committee gender diversity and profitability of publicly traded oil and gas companies in Nigeria.
- **Ho**<sub>5</sub>: There is no significant relationship between green board committee meeting and profitability of publicly traded oil and gas companies in Nigeria.

In part four, under the heading "Results and Discussion," the hypotheses are investigated, and the remaining sections are devoted to reviews of relevant literatures, methodology, results, discussions, conclusions, and recommendations.

## 2. LITERATURE REVIEW

According to earlier surveys, the number of green board committees in organizations has increased. By examining 675 US corporations, Eccles et al. (2014) reported the existence of green board committees among highly sustainable enterprises.

The growing trend of green board committees in listed public businesses was documented by Burke et al. (2019). The growing presence of such committees was also demonstrated by practitioners like Calvert Asset Management and the Corporate Library in 2010 and the Institute of Business Ethics in 2016. The importance of green board committees in firms for achieving

sustainability is highlighted by this upward trend. Growing sustainability concerns have recently drawn extensive and intense attention from investors and stakeholders across the globe. These issues are both environmental and social (Jan et al., 2021). The long-term success of businesses is now substantially in jeopardy due to the societal and environmental problems that are only becoming worse. To acknowledge the significance of society and the environment, stakeholder pressure organizations have been established (Tang et al., 2018). Companies must implement green practices to enhance their sustainability performance in the management of sub-board committees in response to sustainability challenges (Liao et al., 2015). A company's efforts in gaining sustainability should be presented to stakeholders, shareholders, employees, consumers, and public authorities (Kilic et al., 2021). To increase governance and the effectiveness of board oversight, the corporate board creates board-level committees (Huang et al., 2009). By splitting the board's fiduciary duties, such committees help the board of directors. Harrison (1987) made the case that creating committees in the boardroom is crucial to safeguarding stakeholders' and shareholders' interests. Organizations will need a sub-board committee to look at issues affecting environmental, societal, and financial performance in order to achieve sustainability. A green board committee that focuses on sustainability performance may be established by the corporate board (Garca-Sánchez et al., 2019). Such boardroom committees convey to stakeholders that organizations are keeping them safe (Eberhardt-Toth, 2017). they interested in As increase stakeholders'/shareholders' long-term value, these committees are becoming into a cornerstone of corporate governance processes (Gennari and Salvioni, 2019). The responsibilities and practices that fall under the purview of the green board committees are extensive, ranging from developing relationships with stakeholders to formulating and putting into action strategic sustainability policies (Burke, 2019). The purpose of green board committees in the boardroom goes beyond environmental concerns and is tied to business sustainability (Li et al., 2017). The onus of economic and social concerns also comes under the realm of these committees, and organizations are developing green board committees to leverage their critical expertise in sustainability obligations. By ensuring that businesses comply to corporate norms that mitigate sustainability risks, such committees assist the board of directors' directors in monitoring and analyzing the sustainability performance (Mahmood et al., 2018). Green committees create CSR plans, satisfy stakeholder requests, and enhance the company's reputation (Cucari *et al.*,2017). The credibility of environmental and social disclosure is enhanced by the formation of such specialized panels (Ienciu, et al., 2012). For businesses to expand chances for sustainable development and financial performance, several studies emphasize the establishment of green board committees as a basic corporate governance instrument. In a comparable study, Rodrigue et al (2013) stated the purpose of green board committee in the following way: "the committee makes sure to tell the board: here it is, we conducted a meticulous review, everything is under control, except here, except there, and we will follow up". According to Liao et al. (2015), an environmental committee's responsibility for environmental disclosure is comparable to an audit committee's responsibility for assuring accurate financial accounting disclosures. Biswas et al (2018) quoted from Rio Tinto's website "the sustainability committee assists the board with overseeing strategies designed to manage social and environmental risks, overseeing management processes and standards and achieving compliance with social and environmental responsibilities and commitments". According to Hussain et al. (2018), the presence of a CSR committee represents the board's commitment to and orientation towards sustainable development. In summary, a company with a green board committee is dedicated to CSR and stakeholder demands, but it also continuously serves as an advisor to improve sustainability performance and turn sustainability into a core strategy.

