



**POLAC MANAGEMENT REVIEW (PMR)
DEPARTMENT OF MANAGEMENT SCIENCE
NIGERIA POLICE ACADEMY, WUDIL-KANO**



THE MODERATING EFFECT OF SUSTAINABILITY DISCLOSURE ON FIRMS FINANCIAL PERFORMANCE EVIDENCE FROM NIGERIA AGRICULTURAL FIRMS'

Uthman Fatimah Zahra

Department of Accounting, Ibrahim Badamassi Babangida University
Lapai

Yusuf Abiodun Sarafadeen

Department of Accountancy, Kwara State Polytechnic. Ilorin

Abdulrasheed Jamiu Alabere (ACA)

Department of Accounting and Finance, Kwara State University, Malete

Abstract

Generally, financial performance has becoming crucial in measuring sustainability of companies' performance most importantly agricultural firms' across developed and developing countries. As a result of declined in firms' financial performance which have resulted from in ability of companies disclosing some non-financial information such as carbon emission, air pollution and other environmental hazardous. In the light of these issues, this study investigates the effect of environmental expenditure and social innovations investments on financial performance of listed Agricultural Firms' in Nigeria. Ex-post facto research design was used. As at 2024, five (5) companies were consistently listed in the floor of Nigeria Exchange Group (NGX), data were obtained in the annual report from 2014 to 2023 which equivalent to 50 year annual reports, therefore, it become the population and sample size of this study, correlation technique were adopted as inferential statistics. The result indicated that there is correlation between Return on Asset (ROA) based on Environmental Expenditure (EE) and Social Innovations Investment (SII). Firstly, R which is the coefficient of correlation between the EE and actual values resulted to moderate positive correlation (0.638). Secondly, the result shows that SII explains 41.9% of the variance in Return on Asset (ROA). The SII has a moderate positive correlation with ROA ($R = 0.647$). Therefore, this study concludes that their positive relationship between Environmental Expenditure (EE) and Social Innovations Investment (SII) on financial performance of listed Agricultural firms' in Nigeria. In the light of these, this study recommends that Agricultural firms should be regularly engaged with stakeholders to understand their sustainability expectations and priorities.

Keyword: Sustainability disclosure, Environmental Expenditure, Social Innovation Investment, Return on Asset (ROA)

Introduction

The persistence growth in agricultural businesses across the developing countries as resulted into growth in production activities which has negatively rose into carbon emission, air pollution and environmental hazardous. As result of these negative impacts, which have consequently resulting to poor financial performance of some agricultural companies. This issue was as a result of poor non-disclosing some non-financial information that will negatively contribute to the some financial performance of these companies. For instance, inability of companies not to disclosure

some non-financial such as environmental and social issues have consequently leads to fine, penalties tight regulations poor publicity and decline in customers interest in companies report. However, Wasara and Ganda (2019) argued that corporate sustainability disclosure does not require expensive resources which capably lower corporate profitability.

At the strategies level of most companies' particularly agricultural firms, environmental and social issues such as air pollution, carbon emission, noise pollution, staff welfares have negative impact on financial performance particularly return on asset. Companies

that are socially and environmentally responsible for reducing social and environmental problems are costly (Villena & Quinteros 2024). This implies that the cost implications of all these social and environmental problems treated as expenses which are consequently resulted into poor financial performance. For instance, in South Africa, Owners, managers, and governing boards are unaware of the effects that noise pollution, carbon emissions, and employee welfare have on profitability because of the rise in employee perks, which include prescription drugs, medical costs, paid time off for illness, and funeral benefits.

It is obvious that investors and shareholders would expect the managers to voluntarily reveal social difficulties and environmental challenges in their Sustainability Reports in light of these exorbitant spending. In addition, the Global Reporting Initiative stressed that businesses must comprehend how carbon emission and air pollution affects society and the environment in order to develop a strategic plan to address the issue. Additionally, the JSE and the Institute of Chartered Accountants promoted a systematic strategy for businesses to disclose information about environmental issues.

