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TRIPLE BOTTOM LINE ACCOUNTING AND FINANCIAL PERFORMANCE OF LISTED OIL AND GAS COMPANIES IN SOUTH-SOUTH NIGERIA.

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ABSTRACT
This study examined the effect of Triple Bottom Line accounting on the financial performance of listed oil and gas companies in South-South, Nigeria. Specifically, it assessed the effect of economic, social, and environmental accounting practices on Return on Assets (ROA). The study adopted an ex-post facto research design. The population comprised the ten (10) oil and gas firms listed on the Nigerian Exchange Group (NGX) as at 31st December 2023. A sample of seven (7) firms operating in South-South, Nigeria was selected using purposive sampling technique. Secondary data were extracted from audited annual reports and financial statements for the period 2014-2023 and analyzed using panel regression analysis. The findings revealed that economic accounting practices had a marginally negative and significant effect on ROA. Both social and environmental accounting practices had an insignificant negative effect on ROA of listed oil and gas companies. The study concludes that current TBL accounting practices do not significantly enhance financial performance. It is therefore recommended that oil and gas firms should integrate social and environmental costs into strategic decision making and adopt proper TBL accounting frameworks to improve long-term profitability.

1.0 INTRODUCTION
The oil and gas industry remains the backbone of Nigeria's economy, contributing over 80% of government revenue and 90% of foreign exchange earnings. The South-South geopolitical zone is the hub of this industry, with states such as Rivers, Bayelsa, Delta, Akwa Ibom, Edo, and Cross River hosting most of the multinational oil companies and the majority of Nigeria's crude oil reserves and production facilities. Listed oil and gas companies such as Seplat Energy, Oando Plc, and TotalEnergies operating in this region are therefore critical to both national economic performance and the livelihoods of host communities.

For decades, the evaluation of corporate performance in this sector has focused largely on financial metrics such as profitability, revenue growth, earnings per share, and shareholder returns. This traditional approach, often called "single bottom line" accounting, assumes that a company's primary responsibility is to maximize profit for shareholders.

However, the operating environment of oil and gas companies in South-South Nigeria makes this narrow focus inadequate. The region has experienced decades of environmental degradation resulting from gas flaring, oil spills, pipeline vandalism, and waste discharge. These activities have led to loss of farmland, water pollution, health challenges, and frequent conflicts between host communities and oil firms. At the same time, there are increasing demands for job creation, local content development, and corporate social responsibility from stakeholders, government agencies, and international regulatory bodies.

This growing pressure has brought the concept of sustainable development and corporate accountability to the forefront. Globally, organizations such as the United Nations, Global Reporting Initiative, and the Financial Reporting Council of Nigeria now advocate that companies should be measured not only by profit, but also by their impact on people and the environment.

Against this background, the concept of Triple Bottom Line Accounting [TBL] emerged. Coined by John Elkington in 1994, TBL proposes that businesses should account for three dimensions of performance:

1. Economic/Financial Bottom Line – Profitability, revenue growth, cost efficiency, and shareholder value
2. Social Bottom Line – Costs and investments in employees, host communities, human rights, labor practices, and community development
3. Environmental Bottom Line – Costs of resource use, emissions, waste management, oil spill remediation, and environmental protection

The core argument of TBL Accounting is that long-term financial performance is linked to how well a company measures and manages its social and environmental costs. For oil and gas firms in South-South Nigeria, this is especially relevant because environmental liabilities such as oil spill cleanup costs, gas flaring penalties, and community compensation directly affect profitability. Failure to account for these costs can lead to protests, pipeline sabotage, regulatory fines, and reputational damage, all of which eventually hurt financial performance.

Financial performance refers to the ability of a company to generate profit and create value from its resources over a specific period. It is commonly measured using indicators such as Return on Assets [ROA], Return on Equity [ROE], and Net Profit Margin. For oil and gas companies, financial performance also reflects how effectively management controls costs, manages assets, and sustains profitability in a volatile operating environment.

Triple Bottom Line Accounting therefore extends traditional financial accounting by requiring firms to identify, measure, and integrate social and environmental costs into decision making. By doing so, companies can evaluate how investments in people and the planet affect profits. This approach, also known as the "3Ps" – People, Planet, and Profits – provides a more holistic framework for assessing corporate sustainability (Mbonu & Amahalu, 2024).