Academics make an effort to investigate how green board committees affect business performance in this vein. Green board committees have been shown by Walls et al. (2012) to improve the environment's quality and lessen its risks. Dangelico (2015) looked into how having a green committee at a company significantly improved its environmental performance and reputation. In a similar vein, Liao et al. (2015) demonstrated how green board committees greatly enhance carbon disclosure clarity. The significance of green board committees in business success has captured the interest of academics and practitioners. According to Shah et al. (2021), the board of directors can create sub-level committees to enhance business performance. In order to focus on achieving sustainability and removing barriers that prevent an organization from progressing toward sustainable advances, green board committees were created. These committees take on a variety of responsibilities to satisfy the needs of shareholders and stakeholders. Burke et al (2019).'s argument, for instance, claims that they carry out sustainability operations to allay stakeholders' worries and foster a sense of shared business value. From the viewpoint of stakeholder theory, green board committees contribute considerably to a firm's performance by fulfilling the interests of multiple stakeholders via sustainability reporting. The elimination of information asymmetry at all organizational levels that results from thoroughly analyzing each non-financial reporting component of risk management leads to cost savings and excellent firm performance (Kilic et al., 2021). The green board committee uses agency theory to make sure that management practices are in line with the organization's purpose, vision, and strategy. At the managerial level, it aids in discouraging opportunistic behavior and resolving the conflict of interest between principals and agents. In the absence of agency expenses, businesses make significant profits. These committees support internal control and corporate governance by taking a supervision-based approach and taking environmental, social, and governance (ESG) issues into account. It contributes to the production of business value by taking a top-down approach to sustainability challenges (Shah et al., 2021). Although Kilic et al. (2021) came to the conclusion that businesses with green board committees can maintain their good name and increase shareholder value.

## 2.1 Development of the Green Board Committee Measurement Index

A proposal of this study was to develop a measurement index for the green board committee. The green board committee has been used as an independent variable in several studies to determine its effects on a variety of dependent variables, including environmental, social, and financial performance in relation to corporate governance frameworks, sustainability reporting, and many more (Jabbour et al., 2013). Green board committees have been seen to be quantified as a binary variable, indicated with one (1) if the organization has one and zero (0) otherwise (Shah *et al.*, 2021). By recommending a green board committee index that includes actions taken by the green board committees, a novel contribution to the current studies was made. Shah et al. (2021) divided the green board committee's practices into four main dimensions or sections in light of the literature, as indicated in Table 2.1.

Variable	Elements	
Green board committee index	Strategy and policy	(a) Information on green board committee's engagement in strategy and policy making of the firm

Monitoring and control	(b) Information on the green board committee's engagement in monitoring and control of the firm
Sustainability reporting	(c) Information on green board committee's engagement in the sustainability reporting of the firm
Risk management	(d) Information on the green board committee's engagement in the risk management of the firm

Source: Shah *et al* 2021 Each dimension is discussed hereunder:

**Strategy and Policy:** Studies have shown that green board committees are crucial to the formulation of a company's strategy and policies (Lun, 2011). Al-Shaer and Zaman (2018) contend that board committees give management wise counsel on ways for meeting stakeholder expectations and sustainability. The board of directors' (BOD) green board committee works with the BOD to incorporate social and environmental sustainability into business goals (Marlow *et al.*,2010). Additionally, it supports the company's sustainability policies (Liao et al., 2015). These groups present tactics and guidelines relating to sustainability (Jorge, 2020). They formulate the goals and plans that steer businesses in the direction of sustainability (Cucari et al.,2017). These groups support the formulation of management-related policies (Eccles *et al.*, 2014). The BOD creates a green board committee to serve in an advising capacity on social and environmental issues, which are subsequently taken into account in the organization's strategy and policymaking (Garca Sanchez et al., 2019). A green board committee's involvement in the firm's strategy and policymaking is taken into account as the next measuring factor under the dimension of strategies and policies of the green board committee index based on this premise.

**Monitoring and Control:** In 2014, Klettner *et al.* offered insight into the oversight of the green board committee and the execution of the company plan. Managers have a tendency toward opportunistic behavior, which allows them to act in their own best interests. Yet, green board committees can closely watch management and coordinate the objectives of the company and the stakeholders (Hussain et al.,2018). These groups oversee management decisions pertaining to the company's sustainability concerns (Cucari *et al.*,2017). These committees, which are a part of GBC's corporate governance system, keep an eye on sustainability and guarantee organizational adherence to its policies (Jorge, 2020). Given the justifications provided, the measurement component for the green board committee index under the dimension of monitoring and control is assumed to be information on the involvement of the green board committees in the monitoring and control of the company.

