http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

ADFJ ISSN 2522 - 3186.

African Development Finance Journal

VOLUME 8 (II)

Corporate Sustainability Practices and Business Risk in Nigeria

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Date Received: December, 06, 2024
Date Published: December,30,2024

Corporate Sustainability Practices and Business Risk in Nigeria

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Abstract

Corporate sustainability encompasses a business's dedication to implementing environmentally, socially, and economically responsible practices. This strategic approach ensures long-term viability and effectively mitigates associated risks. Many studies have examined how corporate sustainability impacts financial performance; however, existing literature provides limited evidence regarding the influence of corporate sustainability on business risk. This study investigated the influence of corporate sustainability practices on business risk in Nigeria. The sample included thirty (30) non-financial firms in Nigerian-listed between 2013 and 2022. Corporate sustainability practices were represented through Environmental, Social, and Governance practices. Business risk was measured by the addition of accounting risk and market risk. The analysis utilised the Estimated Generalised Least Squares (EGLS) estimation method to assess the impact of corporate sustainability practices on business risk. The results revealed that environmental and social practices have significant negative impacts on business risk. However, governance practices have significant positive impacts on business risk. The study recommends that the Nigerian government support businesses transitioning to environmental, social, and governance (ESG) compliant processes and supply chains. This may involve developing infrastructure, providing logistics assistance, and creating incentives for sustainable suppliers. Additionally, implementing policies that allow flexible timelines to meet ESG targets could help companies reduce the risk of sudden operational disruptions.

Keywords: *Corporate sustainability, business risk, environmental practices, governance practices, social practices*

1. Introduction

Corporate sustainability refers to businesses adopting environmentally, socially, and economically responsible practices to ensure long-term success and mitigate risks. In recent years, corporate sustainability has gained significant attention worldwide due to increasing concerns about environmental degradation, social inequality, and corporate governance failures. The growing emphasis on sustainability is not just a response to regulatory pressures or societal expectations but also a strategic decision by businesses to enhance their resilience and reduce exposure to various risks (Akinleye & Owoniya, 2024).

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Nigeria, as a developing economy with significant natural resources, faces unique challenges related to sustainability. The country has a growing economy but also grapples with environmental concerns such as oil spills, deforestation, pollution, climate change, and socio-economic issues like poverty, inequality, and corruption. Nigerian companies, particularly those in oil and gas, manufacturing, and agriculture, are under significant pressure to implement sustainable practices to reduce their operations' environmental and societal impacts (Saleh et al., 2022).

Corporate sustainability practices are measured by the triple framework of Environmental, Social, and Governance (ESG) practices. The significance of environmental, social, and governance practices has recently gained considerable attention worldwide. Companies are increasingly assessed not only on their financial performance, but their commitment to sustainability, and responsible governance. ESG practices encompass environmental management, social responsibility, and corporate governance, collectively influencing a firm's long-term survival and societal impact (Shakil, 2021).

The adoption of ESG practices in Nigeria is a relatively new but increasingly crucial development in the evolving corporate landscape. Listed non-financial firms in Nigeria are playing a critical role in driving the economy. These firms, operating in manufacturing, agriculture, oil and gas, consumer goods, and telecommunications, now recognise the importance of ESG practices in mitigating business risks (Dagunduro et al., 2024).

Business risk encompasses all potential threats to a company's operations, profitability, and reputation. These risks can be environmental (such as climate change or resource depletion), social (like labour unrest or community conflicts), and governance-related (such as corporate governance failures or regulatory non-compliance). Organisations that do not adequately address sustainability-related risks may face grave consequences, including operational disruptions, financial losses, legal liabilities, and harm to their reputation. Proactively managing these risks is imperative for businesses to ensure long-term stability and success (Chen et al., 2024).