In Nigeria context, Agriculture Company is a major consumer of water resources, and inefficient use can lead to water scarcity or pollution of water bodies through runoff of fertilizers and pesticides (Wang, et al 2024). Intensive farming practices can deplete soil nutrients, degrade soil structure, and contribute to erosion, reducing long-term agricultural productivity. Agriculture is both affected by and contributes to climate change. Changing weather patterns can impact crop yields, while agricultural practices like deforestation and methane emissions from livestock contribute to greenhouse gas emissions. In the light of social problems, employee often face issues such as low wages, lack of job security, poor working conditions, and exposure to hazardous chemicals. However, disputes over land ownership and use can arise, particularly in areas where large-scale agricultural operations encroach on traditional or communal lands. In addition, while agricultural firms contribute to food production, issues such as food access, affordability, and distribution inequalities can persist, exacerbating food insecurity. Above all, Large-scale agricultural operations can disrupt local communities, affecting traditional livelihoods, cultures, and social structures.

Addressing these issues requires collaboration among governments, companies, NGOs, and consumers to promote sustainable agriculture practices that balance economic viability with environmental and social responsibility. Agricultural companies are increasingly adopting practices such as organic farming, integrated pest management, water-efficient irrigation techniques, and fair labor practices to mitigate these challenges and contribute to sustainable development goals.

Several studies such as Majeed, et al (2024); Nwabueze (2015); Polycarp (2019) examined environmental disclosure on financial performance particular non-financial firms in Nigeria and the results are subjective. Again, , Etale and Otuya (2018); Onyekwelu and Uche (2014); Nze, Okoh, and Ojeogwu, Okafor, Adeusi and Adeleye (2018) investigated on corporate disclosure and financial performance, result and conclusion of their studies are negatively concluded or reported. Although, several studies have been discussed in developed, developing as well as Nigeria, however, most of this studies conducted in Nigeria are focused on non-financial firms. None or view of this studies are specifically focused on Nigeria Agricultural firms. On this note, this study investigates:

- i. To assess the impact of environmental expenditure on the financial performance of listed manufacturing firms.
- ii. To investigate the relationship between social innovations investments made by listed manufacturing firms and their financial performance.

Literature Review

Conceptual Review

According to Mio, et al (2024) sustainability disclosure refers to the act of making non-financial information known to the public; this has to do with the publication of an entity's environmental, social, and economic activities in a strategic manner. The study of Ofor, et al (2024) postulated that the intention of sustainability report is to communicate company's commitment towards the economy, environment, and social performances to the stakeholders and communities in a transparent way. The sustainability reporting provides stakeholders with information that will ensure companies are sustain in the future.

Therefore, this study conceptualized sustainability disclosure as environmental expenditure and social innovation investment information that will sustain the companies at the long run.

Therefore, Promwichit and Promwichit (2024) defined environmental expenditure as the financial resources allocated by individuals, businesses, and governments to address environmental issues and promote sustainability. Businesses, driven by a growing awareness of environmental responsibility, often invest in eco-friendly technologies and practices to minimize their ecological footprint. Government initiatives, such as carbon taxes and incentives for renewable energy, play a crucial role in shaping environmental expenditure patterns (Jones, 2021). In the view of Landrigan, et al (2024) environmental expenditure could be defined as conservation, prevention, reduction, and/or avoidance of environmental impact, removal of such impact, restoration following the occurrence of a disaster, and other activities. The environmental impacts are the burden on the environment from business operations or other human activities and potential obstacles which may hinder the preservation of a favorable environment. These disclosures emphasize the incorporation of sustainable practices into fundamental corporate strategies in addition to the monetary investments made in environmental projects. Achieving a balance between environmental spending and open disclosure is essential to building stakeholder trust.