**Sustainability Reporting:** Oil and gas businesses worldwide are under intense demand from stakeholders to reveal sustainability policies in the current era of climate change (Hussain et al., 2020). The interest among stakeholders in learning both financial and non-financial information about these businesses has significantly increased. Today, businesses publish their sustainability reports in an effort to reduce stakeholder pressure. Green board committees are essential in this case for reviewing the sustainability reporting's substance. Via sustainability reporting, it informs shareholders and stakeholders about the company's responses to sustainability-related concerns. According to a study, green board committees help businesses with non-financial reporting (Walls

et al.,2012). Similar studies claim that publishing sustainability reports improves business performance (Spitzeck, 2009). Given the foregoing explanation, the information on the green board committees' involvement in the company's sustainability reporting is expected to be the next measuring element for the green board committee index under the dimension of sustainability reporting.

**Risk Management:** As previously said, the green board committee is crucial to addressing new hazards (Burke et al., 2019). Creating a dedicated committee with the objective of monitoring, identifying, and analyzing environmental, social, and governance (ESG)-related concerns is discussed in a reputable paper (COSO; WBCSD 2021). According to Shah et al. (2021), corporations may have financial concerns in addition to ESG risks, for which a green board committee consults with other board committees like the audit and risk committees.

Such committees preserve the corporate value by overcoming sustainability challenges (Cordeiro et al., 2020). It raises awareness of how emerging threats impact corporate value and competitive advantage. It provides countermeasures to the hazards (Shahbaz et al., 2020). Such committees are advantageous for firms since they give crucial insight into risk management techniques and guarantee that an enterprise complies with sustainability criteria (Biswas *et al.*,2018). The information on the green board committees' involvement in the risk management of the company is the next measuring factor for the green board committee index, according to the aforementioned evidence.

As shown in Table 2.1, the green board committee index consists of four measuring components. A rating of two (2) is assigned if all relevant information about each aspect was given in the annual reports. A value of one (1) or zero (0) was given, respectively, if the element in the annual reports was only partially disclosed or completely absent.

Finally, the green board committee index value was calculated using the following formula adopted from Shah *et al* (2021).

Green board committee index 
$$= \sum X$$

Where:

 $\sum X$  represents the number of practices performed by the green board committee, and

N represents the total number of practices.

## 3 METHODOLOGY

For this study, an ex post facto research design was used. Due to the fact that this study used secondary data, which means that the information on the variables was already accessible, the research technique was considered to be the most appropriate for this study. Multiple regression was the method for data analysis that was used. The Nigerian Exchange Group Fact Book 2019, which contains all the listed oil and gas businesses, served as the study's target audience. There were twelve (12) oil and gas businesses listed in the Nigerian Exchange Group as of December 31, 2019. A sample size of ten (10) was utilized to generate one hundred (100) panel data observations for the years 2010 to 2019 based on a census study. The results demonstrated that businesses having a green board committee in place throughout the study period outperformed those without one in terms of economic performance.

The following are the study's models:

 $ROCE = \beta 0 + \beta 1 gbcpi, t + \beta 2 gbcsi, t + \beta 3 gbcii, t + \beta 4 gbcgdi, t + \beta 5 gbcmi, t + \epsilon i, t$ 

 $ROA = \beta 0 + \beta 1$ gbcpi, t +  $\beta 2$ gbcsi, t +  $\beta 3$ gbcii, t +  $\beta 4$ gbcgdi, t +  $\beta 5$ gbcmi, t +  $\epsilon i$ ,t

Where: ROCE = Return on Capital Employed, calculated as profit before interest and tax (PBIT) scaled by capital employed

Capital employed = total assets – current liabilities = equity + non-current liabilities.

ROA = Return on assets, calculated as profit before interest and tax (PBIT) scaled by total assets. GBCP = Green board committee presence, measured by 1 if there is green board committee or otherwise 0.

GBCS = Green board committee size, measured in numbers, is the total directors and non-directors in the green board committee.

GBCI = Green board committee independence, measured in percentage, is the non-executive directors and shareholders representatives in the green board committee to total green board committee members' size.

GBCGD = Green board committee gender diversity, measured in percentage, is the number of female green board committee members scaled by total green board committee members' size.

GBCM = Green board committee meeting (diligence), measured as number of meetings held by members in a year.

 $\beta 0 = \text{Beta (Constant)}$  $\beta 1-5 = \text{Beta (Coefficients)}$ i = Companiest = Time measured in years $\epsilon = \text{Error term}$ 

The time series data used for this study were provided by the audited financial statements and annual reports of the listed oil and gas enterprises for the ten years under review and by the Nigerian Exchange Group Fact book. The study's data source was secondary data. This study makes use of secondary data from the audited annual financial statements and footnotes of the sampled oil and gas businesses for the years 2010 through 2019. Diagnostic tests, such as those for the normal distribution, multicollinearity, heteroskedasticity, and panel effect tests, were carried out prior to doing the multiple regression. The acceptance or rejection of test results occurred at a rate of 0.05 percent. A summary of the results is presented in Section 4.