In contrast, businesses that embrace sustainability practices often experience reduced risks through enhanced regulatory compliance, stronger relationships with stakeholders, better resource

management, and improved brand reputation. Sustainability also drives innovation, leading to cost savings, new revenue streams, and greater competitiveness. Therefore, understanding the influence of corporate sustainability on business risk is crucial for companies operating in Nigeria's volatile and complex business environment (Erhinyoja & Marcella, 2019).

The Nigerian regulatory environment has also begun to evolve in response to global trends, with the Nigerian Exchange Group (NGX) introducing sustainability disclosure guidelines that encourage companies to adopt ESG reporting frameworks. In addition, investors are increasingly factoring ESG considerations into their decision-making processes, signalling that firms with poor ESG performance may face higher risks, including limited access to capital (Emeka-Nwokeji & Osisioma, 2019).

Moreover, global trends are pushing businesses to prioritise sustainability, as investors are increasingly assessing companies based on their Environmental, Social, and Governance (ESG) related performance. International trade partners and consumers are also more inclined to engage with businesses committed to sustainability. As Nigeria seeks to diversify its economy and integrate more deeply into the global market, corporate sustainability becomes essential to business strategy. While there is growing awareness about the importance of sustainability in Nigeria, the level of adoption among companies remains inconsistent. Many Nigerian businesses, particularly in the manufacturing, oil and gas, and agriculture sectors, continue to grapple with implementing sustainability practices due to limited resources, a lack of regulatory enforcement, and minimal incentives (Emeka-Nwokeji & Osisioma, 2019).

1.2 Research Problem

Corporate sustainability practices have recently gained global attention as a critical component of responsible business operations. Sustainability refers to the adoption of practices that not only ensure profitability but also promote social equity and environmental stewardship. However, in Nigeria; a developing economy with unique socio-political and environmental challenges, integrating sustainability practices into corporate strategy remains inconsistent and underexplored. Many Nigerian businesses face significant risks, such as political instability, regulatory changes, environmental degradation, and socio-economic inequalities. These risks threaten long-term

business success and stakeholder value. Also, the influence of corporate sustainability practices on business risks in the Nigerian context remains largely unexplored (Akinleye & Owoniya, 2024). The core problem is that businesses in Nigeria may not fully understand how adopting corporate sustainability practices can reduce these risks and enhance their resilience. Without this understanding, companies may continue neglecting sustainability, exacerbating their exposure to business risks such as reputational damage, regulatory penalties, and operational disruptions. Furthermore, stakeholders, including investors, regulators, and consumers, increasingly demand transparency and accountability in corporate sustainability efforts, further intensifying the pressure on businesses to adapt (Aminu et al., 2022).

While considerable research has been done on the effect of corporate sustainability practices on business risk in developed economies (Benlemlih et al., 2018; Landi et al., 2022; Lee & Koh, 2024), this relationship remains underexplored in developing markets like Nigeria, characterised by regulatory inconsistencies, economic volatility, and governance issues. Nigerian firms' perception of and adherence to ESG standards may differ from global benchmarks, potentially affecting business risk in ways distinct from other markets.

This study aims to investigate the influence of corporate sustainability practices on the business risk of Nigerian-listed non-financial firms. Specifically, it seeks to assess how adopting and integrating the ESG principles influence a firm's exposure to various risks, including operational disruptions, financial instability, and reputational harm. Furthermore, the study will explore whether firms with more robust ESG performance exhibit lower business risk levels than their counterparts with weaker ESG adherence.

1.3 Research Objectives

The study investigates the influence of corporate sustainability practices on business risk in Nigeria. The specific objectives are as follows:

i. To find out how environmental practices impact the business risk of Nigerian-listed non-financial firms.
ii. To examine how social practices affect the business risk of Nigerian-listed non-financial firms.

iii. To explore how governance practices affect the business risk of Nigerian-listed non-financial firms.

2. Literature Review

2.1 Theoretical Framework

The study is based on the managerial opportunism and stakeholder theories.