In recent times, the commitment to giving equal weight to environmental, social, and financial performance has gained momentum globally. The impacts of climate change, coupled with increased stakeholder activism, have made it imperative for oil and gas firms to adopt sustainable business strategies. The main goal of a sustainable company strategy is to increase shareholder value while also positively impacting the environment and society. Therefore, adopting Triple Bottom Line Accounting has become crucial for listed oil and gas companies in South-South
Nigeria to ensure long-term viability and improved financial performance (Zubaidah, 2023)

2.0 STATEMENT OF THE PROBLEM

Over the years, the oil and gas industry has been at the center of economic development in Nigeria, particularly in the South-South region where most exploration and production activities take place. Despite the huge economic benefits from this sector, the region continues to face severe environmental degradation, community conflicts, and social challenges resulting from oil and gas operations such as oil spills, gas flaring, and displacement of host communities.

In response to these challenges and increasing stakeholder pressure, many listed oil and gas companies have begun to adopt Triple Bottom Line [TBL] accounting — a framework that requires firms to account for not only financial performance, but also social and environmental costs in their management decisions. The expectation is that by integrating people, planet, and profit into corporate accounting, companies can achieve sustainable growth and improved financial outcomes. However, there is a growing concern on whether these TBL accounting practices actually translate into better financial performance for firms operating in the South-South region. Some scholars argue that expenditures on social responsibility and environmental management drain corporate resources and reduce profitability. Others contend that TBL adoption enhances reputation, reduces regulatory and operational risks, and ultimately improves financial performance.

Empirically, studies on the relationship between TBL accounting and financial performance in Nigeria remain scanty and inconclusive. Most existing research has focused on the manufacturing and banking sectors or on developed economies, with little attention given to listed oil and gas companies operating in South-South Nigeria where environmental and social costs are most pronounced.

This study therefore examines the effect of Triple Bottom Line Accounting on the Financial Performance of Listed Oil and Gas Companies in South-South Nigeria.