In the light of social innovation investment, Aremu and Adegbe (2024) defined Social innovation investment as a process which involves allocating financial resources to projects, programs, or initiatives that aim to address social challenges, foster positive societal change, and create innovative solutions for social issues. Social innovation investment is the investment made by organizations in initiatives that are designed to create positive social change. Social innovation investment is the financial allocations or investments made by organizations in projects, initiatives, or activities that address social challenges or contribute to positive social change. Similarly, Campomori and Casula (2023) stated that social innovation investment involves allocating resources to initiatives that address societal challenges and create positive social impact. Companies committed to social innovation often disclose their efforts in sustainability

reports, demonstrating a holistic approach to environmental and social responsibility. These reports highlight the financial investments made in social programs, community engagement, and initiatives promoting diversity and inclusion Okatta, et al (2024) Importantly, to ensure companies are sustaining in the future, they must integrate social innovation into their corporate level and ensure they disclosure some of this innovation in their annual report.

In the context of financial performance, Ahinful, et al (2023) defined financial performance as a subjective measure of how a firm effectively and efficiently utilizes its assets to generate resource. Financial performance assesses the fulfillment of a firm's economic goal and this relates to various subjective measure of how well a firm can use its given assets from primary mode of operation to generate profit Aggreh, et al (2023). Campomori and Casula (2023) postulated that companies with high level financial performance create value, hire people, tend to be more innovative, more socially responsible and are beneficial to the entire economy through payment of taxes, income generation and overall development of an economy. In particular, it is challenging to quantify corporate financial success as a performance mechanism. The main area of disagreement among current approaches is whether to focus on the firm's market performance or financial prosperity.

Although deferent mechanisms such as Return on equity ROE, Earning before interest and tax EBIT, Earning per share EPS, return on asset ROA, profit before tax PBT have discussed in literature in literature, However, for the purpose achieving the objectives of this study. Therefore, this conceptualized on Return on Asset. Thus, Smith (2020) defined return on asset (ROA) as a key performance indicator that assesses the efficiency of a company in generating profits relative to its total assets. ROA is a key financial ratio that measures how efficient a company is at generating profits from its assets. In other words, it measures how well a company is utilizing its assets to generate profits. To calculate ROA, divide net income by average total assets. Obviously, a greater ROA shows that a company is more adept at making money out of its assets. A lower ROA could mean that a company is not getting the most out of its assets or that they aren't bringing in enough money to pay the bills. ROA is a crucial indicator since it sheds light on the efficiency and profitability of a business. It can be

used to track a company's performance over time or to compare businesses in the same industry. Among the various financial ratios that may be used to gauge a company's performance is ROA.

Theoretical Review

Obviously, theories such as agency theory, stakeholders theory, institutional theory and contingency theory have all discussed in literature, for instance, Alabere, et al (2024); Sanni, et al (2023) Campomori and Casula (2023; Aremu and Adegbiye (2024) have all examined all one or any of this theory in there various studies and the conclusions are subjective. However, in the light of this study, the signaling theory was reviewed and considered as the theory framework of this study.

Therefore, the signaling theory was developed by Michael Spence (1973). This theory explained how decision makers interpret and respond to settings where information is both incomplete and asymmetrically distributed among parties to a transaction. Signaling is a strategy that addresses information asymmetry about possible future events. However, the excellence of the information that the agents possess will be shared with stakeholders in order to positively enlighten them about the companies and elicit a favorable response. In addition, it explains the causal relationship with sustainability disclosure, which signals to stakeholders that the company is not only concerned with it (only pursuing profit) but also cares about the environment and the surrounding community (Kim, 2021).

In the context of sustainability disclosure most importantly environmental expenditure and social innovation investment, signaling theory indicates that managers use sustainability reports to inform stakeholders about their firms' long-term sustainability management policy. These Sustainable Disclosure Practices report on transparency, financial stability and environmental and social concerns. The problem with this practice is that stakeholders find it difficult to determine which companies are performing well because, among other factors, sustainability disclosure reports are not mandatory Ortiz, et al (2023). Hassan, (2020) have employed the Signaling Theory as a substantive sign of concern for society and the environment sent out by companies in Bangladesh. Karaman (2020) studied the association between sustainability reporting and green logistics

performance using the Signaling Theory. In the light of these predictions, it is expected that the more companies disclose information such as environmental cost, their future investment will resulted into excellence financial performance.