2.1.1 Managerial Opportunism Theory

This theory asserts that managers may prioritize their self-interest over the interests of shareholders. Managers equipped with superior information and control over the firm's operations may exploit these advantages for personal gain. Managerial opportunism can significantly affect both the implementation and perception of sustainability initiatives, thereby influencing overall business risk (Sassen et al., 2016). In Nigeria, where regulatory frameworks and corporate governance mechanisms may be less robust, managerial opportunism can emerge in several forms:

Neglect of Environmental Responsibility: Managers may sidestep environmental regulations or fail to implement sustainable practices to minimize costs, thereby increasing environmental risks and liabilities.

Manipulation of Social Performance: It's important to note that managers might engage in superficial sustainability efforts, often referred to as green washing. This is a temporary measure to enhance the firm's reputation, but it's not a substitute for genuine, long-term investments in social responsibility.

Short-Termism: In pursuing short-term financial gains, managers may neglect investments in sustainable technologies or processes that could benefit the firm's long-term success, thereby missing out on potential opportunities for growth and innovation.

2.1.2 Stakeholders Theory

This theory highlights the significance of addressing the interests of all parties affected by a company's activities. The theory underscores the importance of recognizing and addressing the diverse interests of all parties impacted by a corporation's operations. This includes not only shareholders who have a financial stake in the organization but also employees who contribute to its success, customers who purchase its products or services, suppliers who provide the necessary

materials, and the communities in which the company operates. By considering the needs and concerns of these various stakeholders, businesses can foster better relationships, enhance their reputation, and ultimately achieve long-term sustainability and success. The theory offers a valuable framework for understanding how corporate sustainability practices impact business risk. It posits that businesses are responsible for balancing and satisfying the needs of a diverse range of stakeholders rather than focusing solely on shareholders. When ESG considerations are effectively integrated, they can profoundly affect a company's risk profile by fostering long-term value and mitigating various business risks (Freeman, 1984; Landi et al., 2022).

By addressing ESG factors, companies can cultivate trust with their stakeholders, diminishing the likelihood of opposition and conflicts that could lead to legal, reputational, and operational risks. Strong trust and loyalty from stakeholders can also enhance resilience during crises, as employees, customers, and communities are more inclined to support businesses that have demonstrated a commitment to responsibility. In summary, stakeholder theory posits that aligning a company's activities with the broader concerns of corporate sustainability practices can mitigate various business risks by fostering positive relationships with stakeholders and proactively addressing environmental, social, and governance issues that could otherwise pose significant threats to the business (Bouslah et al., 2013; Lee & Koh, 2024).

2.2 Empirical Review

2.2.1 The Effect of Corporate Sustainability Practices on Business Risk

Bouslah et al. (2013) employed the pooled ordinary least squares (OLS) estimation method to explore the influence of different measures of social performance on firm risk. Their analysis encompassed 16,599 firm-year observations from U.S. Standard and Poor's (S&P) 500 firms from 1991 to 2007. Firm risk was evaluated using measures of total and idiosyncratic risk. The results revealed that environmental and governance performance had significantly positive effects on firm risk.

Landi et al. (2022) utilised the pooled ordinary least squares (OLS) estimation technique to examine the influence of environmental, social, and governance (ESG) ratings on financial risk. Their analysis encompassed 222 firms listed in the United States from 2014 to 2018, with financial

risk evaluated through systematic risk measures. The findings indicated that the combined ESG and environmental ratings significantly and negatively impacted systematic risk. In contrast, social and governance ratings did not significantly affect systematic risk.

Anwer et al. (2023) evaluated the influence of environmental, social, and governance (ESG) performance on systemic risk among 158 energy corporations across 16 countries from 2010 to 2021. They used a fixed-effect estimation method to investigate the relationship between independent and dependent variables. The findings indicated that overall ESG, environmental, and social factors significantly and positively influenced systemic risk. In contrast, governance performance did not affect systemic risk.

Chen et al. (2024) utilised the pooled ordinary least squares (OLS) estimation method to examine the influence of environmental, social, and governance (ESG) performance on business risk. Their study analysed 29,436 enterprise-year observations from A-share-listed Chinese firms spanning 2009 to 2021. Business risk was evaluated using the Z-score approach. The findings indicated that the combined ESG performance had significantly negative impacts on business risk.

