

## Triple Bottom Line Disclosure and Bottom Line Performance of Quoted Companies in Nigeria

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**Abstract:** This research investigates the impact of triple bottom line (TBL) disclosure (economic, social and environmental disclosure) on the financial performance (bottom line performance) of non-financial firms listed in Nigerian stock exchange between the period 2005 to 2016. TBL is measured by the level of disclosure of economic, social and environmental initiatives, while bottom line or financial performance is measured by Return on Assets (ROA), Return on Equity (ROE) and Net Profit Margin (NPM). Multivariate regression models were specified for testing formulated hypotheses. The hypotheses revealed that while TBL Disclosure has a significant impact on ROA and ROE, it does not have a significant impact on NPM of companies quoted on the Nigeria Stock Exchange. It was recommended from the findings that firms should alongside economic performance disclosure, increase their disclosure of environmental and social initiatives and investments in order to improve their bottom lines and value.

**Keywords:** Triple Bottom Line (TBL) Disclosure, Bottom Line Performance, Return on Assets (ROA), Return on Equity (ROE), Net Profit Margin (NPM)

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### INTRODUCTION

Triple Bottom Line (TBL) disclosure is of essence because businesses do not exist in a vacuum, but operates as a part and parcel of an environment. These businesses not only provide economic performance to their stakeholders, but also disclose non-financial information covering social and environmental performance. TBL reporting is reflected in social and environmental responsibility which, according to Suttipun [1] is reflected in social and environmental performance disclosure. Social or environmental performance disclosure is an aspect of sustainable development reflecting companies concerns and responsibility towards the earth and its resources, intergenerational equality as well as environmental protection [2].

TBL as an accounting framework incorporates financial performance, social performance and environmental performance. This accounting framework that measures both financial and non-financial performance was created by John Elkington [3] to focus on interrelated dimensions of profit, people and the planet (PPP). Since its creation, it has grown significantly in advanced countries such as USA, Canada, Australia, Canada, Japan, UK, New Zealand and other European Countries, and have consequently pushed both private and public organizations to adopt it as a better measure and evaluator of their operational performance. In the wake of increased business regulations and Stakeholders increasing awareness of

the ecological and social footprints adopted by companies globally, boardroom discussions have been centered on how to manage corporate performance across the three dimensions of TBL or sustainable reporting in order to derive synergistic benefits from TBL implementation strategy. Accountability, transparency and governance issues have heightened with the attendant challenges of accounting or measuring social and ethical dimensions, as well as developing an approach to measuring progress in an integrated way across the TBL reporting framework [4].

Global Reporting Institute [22] has defined TBL reporting as the “practice of measuring, disclosing and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development.” By implication, firms are to take full responsibility for the impact of their activities on the environment and society as a whole, whether negative or positive, and provide adequate and proper disclosure of these impacts in an appropriate sustainability report, giving detailed description of their governance structure, stakeholder engagement approach and their economic, social and environmental performance. Aggarwal [5] adds that TBL disclosure lays a foundation for preserving and enhancing value for firms to reap plenty of strategic benefits as a result of sustainability thinking. Companies that disclose both financial and non-financial measures in today’s dynamic and complex

business environment can attract more profits, and perform more efficiently, due to the external economies of scale flowing from stakeholders' satisfaction.

In a developing market like Nigeria, most firms have continued to focus on the economic performance of their operations, which has left Stakeholders unsatisfied. Luke and Olugbenga [6] opine that "with the current global trend of social sustainability, senior managers must endorse and be committed to environmental and social obligation, even though this may have a major resources implication to major goals and results if they must improve relationship with stakeholders; especially employees, customers and investors. Dutta [4] assert that with the present transition in societal focus to environmental sustainability and longevity, business organizations are to look at the bigger picture of TBL impact, in order to balance economic, social and environmental performance not just for the now, but also for future generations to come.

Hence, there is increased expectation for all companies to be more transparent in how they treat the environment, how they handle their corporate governance issues, how they treat their employees, and how they treat their communities. According to Epstein [7] corporations have become more sensitive to social issues and stakeholder concerns and are striving to become better corporate citizens. Whether the motivation is concern for society and environment, government regulation, stakeholder pressures, or economic profit, the result is that managers must make significant changes to more effectively manage their social, economic and environmental impact.

Against the backdrop, this study examines the impact of Triple Bottom Line (TBL) reporting or disclosure on the bottom line (performance) of quoted companies in Nigeria. More specifically, the study examines:

1. The impact of Triple Bottom Line Disclosure on Return on Assets (ROA)
2. The impact of Triple Bottom Line Disclosure on Return on Equity (ROE)
3. The impact of Triple Bottom Line Disclosure on Net Profit Margin (NPM)

## **THEORETICAL FRAMEWORK AND LITERATURE REVIEW**

The stakeholder theory begins with the assumption that values are necessarily and explicitly a part of doing business. It asks managers to articulate the shared sense of the value they create, and what brings its core stakeholders together. It also pushes managers to be clear about how they want to do business, specifically what kinds of relationships they want and

need to create with their stakeholders to deliver on their purpose. The traditional definition of a stakeholder is 'any group or individual who can affect or is affected by the achievement of the organization's objectives'. The general idea of the stakeholder concept is a redefinition of the organization.