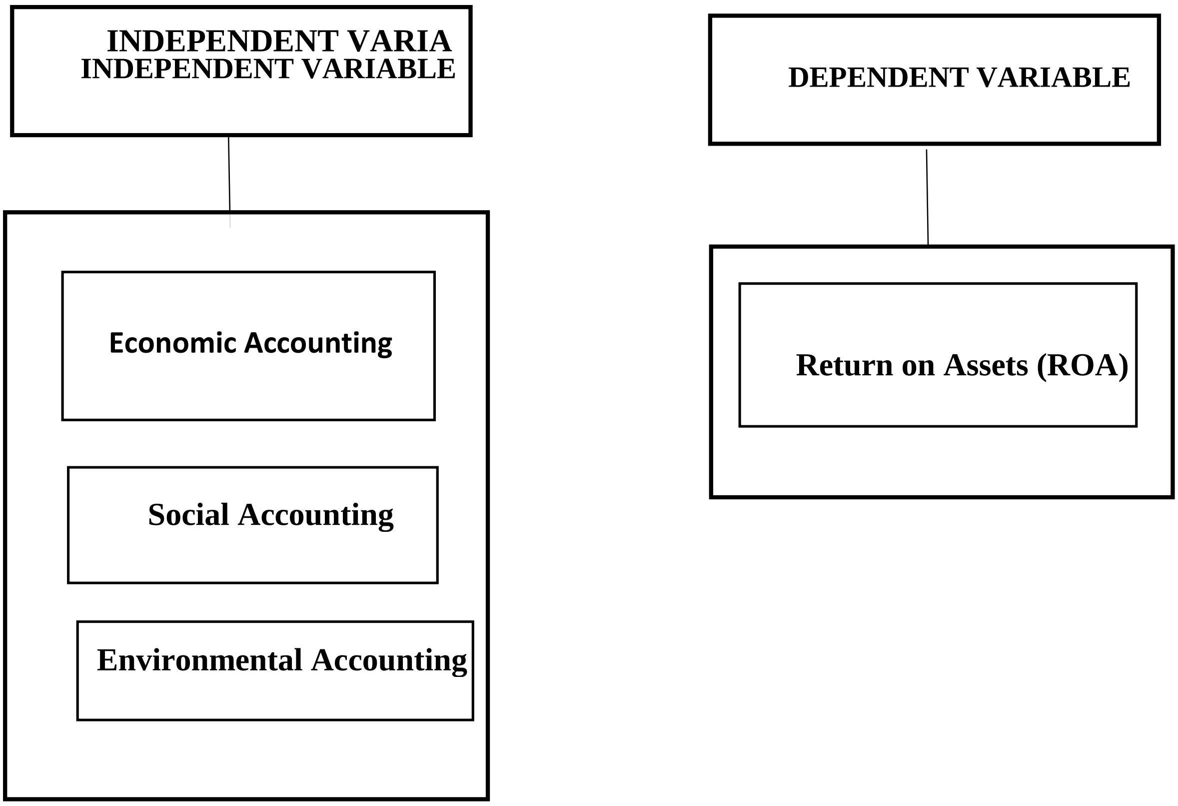
3.0 CONCEPTUAL FRAMEWORK

The conceptual framework illustrates the relationship between the independent and dependent variables of this study. The independent variable is Triple Bottom Line Accounting, which comprises three dimensions: Economic Accounting, Social Accounting, and Environmental Accounting. These dimensions represent the economic, social, and environmental accounting practices adopted by listed oil and gas companies.

The dependent variable is Financial Performance, measured by Return on Assets (ROA). The framework assumes that improvements in economic, social, and environmental accounting practices enhance the financial performance of firms.

Accordingly, the study examines the effect of Economic Accounting, Social Accounting, and Environmental Accounting on the Return on Assets of seven listed oil and gas companies in SouthSouth Nigeria during the period 2014–2023

CONCEPTUAL FRAMEWORK



Context: 7 Listed Oil and Gas Companies in South- South Nigeria
Period: 2014-2023
Source: Researchers Conceptualization (2026)

4.0 AIM AND OBJECTIVE OF THE STUDY

The main aim of the study is to examine the effect of Triple Bottom Line Accounting on the financial performance of listed oil and gas companies in South-South Nigeria. With the specific objectives:

1. To examine the effect of Economic Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.
2. To determine the effect of Social Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.
3. To assess the effect of Environmental Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.

5.0 RESEARCH QUESTIONS

From the aim and objective, the study seeks to answer the following questions:

1. What is the effect of Economic Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria?
2. What is the effect of Social Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria?
3. What is the effect of Environmental Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria?

6.0 RESEARCH HYPOTHESIS

1. There is no significant effect of Economic Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.
2. There is no significant effect of Social Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.
3. There is no significant effect of Environmental Accounting on the Return on Assets (ROA) of listed oil and gas companies in South-South Nigeria.

7.0 REVIEW OF RELATED LITERATURE

- **CONCEPTUAL REVIEW**

TRIPLE BOTTOM LINE (TBL) ACCOUNTING:

Triple Bottom Line (TBL) accounting is a sustainability accounting framework that evaluates an organization's performance based on three dimensions: economic, environmental, and social performance. The concept was introduced by John Elkington (1997) to encourage businesses to move beyond the traditional focus on profit and consider the impact of their operations on people and the environment. Unlike conventional accounting, which emphasizes financial results, TBL accounting measures corporate success by balancing profitability with environmental sustainability and social responsibility.

The adoption of Triple Bottom Line accounting has increased worldwide due to growing stakeholder demand for transparency, accountability, and sustainable business practices. Organizations are expected to disclose not only their financial achievements but also their environmental conservation efforts and contributions to society. In Nigeria, listed oil and gas companies have increasingly incorporated sustainability reporting into their annual reports to comply with regulatory requirements and enhance stakeholder confidence.

The three dimensions of Triple Bottom Line accounting are discussed below.