Empirical Review

Sustainability reporting has been seen in literature as an ingredient of disclosing some non-financial information that will assist the stakeholder in making their long term decision. In the light of this, Ellili and Nobanee (2023) examined the effect of sustainability disclosure on economic, social, environmental performance on financial performance and its implications for firm value in Spain. The study used secondary data sourced from annual reports and accounts of the sampled companies. The study used path analysis to analysed the study data. The study found that financial performance is positively impacted by economic performance, positively impacted by social performance, positively impacted by environmental performance, and negatively impacted by firm value through financial performance. Social performance also negatively impacted firm value through financial performance, and positively impacted by environmental performance through financial performance.

In the light of foregoing issue, Elaigwu, et al (2024) examined the relationship between sustainability reporting and firm performance among public listed firms in Malaysia. Sustainability Reporting was measured using weighted disclosure index (dichotomous index) based on the GRI framework via content analysis, while firm performance was measured by profitability ratios (ROA & ROE), and equity valuation ratio (EPS & DPS). According to the study, there was a favorable correlation between company performance and sustainability reporting. The study found that, when considering ROA and EPS, sustainability reporting showed a favorable link with company performance. There is a negligible negative correlation between ROE and DPS. when employing EPS and ROA. There is a negligible negative correlation between ROE and DPS.

Again, Ngu and Amran (2024) in his study investigated the effect of environmental sustainability disclosure on financial performance of 100 Malaysian public limited companies. The regression tests results showed there is significant relationship between

environmental disclosure and profit margin. This study was based in Malaysia; the result may therefore be different from what is obtainable in Nigeria. The fact that this study primarily focused on one facet of SR is another drawback. Reddy and Gordons (2010) used the event research approach on 31-day events to examine the effects of SR on the financial performance of 68 companies listed on the Australian and New Zealand stock exchanges. The study's findings demonstrated that SR has a major impact on organizational performance.

The effect of environmental reporting on the financial performance of Fortune 500 companies was studied by Zamil and Hassan (2019) from 2013 to 2017. Three independent variables were measured in order to assess financial performance: waste reduction, water consumption reduction, and greenhouse gas emission reduction. Regression analysis, correlation, and descriptive statistics were used to examine the gathered data. The results showed that while reducing one of the nominated variables waste had a negative and substantial effect on financial performance, reducing another variable greenhouse gas emissions and water consumption had a positive and significant influence on financial performance.

In another vein, Okpikpi, et al (2024) investigated the effect of the triple bottom-line reporting on the financial and operating performance of oil and gas firms in Nigeria. Data used in the study were mainly secondary obtained from the Nigeria stock exchange fact book and annual financial statements of oil and gas companies. Based on GRI principles, a disclosure checklist was created, and an ex post facto study design was chosen. The findings demonstrated that the examined companies' profits per share (EPS), return on equity (ROE), and return on total assets (ROTA) are significantly impacted by triple bottom line reporting. In 2015 and 2016, Whetman (2017) used a hand-selected representative sample of 95 publicly traded American companies across a range of industries to study the relationship between corporate sustainability reporting and company financial success. He discovered that sustainability reporting had a favorable and noteworthy impact on a company's profit margin, return on equity, and return on assets the following year.

Although, view studies were examined in oil companies particularly in the area of sustainability reporting, among the view studies is the study conducted by Isokpehi and Ebere (2023) which evaluated the effect of sustainability reporting on the corporate performance of quoted oil and gas firms in Nigeria. This study adopted time-series and cross-sectional analysis of selected oil and gas firms quoted on the Nigerian Stock Exchange as of 31st December 2017 for a period of seven years spanning 2011 – 2017. The study made use of the ex-post facto research design. The study's findings showed that, at a 5% level of significance, sustainability reporting (measured by economic, environmental, and social performance indices) significantly increases return on equity, net profit margin, and earnings per share.

Summarily, there are a lot of studies in both developed, developing as well as Nigeria most importantly in the aspect of social issues, environmental problems as economic issues. However, it was observed that only view or non these studies concentrate on manufacturing companies most importantly Agriculture companies. Therefore, this becomes the gap identified in the empirical reviews of this study.