## 4. FINDINGS

This section summarizes the study's results before contrasting them with widely known, previously published empirical data.

Table 4.1					
Descriptive Stat	istics				
Variables	Observation	Mean	Std. Dev.	Minimum	Maximum
GBCP	100	.955	.113	0	1
GBCS	100	5.911	2.114	0	12

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GBCI	100	53.502	12.615	0	80
GBCGD	100	10.712	12.513	0	46.667
GBCM	100	4.123	2.604	0	7
ROCE	100	.025	.0336	095	.075
ROA	100	.611	.138	.432	3.251

Researcher's Analytic Output

The observations from Table 4.1 consist of 10 companies with 10 years covered, for a total of 100 observations. The average value for gbcp is around 1, with a standard deviation of.113, a minimum and maximum mean of 0 and 1, respectively. Similar to this, there are 6 people on average in gbcs, with a mean of 6, a standard deviation of 2, a minimum mean of 0, and a maximum mean of 12. With a lowest and highest mean of 0% and 80%, respectively, and a standard deviation of 12.6%, Gbci has an average of 53.5%. Women make up on average 10.7% of the members of the green board committee, with a minimum and maximum mean of 0% and 47%. The standard deviation is roughly 12.5%. However, the proportion of women on the committee should rise given that they are frequently committed, dogmatic, and risk-averse. Moreover, the average number of meetings held by gbcm is between 0 and 7, with a standard variation of around 3. Since there are the same number of observations across all explanatory factors, the ROCE model predicts a balanced data set. ROCE has a maximum of 7.5 percent, a standard deviation of 3.36 percent, and an average of 2.5%, based on the information in Table 4.1.

Sadly, ROA has an appalling performance average of.611 (less than 1), a standard deviation of.138, and lowest and maximum values of.432 and 3.251, respectively. Nonetheless, the maximum mean indicates that the oil and gas companies performed well whenever ROA was 1 or higher.

Table 4.2				
Normal distribu	ition			
Variables	Observation	QH	QH*	P-value
GBCP	100	3.26000	-2.6e+01	> 0.2
GBCS	100	1.01720	-0.19609	> 0.2
GBCI	100	0.96685	0.37795	< 0.0001
GBCGD	100	0.91115	1.01301	< 0.0001
GBCM	100	0.95709	0.48928	< 0.0001
ROCE	100	0.93087	0.78816	< 0.0001
ROA	100	0.76406	2.69017	< 0.0001

#### Researcher's Analytic Output

According to the findings in Table 4.2, only gbcp and gbcs are regularly distributed because their p-values are higher than the 5% significant level. On the other hand, Gbci, Gbcgd, and Gbcm failed the test since their p-values were below the 5% significant level. The test for normality failed because their residual is considerable. These conclusions were reached using the heteroskedasticity evaluation method (imtest) and multiple regression analysis.

Table 4.3 Correlation m	natrix				
	GBCP	GBCS	GBCI	GBCGD	GBCM
GBCP	1.000				
GBCS	0.3767*	1.000			
	0.000				
GBCI	0.4348*	-0.2962*	1.000		
	0.000	0.0006			
GBCGD	0.1239	0.1077	0.0142	1.000	
	0.1602	0.2225	0.8723		
GBCM	0.3225*	-0.0692	0.4409*	0.1322	1.000
	0.0002	0.4340	0.000	0.1337	

Researcher's Analytic Output

The findings in Table 4.3 show that multicollinearity is not present in any of the two models, ROCE or ROA. The level at which concern should have been voiced would have been at or above.80 for each independent variable coefficient. The findings in Table 4.4 supported those in Table 4.3 by demonstrating that the figures for the variance inflation factor and tolerance level are within acceptable boundaries.

Table 4.4 Variance Inflati	ion Factor & Tole	rance Level
Variables	VIF	1/VIF
GBCI	1.72	0.512
GBCP	1.82	0.612
GBCS	1.52	0.464
GBCM	1.41	0.332
GBCGD	1.12	0.755
Mean VI	1.42	

Researcher's Analytic Output

The results of Table 4.4 show that for GBCI and GBCP, the VIF and tolerance level are 1.72 and 512, respectively. Given that the average VIF is less than the threshold value of 3.33 at 1.42, there is grounds for worry. A VIF of 1.52 and a tolerance level of 464 are found in GBCS, 1.41 and a tolerance level of .332 are found in GBCM, and 1.12 and a tolerance level of .755 are found in GBCGD.