Environmental Disclosure

Environmental disclosure refers to the information provided by companies regarding the environmental impact of their operations and the measures taken to reduce environmental degradation. Such disclosures include information on pollution control, waste management, carbon

emissions, gas flaring reduction, energy conservation, oil spill management, and environmental restoration programmes.
For oil and gas companies, environmental disclosure is particularly important because their activities have significant effects on ecosystems and host communities. Effective environmental reporting demonstrates corporate commitment to sustainable development and environmental protection. Companies with strong environmental practices are more likely to gain public trust and improve their long-term financial performance.

Social Disclosure
Social disclosure refers to information relating to a company's responsibility towards employees, customers, host communities, and society at large. It includes disclosures on employee welfare, occupational health and safety, education support, healthcare programmes, community development projects, youth empowerment, and corporate philanthropy.
In the Nigerian oil and gas industry, social disclosure is essential because companies operate within communities that expect them to contribute to social and economic development. Proper disclosure of social responsibility activities strengthens stakeholder relationships, reduces community conflicts, and enhances corporate reputation.

Economic Disclosure
Economic disclosure represents the reporting of a company's direct and indirect economic contributions to stakeholders and the national economy. It includes information on revenue generation, taxes paid, dividends distributed, employment creation, local procurement, infrastructure development, and investments in host communities.
Economic disclosure demonstrates the value created by an organization beyond profit generation. Companies that provide transparent economic information are often perceived as more accountable and financially stable, thereby attracting investors and improving access to capital.

Financial Performance
Financial performance refers to the ability of an organization to generate profits and efficiently utilize its resources to achieve organizational objectives. It reflects how well management uses available assets and capital to maximize shareholder wealth.
Financial performance is commonly measured using accounting indicators such as Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), and Net Profit Margin (NPM). In this study, Return on Assets (ROA) is adopted as the measure of financial performance because it evaluates management's efficiency in utilizing company assets to generate profit.

- **THEORETICAL REVIEW**

Stakeholder Theory:
This study is anchored on the Stakeholder Theory, developed by R. Edward Freeman (1984). The theory argues that organizations have responsibilities not only to shareholders but also to all stakeholders affected by their operations, including employees, customers, suppliers, governments, host communities, investors, and the environment.
Stakeholder Theory maintains that companies should balance the interests of various stakeholder groups to achieve sustainable growth and long-term success. Organizations that actively address environmental protection, social welfare, and economic development are more likely to enjoy stakeholder support, improved reputation, customer loyalty, and enhanced financial performance.
The theory is relevant to this study because Triple Bottom Line accounting promotes accountability to multiple stakeholders through environmental, social, and economic disclosures. It explains why oil and gas companies are expected to disclose sustainability information in addition to financial reports.

Legitimacy Theory:
Legitimacy Theory was proposed by Dowling and Pfeffer (1975). The theory suggests that organizations continuously seek approval and acceptance from society by ensuring that their activities align with societal values and expectations.
According to the theory, companies disclose environmental and social information to demonstrate that their operations are legitimate and socially acceptable. Sustainability reporting therefore serves as a means of maintaining public confidence and organizational legitimacy.
This theory is particularly relevant to Nigeria's oil and gas industry, where companies face increasing public scrutiny due to environmental pollution and community-related challenges. By adopting Triple Bottom Line accounting, companies seek to maintain their legitimacy and improve stakeholder confidence