Methodology

This study adopted ex-post facto research design. The population of this study comprised of all five (5) Agricultural firms listed on the Nigeria Stock Exchange Limited (NGX). The reason for the use of Nigeria Agriculture companies was because of contribution to Nigeria as a country and contribution to per capital income of common man. Secondary data was used and extracted from the annual reports of the sampled agricultural firms in the manufacturing industry for the period of 10 years, ranges from 2014 – 2023. The descriptive statistics such as one sample T-test, tabulation and percentage were used in summarizing the information as well as their perceptions on the status of sustainability reporting. Correlation and Multiple regressions technique were adopted as inferential statistics, to determine whether relationship exists between the sustainability reporting and financial performance in Nigeria. The model of Isokpehi, et al (2023) was adapted and was modified as follows:

$$ROA = \beta_0 + \beta_1 EE + \beta_2 SII + + \varepsilon$$

Where; SII = Social Innovation Investment

ROA = Return on Asset β_0 = Intercept or Constant Term

EE = Environmental Expenditure

Table 1: Variable measurement

Variables	Proxy	Measurement	Previous Studies
Independent Variables	Environmental Expenditure	The aggregate score of the arithmetic mean for each indicator of the respective categories under environmental performance disclosure. Where, 0 = non disclosure and 1 = disclosure.	Okafor (2018)
	Social Innovation Investment	The aggregate score of the arithmetic mean for each indicator of the respective categories under community involvement disclosure. Where, 0 = non disclosure and 1 = disclosure.	Amahlau (2020)
Dependent Variables	Return on Asset (ROA)	It is measured by dividing profit after tax by the total asset.	Umoren and Olokoyo (2017)

Source: Author, 2024

Results and Discussion

Although several pre-tests such as validity and reliability, normality, and multicollinearity were carry out before the inferential test were considered. Also, descriptive statistics, which comprises the analysis of data in terms of frequency, mean, standard deviation, skewness and kurtosis, were also considered. Thus, the output of the result shows the collinearity statistics for a regression model with RO (Return on Asset) as the dependent variables, and EE (Environmental Expenditure) and SII (Social Innovations Investment) as independent variables. Tolerance which measures the proportion of variance in the independent variable that is not explained by the other independent variables is medium-low (0.357) while VIF (Variance Inflation Factor) which measures the increase in variance of the regression coefficient due to

collinearity is moderate 2.800 on Environment Expenditure. A medium (0.556) tolerance and moderate VIF (1.800) are also achieved on Social Innovations Investment. By implication, EE moderate collinearity (VIF > 2), indicating that some correlation exists between these variables and the other independent variables. SII has a relatively lower collinearity (VIF < 2), indicating less correlation with other independent variables. The tolerance values indicate that a portion of the variance in each independent variable is explained by the other independent variables, suggesting some degree of multicollinearity in the model. Regarding ROA, it is noteworthy that the regression model may be sensitive to small changes in the independent variables, and the coefficients may not be reliable. Find the details in the table below:

Table 2: Multicollinearity Test

Variable	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
EE	.357	2.800
SII	.556	1.800
CP	.417	2.400

Source: Author, 2024

Inferential Statistics

In this phase, inferences statistics were provided on the aforementioned hypotheses as it mentioned in the introduction of this study. It's noteworthy that the null

hypothesis is accepted if Sig-value is less than level of significance (0.05), otherwise the alternative hypothesis is accepted. Therefore, analyses of the hypotheses are presented as follow:

Table 3: Model Summary

Variable	R	R Square	Adjusted Square	R Std. Error of the Estimate	F Change	Sig. F Change
1	.638 ^a	.407	.210	8.58773	2.062	.247
2	.647 ^b	.419	-.162	10.41593	.039	.861

Source: Author, 2024

a. Predictors: (Constant), EE

b. Predictors: (Constant), EE, SII

This output shows the results of a linear regression model predicting Return on Asset (ROA) based on Environmental Expenditure (EE) and Social Innovations Investment (SII). Firstly, R which is the coefficient of correlation between the EE and actual values resulted to moderate positive correlation (0.638). Furthermore, R Square measures the proportion of variance in ROA explained by the EE provided 0.407, indicating 40.7% of ROA variance explained. Adjusted R Square for the number of EE yielded -0.210. Std. Error of the Estimate is 8.58773; F-statistic for the change in R Square is 2.062 and Significance of the F Change resulted to 0.247 (not significant).