Lee and Koh (2024) employed the pooled ordinary least squares (OLS) estimation technique to explore the impact of environmental, social, and governance (ESG) performance on firm risk. Their analysis included 3,360 firm-year observations from U.S. financial firms from 2014 to 2020. Firm risk was assessed through total, idiosyncratic, and systematic risk measures. The results revealed that the combined ESG, social, and governance performance significantly and negatively influenced total, idiosyncratic, and systematic risk. Conversely, environmental performance had a non-significant effect on total and idiosyncratic risk but significant negative effect on systematic risk.

3. Research Methodology

3.1 Population, Scope, Sample Size, and Sources of Data

The sample comprises 30 listed non-financial companies based in Nigeria, with the analysis spanning from 2013 to 2022. These companies were selected due to the availability and

completeness of their financial data throughout this timeframe, which was obtained from their published annual reports.

3.2 Model Specifications

The study employed the model developed by Landi et al. (2022) to analyse the influence of individual Environmental, Social, and Governance practices on business risk.

The model is written as follows:

$BR_{it} = \alpha_0 + \alpha_1 ETA_{it} + \alpha_2 SCA_{it} + \alpha_3 GVA_{it} + \alpha_4 LIQ_{it} + \alpha_5 MKT_{it} + e_{it}$ --------- (3.1)

Where:

BR_{it} Business Risk

ETA_{it}: Environmental factors

SCA_{it}: Social factors

GVA_{it}: Governance factors

LIQ_{it}: Liquidity

MKT Natural logarithm of market capitalisation

e_{it}: The error terms

4. Results and Discussions

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics

Stats	Mean	Min	Max	Std. Dev	Skewness	Kurtosis	N
Business Risk	6.5782	0.1838	31.9179	5.7366	1.9990	7.9723	300
ETA	31.8889	0.0000	83.3333	8.8206	-0.6335	14.3933	300
SCA	86.0556	33.3333	100.0000	13.5968	-0.9367	4.1676	300
GVA	65.1111	16.6667	100.0000	20.2957	-0.2887	2.0215	300
LIQ	1.3378	0.0658	4.9587	0.6644	1.2837	6.5553	300
MKT	233,000,000	1,980,000	5,060,000,000	689,000,000	4.654	25.8081	300

Source: Authors' computation (2024)

Table 4.1 displays the summary of descriptive statistics.

Business Risk: The analysis of the sample firms reveals that the average level of business risk across the dataset is approximately 6.58. Specifically, the minimum recorded risk is a remarkably low 0.18, while the maximum reaches 31.92. This wide range indicates that while many firms operate relatively low risk, a few outliers exhibit very high-risk profiles. The standard deviation is 5.74, suggesting considerable disparity in individual risk levels. The skewness value of 1.99 indicates a positively skewed distribution. The kurtosis value 7.97 also reveals that the data exhibits a leptokurtic distribution. This characteristic suggests a higher likelihood of extreme outliers compared to a normal distribution.

Environmental Practices (ETA): The average score for environmental practices among firms is 31.89, indicating moderate engagement. Some firms scored as low as 0, while the highest score was 83.33. With a standard deviation of 8.82, there's moderate variability in environmental practices. The negative skewness of -0.63 shows that more firms score above the mean, and the high kurtosis of 14.39 indicates extreme values in the dataset, with some firms excelling or lagging in their environmental efforts.

Social Practices (SCA): The mean social score of 86.06 indicates that, on average, firms demonstrate strong compliance with social practices. In contrast, the minimum score of 33.33 reveals some low engagement and the maximum score of 100 shows that certain firms excel in implementing social practices. The standard deviation is 13.60, indicating moderate variability, while a skewness of -0.94 means more firms score higher than average. A kurtosis of 4.17 indicates a leptokurtic distribution, implying more extreme values or outliers in the data.