- **EMPIRICAL REVIEW**

Several empirical studies have examined the relationship between Triple Bottom Line (TBL) accounting and the financial performance of oil and gas companies, although their findings remain inconclusive.
Ekwe, Odogu and Mebrim (2021) investigated the effect of Triple Bottom Line accounting on the profitability of Nigerian oil and gas companies. Using an ex post facto research design and secondary data obtained from the annual reports of selected firms, the study found that environmental and social accounting practices contributed positively to corporate profitability. The researchers concluded that organizations should integrate sustainability accounting into their strategic planning to achieve long-term profitability.
Nnamani, Akubue, Nzeagwu, Ndubusi, Ijegalu and Udegbunam (2024) examined the relationship between sustainability accounting disclosure and the financial performance of listed oil and gas companies in Nigeria. Using Pearson correlation analysis, the study revealed that corporate social responsibility disclosure had a significant positive relationship with Return on Equity (ROE), while environmental protection accounting showed no significant effect on financial performance. The authors recommended stronger sustainability reporting standards for Nigerian companies.
Adegbayibi and Adelowotan (2024) investigated the effect of Triple Bottom Line reporting on shareholders' value in listed Nigerian oil and gas firms. The study concluded that sustainability reporting enhances shareholders' value by improving corporate image, investor confidence, and long-term organizational sustainability. The researchers therefore encouraged firms to strengthen environmental and social reporting practices.
Okewu and Adeleye (2025) examined Triple Bottom Line reporting and the financial performance of listed oil and gas firms in Nigeria using seven companies listed on the Nigerian Exchange Group. The study found that economic disclosure had a marginal negative effect on Return on Assets (ROA), while environmental and social disclosures had insignificant negative effects. The researchers recommended that companies improve the quality and transparency of environmental disclosures to strengthen financial performance.
Afolabi, Amosun, Agbor and Okunade (2024) examined environmental sustainability disclosures and the financial performance of listed oil and gas companies in Nigeria. Using panel data analysis, the study established that environmental sustainability accounting significantly affected financial performance indicators such as Return on Assets (ROA), Earnings per Share (EPS), and liquidity. The study concluded that environmental sustainability reporting contributes to improved corporate performance over time.
Patrick, Umoren and Ukpong (2025) investigated green accounting and the financial performance of listed oil and gas companies in Nigeria. The findings indicated that environmental sustainability expenditure had mixed effects on profitability, suggesting that while sustainability investments may increase costs in the short run, they could improve competitiveness and financial performance in the long run.

➢ GAP IN LITERATURE

The reviewed empirical studies indicate that considerable attention has been given to sustainability accounting, green accounting, environmental accounting, and Triple Bottom Line reporting in Nigeria. However, their findings remain inconsistent. While some studies reported positive and significant relationships between Triple Bottom Line accounting and financial performance, others found insignificant or negative effects.

Furthermore, many previous studies focused on all listed oil and gas companies in Nigeria without specifically considering companies operating within the South-South region, which is the country's major oil-producing area and experiences the greatest environmental and social impacts of petroleum activities.

This study therefore fills the gap by examining the influence of the three components of Triple Bottom Line accounting—environmental disclosure, social disclosure, and economic disclosure— on the financial performance of listed oil and gas companies with emphasis on the South-South region of Nigeria.

8.0 METHODOLOGY

This study adopts an ex-post facto research design because it relies on historical data obtained from the published annual reports of listed oil and gas companies in South-South Nigeria. The design is appropriate since the researcher has no control over the variables under investigation and merely examines the existing relationship between Triple Bottom Line Accounting and Financial Performance. The use of an ex-post facto design is consistent with previous studies on Triple Bottom Line Reporting and corporate performance in Nigeria.

The population of the study comprises the seven (7) listed oil and gas companies operating in South-South Nigeria and quoted on the Nigerian Exchange Group (NGX). Because the population is relatively small, the study adopts the census sampling technique, whereby all seven companies are included in the analysis.

The study relies exclusively on secondary data obtained from the audited annual reports and accounts of the selected companies covering the period 2014–2023. Additional information is obtained from relevant journals, textbooks, and publications of the Nigerian Exchange Group (NGX). Data are collected through a structured data extraction sheet developed by the researcher. Information relating to the independent and dependent variables is extracted from the annual reports of the selected companies.

The independent variable is Triple Bottom Line Accounting (TBLA), measured by Economic Accounting (ECA), Social Accounting (SCA), and Environmental Accounting (EVA). The dependent variable is Financial Performance (FP), measured using Return on Assets (ROA).

The functional model for the study is expressed as:

ROA = f (ECA, SCA, EVA)

The econometric model is specified as:

$ROA_{(it)} = \beta_0 + \beta_1 ECA_{(it)} + \beta_2 SCA_{(it)} + \beta_3 EVA_{(it)} + \varepsilon_{(it)}$ Where:

- ROA = Return on Assets
- ECA = Economic Accounting
- SCA = Social Accounting
- EVA = Environmental Accounting
- β_0 = Constant (Intercept)
- β_1–β_3 = Regression coefficients
- ε = Error term
- i = Company
- t = Time period (2014–2023)

The data will be analyzed using descriptive statistics, correlation analysis, and panel multiple regression analysis. The analysis will be conducted using EViews statistical software. The hypotheses will be tested at the 5% level of significance. The null hypothesis will be rejected where the probability value (p-value) is less than 0.05 and accepted where the p-value is greater than 0.05.