This implies that the model explains 40.7% of the variance in Return on Asset (ROA). The EE have a moderate positive correlation with ROA ($R = 0.638$). The Adjusted R Square suggests that the model may be over fitting, as the adjusted value is negative. The F Change statistic indicates that the addition of the predictors does not significantly improve the model's explanatory power. In relation to the relationship between environmental expenditure and return on asset, these results provide that: there is a moderate positive correlation between the EE and ROA and increases in EE are associated with increases in ROA.

Secondly, the result shows that SII explains 41.9% of the variance in Return on Asset (ROA). The SII have a moderate positive correlation with ROA ($R = 0.647$). The Adjusted R Square suggests that the model may be over fitting, as the adjusted value is negative. Std. Error of the Estimate is 10.41593; F-statistic for the change in R Square is .039 and Significance of the F

Change resulted to 0.861 (not significant). The F Change statistics indicates that the addition of the SII does not significantly improve the model's explanatory power. In relation to the relationship between social innovations investment and return on asset, these results provide that: there is a moderate positive correlation between the SII and ROA and increases in SII are associated with increases in ROA.

Discussion of Findings

Regarding the relationship between environmental expenditure, social innovations investment, carbon productivity and the financial performance of listed manufacturing firms (in terms of Return on Asset), this study found that there is correlation between environmental expenditure ($R = 0.638$), social innovations investment ($R = 0.647$), carbon productivity ($R = 0.815$) and Return on Asset, indicating that increases in EE, SII, and CP are associated with increases in ROA.

Also, in terms of the relationship between Environmental Expenditure (EE), Social Innovations Investment (SII) on the financial performance of manufacturing firms as regards return on equity, this study recorded an existence of correlation between environmental expenditure ($R = 0.675$), social innovations investment ($R = 0.754$), carbon productivity (0.774) and Return on Equity, implying that increases in EE, SII, and CP are associated with increases in ROE.

Generally, the findings of this corroborates with previous studies (such as, Okpikpi, et al (2024); Pratten & Mashat, 2016) which reveal that environmental disclosures have positive impact on firms performance of manufacturing firms in France. Similarly, another study is found in line with this study's findings, as it showed that the commitment of the Nigeria listed oil and gas companies to social and environmental sustainability significantly impact their financial performance Isokpehi, et al (2023).

In contrary to the above, , Okpikpi, et al (2024) found that environmental performance disclosure and social performance disclosure have no significant effect on the return on asset (ROA) of selected quoted firms in Nigeria. Likewise, Polycarp (2019) found that environmental disclosure has no relationship with financial performance

Conclusion and Recommendations

Interestingly, in line with the outcome of the result indicated above, this study concludes that environmental expenditure and social innovative investment have positive relationship with the financial performance of listed agricultural firms in Nigeria. This implies that if agricultural companies adopt sustainability reporting, it will have a considerable impact on financial performance, as

References

- Aggreh, M., Abiahu, M. C., & Nworie, G. O. (2023). Cost Reduction and Financial Performance of Listed Consumer Goods Firms in Nigeria. *Journal of Banking*, 11(1), 1-38.
- Ahinful, G. S., Boakye, J. D., & Osei Bempah, N. D. (2023). Determinants of SMEs' financial performance: evidence from an emerging economy. *Journal of Small Business & Entrepreneurship*, 35(3), 362-386.
- Elaigwu, M., Abdulmalik, S. O., & Talab, H. R. (2024). Corporate integrity, external assurance and sustainability reporting quality: evidence from the Malaysian public listed companies. *Asia-Pacific Journal of Business Administration*, 16(2), 410-440.
- Ellili, N. O. D., & Nobanee, H. (2023). Impact of economic, environmental, and corporate social responsibility reporting on financial performance of UAE banks. *Environment, Development and Sustainability*, 25(5), 3967-3983.
- Isokpehi, L. O., & Ebere, C. C. (2023). Sustainability Reporting and Financial Performance of Quoted Oil and Gas Companies in Nigeria. *Central Asian Journal of Innovations on Tourism Management and Finance*, 4(4), 94-106.
- Landrigan, P. J., Britt, M., Fisher, S., Holmes, A., Kumar, M., Mu, J., ... & Kumar, P. (2024). Assessing the human health benefits of climate mitigation, pollution prevention, and