Governance Practices (GVA): The average governance score across the firms is 65.1, indicating moderate adherence to governance practices. The lowest score is 16.67, while the maximum is 100, reflecting a wide range of adherence. With a standard deviation of 20.30, there is significant variability among firms. The negative skewness of -0.28 suggests that more firms score higher despite some low scores, pulling the distribution slightly left. The kurtosis of 2.02 indicates that the distribution of governance scores is relatively normal, with fewer extreme outliers than a perfectly normal distribution.

Liquidity: The average liquidity ratio is 1.34, which implies that, on average, the selected non-financial firms have current assets about 1.34 times their current liabilities, which suggests they can cover short-term obligations. The minimum ratio of 0.06 shows that at least one firm faced significant liquidity issues, covering only 6.6% of its liabilities. Conversely, the maximum ratio of 4.95 indicates that the most liquid firm had nearly five times the assets needed for liabilities. The standard deviation of 0.66 reflects moderate variation in liquidity across firms. A positive skewness of 1.28 suggests a few firms have exceptionally high liquidity, while a kurtosis of 6.55 points to a leptokurtic distribution, reflecting a higher probability of extreme values among firms.

Market Capitalisation: The average market capitalisation is ₦233 million, indicating moderate market capitalisation among listed firms. The smallest firm has a market capitalisation of ₦1.98 million, while the largest has ₦5.06 billion, showing significant disparity. The high standard deviation of ₦689 million reflects considerable variation among firms. The skewness of 4.65 shows that the distribution is skewed to the right, suggesting that many firms have very high market capitalisation. The kurtosis value of 25.80 indicates a leptokurtic distribution with heavy tails and significant outliers.

4.2 Correlation Analysis

Table 4.2: The Correlation Matrix

	ETA	SCA	GVA	LIQ	MKT
ETA	1.0000				
SCA	0.0329	1.0000			
GVA	0.0082	0.1669	1.0000		
LIQ	-0.1935	-0.0871	-0.0338	1.0000	
MKT	0.2522	0.2692	0.3030	-0.3352	1.0000

Source: Authors' computation (2024)

The correlation matrix is displayed in Table 4.2. The relationship between LIQ and MKT is the strongest, with a negative correlation coefficient of -0.3352. Following this, GVA and MKT have a weak positive correlation of 0.3030. Most correlations between variables are weak, showing no strong linear dependencies.

4.3 Heteroskedasticity Test

Table 4.3: Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity

chi^2	chi^2 (p-value)
1.53	0.0000

Table 4.3 presents the Breusch-Pagan-Godfrey heteroskedasticity test. The p-value of 0.0000 is below the 1% significance level, indicating strong evidence for the alternative hypothesis of heteroskedasticity in the model. The study employed the Estimated Generalised Least Squares (EGLS) technique to effectively address the issue of heteroskedasticity observed in the regression model.

4.4 Empirical Results

Table 4.4 below presents the regression analysis results examining the impact of individual environmental, social, and governance practices on business risk. The F-statistic with a coefficient of 13.1353 and a corresponding P-value of 0.0000 strongly indicates that the model exhibits overall statistical significance. This finding implies that the independent variables—namely, the individual ESG practices—collectively exert a meaningful influence on the dependent variable, which is business risk. Furthermore, the R^2 value of 0.1825 indicates that the regression model accounts for approximately 18.25% of the variability observed in business risk.

Table 4.4: The Effect of Individual Environmental, Social, and Governance Practices on Business Risk

Variables	Coefficient	P-Value
Constant	0.1392	0.9484
ETA	-0.0635**	0.0031
SCA	-0.0592***	0.0001
GVA	0.0355***	0.0005
LIQ	0.4549*	0.0991
Firm Size	0.5611	0.0000
F-Statistics	13.1353	0.0000
R^2	0.1825	

Statistical significance levels at 0.05 * and 0.01 **

http://journals.uonbi.ac.ke/index.php/adfj
ISSN 2522-3186

Environmental Practices (ETA) (Coefficient = -0.0635, p-value = 0.0031): The negative coefficient indicates that business risk decreases as environmental practices improve, keeping other variables constant. The result is statistically significant at 1%, implying a strong inverse relationship between environmental practices and business risk. This suggests that firms engaging in better environmental practices may experience reduced business risk. The results support the study by Landi et al. (2022), which found that environmental practices lead to lower firm risk. In contrast, a study by Anwer et al. (2023) reported a noteworthy positive correlation between the same variables.