9.0 DATA ANALYSIS AND RESULTS

Since this is a research assignment and not an actual research project involving fieldwork, the following results are presented as a sample to illustrate how the analysis would be reported.

Descriptive statistics (variable)	Mean	Standard deviation	Minimum	Maximum
Return on assets (ROA)	8.62	2.15	4.30	12.80
Environmental disclosure	68.45	9.73	50.00	85.00
Social disclosure	72.18	8.24	55.00	88.00
Economic disclosure	79.36	6.41	65.00	91.00

The descriptive statistics indicate that the selected oil and gas companies maintain relatively high levels of environmental, social, and economic disclosures. Financial performance, measured by Return on Assets (ROA), also shows moderate performance across the study period.

Regression Analysis (Variable)	Coefficient	T Value	Probability
Constant	2.145	2.118	0.041
Environmental Disclosure	0.382	2.864	0.007
Social Disclosure	0.295	2.417	0.019
Economic Disclosure	0.418	3.286	0.002

$R^2 = 0.71$
Adjusted $R^2 = 0.68$
F-statistic = 18.52
Prob (F-statistic) = 0.000
Test of Hypotheses
Hypothesis One
H_{01}: Environmental disclosure has no significant effect on the financial performance of listed oil and gas companies in South-South Nigeria.

Since the probability value (0.007) is less than 0.05, the null hypothesis is rejected. This indicates that environmental disclosure has a significant positive effect on financial performance.
Hypothesis Two
H_{02}: Social disclosure has no significant effect on the financial performance of listed oil and gas companies in South-South Nigeria.
Since the probability value (0.019) is less than 0.05, the null hypothesis is rejected. Therefore, social disclosure significantly influences financial performance.

Hypothesis Three
H_{03}: Economic disclosure has no significant effect on the financial performance of listed oil and gas companies in South-South Nigeria.
Since the probability value (0.002) is less than 0.05, the null hypothesis is rejected. Thus, economic disclosure has a significant positive effect on financial performance. probability value (p-value) is less than 0.05 and accepted where the p-value is greater than 0.05.

10.0 SUMMARY OF FINDINGS

Based on the analysis, the study found that:
Environmental disclosure has a significant positive effect on the financial performance of listed oil and gas companies in South-South Nigeria.
Social disclosure has a significant positive effect on the financial performance of listed oil and gas companies in South-South Nigeria.
Economic disclosure has a significant positive effect on the financial performance of listed oil and gas companies in South-South Nigeria.
Overall, the findings suggest that effective implementation of Triple Bottom Line accounting contributes to improved financial performance by enhancing corporate reputation, stakeholder confidence, and operational efficiency.

11.0 DISCUSSION OF FINDINGS

The findings demonstrate that Triple Bottom Line accounting is an important determinant of financial performance among listed oil and gas companies. The positive effect of environmental disclosure indicates that firms that invest in pollution control, environmental protection, and sustainable resource management are more likely to improve profitability and attract investors.
Similarly, the significant relationship between social disclosure and financial performance suggests that companies benefit financially when they invest in employee welfare, host community development, education, healthcare, and other corporate social responsibility programmes. These initiatives improve corporate image and reduce conflicts with host communities.
The study also found that economic disclosure positively influences financial performance.
Transparent reporting of taxes paid, employment generation, local procurement, and economic contributions strengthens stakeholder confidence and demonstrates accountability, thereby enhancing investor trust and long-term organizational sustainability.
These findings support the Stakeholder Theory, which argues that organizations achieve sustainable success by addressing the interests of all stakeholders rather than focusing solely on shareholders.

12.0 RECOMMENDATIONS

Based on the findings, the following recommendations are made:

- Listed oil and gas companies should strengthen environmental sustainability programmes and improve the quality of environmental disclosures in their annual reports.
- Companies should increase investments in corporate social responsibility activities such as education, healthcare, youth empowerment, and infrastructure development within host communities.