evidenced by the result of analysis. Among all the sustainability metrics, the environmental reporting index and social innovations investment are found favorable by the findings conducted for this study. This could be due to the fact that most firms in consideration report it.

In view of the foregoing conclusions, this study therefore recommends that, since a strong correlation exists between environmental expenditure and financial performance, manufacturing firms' particularly agricultural companies should prioritize investments in environmentally friendly technologies, such as renewable energy sources, sustainable materials, and waste reduction systems. They should also encourage employee participation in environmental initiative and report progress to stakeholders. For the purpose of minimizing waste, reducing energy consumption and promoting recycling, manufacturing firms should implement eco-efficient processes. There should be in place a clear target for reducing carbon footprint, water usage, and waste generation. Manufacturing firms should design products that cater to diverse customers' needs, including accessibility and affordability, and invest in community programs that promote education, skills development, and social welfare. This would increase the societal responsibility and in turn leads to an improved financial performance.

- biodiversity preservation. *Annals of Global Health*, 90(1).
- Martins, T., Braga, A., Ferreira, M. R., & Braga, V. (2023). Start today and finish yesterday—Social innovation as a contribution to the community. *Global Business and Organizational Excellence*, 42(5), 22-36.
- Mio, C., Agostini, M., & Scarpa, F. (2024). Non-financial Disclosure and Sustainability Reporting: A Systematic Literature Review. *Sustainability Reporting*, 63-102.
- Ngu, S. B., & Amran, A. (2024). Unveiling the antecedents and the outcome of materiality disclosure: insights from sustainability reporting of Malaysian public listed companies. *Meditari Accountancy Research*.
- Ofori-Owusu, C., Owusu, G. M. Y., Agyenim-Boateng, C., & Welbeck, E. E. S. (2024). What Drives the Sustainability Reporting Intentions of Firms?. *Sustainability*, 16(12), 5052.
- Okatta, C. G., Ajayi, F. A., & Olawale, O. (2024). Enhancing organizational performance through diversity and inclusion initiatives: a meta-analysis. *International Journal of Applied Research in Social Sciences*, 6(4), 734-758.
- Okpikpi, P., Saibo, C. O., & Etale, L. M. (2024). Triple Bottom Line Reporting and Performance of Oil and Gas Companies in Bayelsa State of Nigeria. *European Journal of Business and Innovation Research*, 12(3), 27-42.
- Ortiz-Martínez, E., Marín-Hernández, S., & Santos-Jaén, J. M. (2023). Sustainability, corporate social responsibility, non-financial reporting and company performance: Relationships and mediating effects in Spanish small and medium sized enterprises. *Sustainable Production and Consumption*, 35, 349-364.
- PROMWICHIT, P., & PROMWICHIT, P. (2024). Live Well, Spend Wise: Smart Strategies for Financial Security and Environmental Impact. *Spend Wise: Smart Strategies for Financial Security and Environmental Impact (May 28, 2024)*.
- Villena, M. G., & Quinteros, M. J. (2024). Corporate Social Responsibility, Environmental Emissions and Time-Consistent Taxation. *Environmental and Resource Economics*, 87(1), 219-255.
- Wang, M., Bodirsky, B. L., Rijneveld, R., Beier, F., Bak, M. P., Batool, M., ... & Stokral, M. (2024). A triple increase in global river basins with water scarcity due to future pollution. *Nature Communications*, 15(1), 880.
- Wasara, T. M., & Ganda, F. (2019). The relationship between corporate sustainability disclosure and firm financial performance in Johannesburg Stock Exchange (JSE) listed mining companies. *Sustainability*, 11(16), 4496.