Table 4.5	
Information Matrix-Check: ROCE and ROA	

Information Matrix-Check: ROCE and ROA							
Source	Chi-sq	ROCE	pr	Chi-sq	ROA	pr	
	_	diff	-	_	diff	_	
Hettest	35.97	14	0.002	5.65	14	0.985	
Skewness	3.83	4	0.574	4.31	4	0.506	
Kurtosis	3.43	1	0.064	2.01	1	0.156	
Total	43.23	19	0.003	11.97	19	0.940	

Researcher's Analytic Output

The ROA model shows heteroskedasticity because its p-value is significant at a threshold of 5%, as shown in Table 4.5. The ROCE model, however, is shown to be insignificant, proving that there is no heteroskedasticity problem. The ROA model demands the multiple regression analysis.

Table 4.6				
Panel check: rem				
		ROCE	ROA	
Chibar-sq (01)		17.04	12.71	
		) (		
Prob > chibar2		0.000	0.000	
Researcher's Analytic	Output			

Because both models' probability values were less than 5%, Table 4.6's findings showed that both had panel effects. As an illustration, ROA and ROCE both have.000.

## Table 4.7

Hausman	specification	check	ROA
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	ROCE	ROA	
chi2 (5)	8.16	10.33	
Prob > chi2	0.171	0.026	

#### Researcher's Analytic Output

According to Table 4.7's findings, random effects is the model that best fits the data because the ROCE model is not significant. Although ROA is significant, the p-value is less than 5%, indicating that it is not. The fixed effects model is therefore the one that fits it the best.

Regression analysis Models ROCE and ROA Variables Coef. P>z Coef					
Models	ROCE		ROA		
	Coef	P>z	Coef.	P>z	
Variables					
GBCP	.041	0.056	.057	0.831	
GBCS	003	0.011	000	0.993	
GBCI	000	0.030	002	0.336	
GBCGD	000	0.854	002	0.433	
GBCM	.001	0.457	.016	0.308	
_cons	.017	0.000	.887	0.000	
Rho	.279		.333		
Wald chi2 (5)	43.01		0.51		
Prob > chi2	0.000		0.613		
R-square (R2)	0.038		0.000		
Researcher's Analytic Output					

Table 4.8 Regression analysis Models ROCE and ROA Variables Coef. P>z Coef

The results showed that ROCE is more appropriate than ROA due to their significant chi-square probability for ROCE and insignificant chi-square probability for ROA. Thus, the hypotheses are solely tested using ROCE. So, even though GBCP has a positive impact, its impact on profitability is minimal. GBCS has a bad impact, although it has very little of an impact on profitability. GBCI displays negative and huge influence in a manner similar to how GBCGD demonstrates negative and tiny influence. Nonetheless, GBCM has a positive and insignificant influence. Prob > chi2 shows that the ROCE is a more suitable and superior explanation for the assignment. A minor magnitude R-square of 3.8% is considered to be present (Cohen, 1988). As a result, the impact on profitability, according to the aforementioned data set, is negligible. As a result, based on these findings, hypotheses 1, 4, and 5 are accepted, whereas hypotheses 2 and 3 are partially refuted.

## 5 CONCLUSIONS AND RECOMMENDATIONS

The study looked at how the risk management committee affected the profitability of listed Nigerian oil and gas companies from 2010 to 2019. As proxies for the GBC, the size, independence, gender diversity, and presence of the risk management committee were all taken into consideration. Moreover, the committee meeting was also taken into consideration. On the other hand, profitability was determined using return on assets and return on capital employed. According on panel data of (10) publicly traded Nigerian oil and gas companies, the study's GBC measures had an overall negative impact and did not significantly affect profitability.

According to this research, GBC has no effect on profitability, particularly for publicly traded Nigerian oil and gas companies. So, management of businesses should create well-structured performance frameworks based on sustainability in order to maximize profitability. To achieve this, the green board committee's membership and size, as well as the proportion of non-executive directors on the committee, may be reduced. The report went on to argue that oil and gas producing

companies should prioritize the environment in order to improve future performance and operational profitability of their operation. Although the focus of this study was the oil and gas business, its findings may be applicable to a number of other areas, such as the real estate, banking, and healthcare sectors

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