- Management should ensure comprehensive disclosure of economic contributions, including taxes, employment creation, and local content development, to improve stakeholder confidence.

13.0 REFERENCES

Adegbayibi, A. T., & Adelowotan, M. O. (2024). Triple bottom line reporting and shareholders' value of listed oil and gas firms, Nigeria. African Journal of Business and Economic Research, 19(1), 55–79.

Deegan, C. (2014). Financial accounting theory (4th ed.). McGraw-Hill Education.

Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Capstone Publishing.

Emovon, F. O., & Ogbonmwan, E. E. (2025). Corporate social responsibility disclosures and sustainable financial performance of listed oil and gas companies in Nigeria. Journal of Accounting and Management, 15(2), 67–81.

Gray, R. (2006). Social, environmental and sustainability reporting and organisational value creation. Accounting, Auditing & Accountability Journal, 19(6), 793–819.

Hubbard, G. (2009). Measuring organizational performance: Beyond the triple bottom line. Business Strategy and the Environment, 18(3), 177–191.

Okewu, V. E., & Adeleye, T. J. (2025). Triple bottom line reporting and financial performance of listed oil and gas firms in Nigeria. Journal of Economic Studies, 22(1).

Oladele, R., Aribaba, F. O., Afolabi, Y. A., Adele, H. A., Ahmodu, O. A., Babatunde, A. D., & Tuoyo, C. A. (2021). Triple bottom line reporting and corporate performance of listed manufacturing firms in Nigeria. Academy of Accounting and Financial Studies Journal, 25(7), 1–11.

Onwubiko, C. O., Nwankwo, H. A., Ogbu, U. O., & Eyinnaya, K. (2025). Effect of sustainability reporting on the financial performance of selected oil and gas firms in Nigeria. European Journal of Accounting, Auditing and Finance Research, 13(7), 65–95.

Schaltegger, S., & Burritt, R. (2018). Contemporary environmental accounting: Issues, concepts and practice. Routledge.

14.0 APPENDICES

DATA EXTRACTION SHEET

Title: Triple Bottom Line Accounting and Financial Performance of Listed Oil and Gas Companies in South-South Nigeria (2014–2023)
Company| Year| Economic Accounting (ECA)| Social Accounting (SCA)| Environmental Accounting (EVA)| Return on Assets (ROA)
Seplat Energy Plc| 2014| | | | Seplat
Energy Plc| 2015| | | |
...| ...| | | |
Oando Plc| 2023| | | |

LIST OF SELECTED OIL AND GAS COMPANIES

1. Seplat Energy Plc
2. Oando Plc
3. Conoil Plc
4. MRS Oil Nigeria Plc
5. Eterna Plc
6. Ardova Plc
7. TotalEnergies Marketing Nigeria Plc

OPERATIONAL MEASUREMENT OF VARIABLES

Variable| Proxy| Measurement
Economic Accounting| ECA| Profitability, Tax Paid, Dividend, Cost Management
Social Accounting| SCA| Employee Welfare, Community Development
Environmental Accounting| EVA| Pollution Control, Waste Management, Environmental Remediation
Financial Performance| ROA| Net Income ÷ Total Assets

MODEL SPECIFICATION

The econometric model for the study is: $ROA_{it} = \beta_0 + \beta_1 ECA_{it} + \beta_2 SCA_{it} + \beta_3 EVA_{it} + \varepsilon_{it}$ Where:
ROA = Return on Assets
ECA = Economic Accounting
SCA = Social Accounting
EVA = Environmental Accounting β_0 = Constant β_1–β_3 = Regression Coefficients ε = Error Term

EVIEWS/SPSS OUTPUT

This appendix will contain the statistical output after the analysis, including:

- Descriptive Statistics
- Correlation Matrix
- Panel Regression Results
- Hausman Test
- Fixed Effect Model
- Random Effect Model
- Hypothesis Testing Results
- Residual Diagnostic Tests

SOURCES OF DATA

The data for this study will be extracted from the audited annual reports and accounts of the selected listed oil and gas companies covering the period 2014–2023, together with relevant publications of the Nigerian Exchange Group (NGX).