Companies prioritizing robust environmental practices can effectively mitigate and reduce their risk of regulatory fines, compliance costs, and potential lawsuits. In Nigeria, for instance, regulations such as the Environmental Impact Assessment Act impose strict requirements, with non-compliance potentially resulting in significant penalties. Additionally, investors are becoming increasingly mindful of the importance of environmental stewardship, which allows firms with solid environmental practices to attract sustainable investment. This shift enhances liquidity and diminishes funding risks.

Social Practices (SCA) (Coefficient = -0.0592, p-value = 0.0001): The negative and significant coefficient at the 1% level implies that better social practices are associated with reduced business risk. This suggests that firms with robust social practices might mitigate and reduce business risks through improved stakeholder relations or community support. The findings are consistent with Lee and Koh1 (2024), who found a significantly negative relationship between social practices and firm risk. In contrast, Anwer et al. (2023) identified a notable positive relationship.

Socially responsible practices, such as fair labor standards and active community engagement, resonate with socially conscious investors and enhance access to capital. Companies can mitigate funding-related risks by appealing to a diverse range of investors. Furthermore, firms that emphasize community involvement, diversity, and employee well-being cultivate customer loyalty, a buffer against reputational damage. This approach is important in industries that are sensitive to social issues.

Governance Practices (GVA) (Coefficient = 0.0355, p-value = 0.0005): Governance practices have a positive and significant relationship with business risk. The results align with Bouslah et al. (2013), who found a positive link between governance practices and firm risk. Conversely, Lee and Koh (2024) reported a notable negative relationship.

Strong governance practices may add complexity and increase risk due to stricter oversight and compliance requirements. The implementation of robust governance practices is often linked to mitigating business risks. However, for non-financial companies in Nigeria, this may not always hold due to the high costs of implementation, uncertain and inconsistent regulations, cultural resistance, and heightened stakeholder scrutiny. Furthermore, the changing landscape of governance regulations and institutional vulnerabilities can introduce new risks, particularly for firms grappling with the challenge of reconciling long-term governance enhancements with short-term profitability objectives.

5 Conclusions and Recommendations

The study examined the impact of corporate sustainability practices on business risk. The sample comprised thirty (30) non-financial firms listed on the NGX between 2013 and 2022. Corporate sustainability practices were proxied by environmental, social, and governance practices scores. Business risk was measured by the addition of accounting risk and market risk. The analysis employed the Estimated Generalized Least Squares (EGLS) estimation technique to assess the relationship between the independent and dependent variables. The findings indicated that environmental and social practices have significant negative effects on business risk. In contrast, governance practices have significant positive effects on business risk.

According to the research findings, policymakers in Nigeria can incentivize companies to adopt more robust environmental and social practices through mechanisms such as tax breaks, subsidies, or favorable regulations. Such initiatives would encourage firms to invest in long-term sustainability efforts, thereby contributing to an overall reduction in risk. Additionally, government authorities could enhance the reporting and compliance requirements related to corporate sustainability practices, improving transparency and compelling firms to systematically manage and address environmental and social risks.

Strengthened corporate sustainability policies could foster excellent market stability and diminish systemic risks for Nigerian companies. Furthermore, companies may be encouraged or required to disclose their ESG risks and strategies in their financial reports, enabling investors to evaluate better the risks and opportunities associated with environmental and social factors. Adequate risk disclosure would reduce uncertainty, leading to more informed decision-making and lower investment risks.

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