Stakeholder theory contributes to the corporate sustainability concept by bringing supplementary business arguments as to why companies should work toward sustainable development. It holds that since the sustainability of a firm depends on the sustainability of its stakeholder relationships, a company must consider and engage not only shareholders, employees and clients, but also suppliers, public authorities, local or national community and civil society in general, financial partners etc. Adopting this stakeholder view means rethinking nature and purposes of firms and the managerial tools adopted by companies themselves. In this relational view of the firm, the success of managerial efforts cannot be measured according to a shareholder perspective, but only by adopting a more holistic and comprehensive stakeholder framework [8].

Companies need appropriate systems to measure and control their own behavior to assess whether they are responding to stakeholder concerns in an effective way and in order to communicate and demonstrate the results achieved. These new evaluation and reporting systems should have the purpose of broadening, integrating and improving the traditional financial/economic approaches to the corporate performance measurement, taking stakeholder needs and requirements into due account. This births triple bottom line reporting [9].

## **Triple Bottom Line Reporting**

Triple Bottom Line or Sustainability Reporting is a concept which is used to explain the communication of a reporting organization's information on its economic, social and environmental performance, these three dimensions of sustainability reporting are synonymous with profits, people and planet. Chapman & Milne [10] defined TBLR as 'the measurement, management and reporting of economic, environmental and social performance indicators in a single report'. From their definition, TBLR is the best reporting framework that includes managing, measuring and publicly reporting multi-dimensional performance and integrating it with management process [11]. Norman and MacDonald, [12] add that Triple Bottom Line Reporting "defines a company's ultimate worth in financial, social, and environmental terms".

In this study, Economic, Social and Environmental performance and disclosure indices is

used to measure Triple Bottom Line Disclosure among companies listed in the Nigerian Stock Exchange.

### **Bottom line Performance**

Bottom line performance which is synonymous with corporate financial performance is a concept which is tied to performance measurement of companies. It refers to the profit levels of a firm in an accounting period which is the foundation of performance measurement and valuation. Profitability literature provide that bottom line (profits) provide a better performance benchmark when translated to financial ratios. These ratios are used to relate one component or value over another to indicate the strength or weakness of a firm's performance in a given area [8].

Prior studies such as Glautier and Underdown [13], Makori and Jagongo [14], and Munasinghe and Kumara [15] show that investors assess corporate financial performance from two perspectives. The first being a measure of the firms' ability to generate profit (as Return on Asset (ROA), Return on Equity (ROE), Return on Capital Employed or Return on Investment (ROCE or ROI), and Net Profit Margin (NPM)), and the second being a measure of value of a company share to investors (Earnings per share (EPS) and Price Earnings Ratio (P/E)).

In this study, bottom line performance or profitability is measured by ROA, ROE and NPM following Morhardt, Baird and Freeman [16].

### **Empirical Review and Hypotheses Development**

Khavah, Nikhashemi, Yousefi and Haque [21] examined the relationship between, and impact of TBL disclosure on performance of firms. The model formulated adopted linear regression where it was revealed that TBL disclosure is positively and considerably related with revenue. It was also observed that with TBL reporting framework, companies become more aware of their host communities and environment, and this knowledge enable them formulate strategic, social and environmental plans that inspire a sustainable and continuous profitability for companies.

Ngwakwe [17] in his study investigated the relationship between sustainable business practice (TBL reporting) and firm performance. Using a field survey design and a sample size of sixty manufacturing companies listed on the Nigerian Stock Exchange, the model formulated regress firm performance as a function of three selected sustainable business practice indicators: Employee Health and Safety (EHS), Waste Management (WM) and Community Development (CD). It was observed from the study that TBL disclosure in terms of sustainable practices of firms are

significantly related with firm performance. It was concluded that within the Nigerian business environment, TBL disclosure significantly affects corporate performance.

Morhardt, Baird and Freeman [16] relied on the work of Hart and Ahuja [18] who studied the impact of environmental and social disclosure on Return on Sales (ROS), Return on Assets (ROA) and Return in Equity (ROE) in 127 large firms in the USA, covering a period of 4 years after the year of toxic release inventory initiation. Morhardt, Baird and Freeman tried to investigate whether social and environmental improvements had any consequence (good or bad) on both managerial and financial performance. Using a causal relationship model, they found that in 1991 and 1992, all the three financial indicators (ROS, ROA and ROE) were significantly related with environmental improvement (emissions reduction).

Makori and Jagongo [14] in their investigation to ascertain the relationship existing between environmental accounting and profitability, selected firms listed in India, used a multiple regression analysis to ascertain how environmental accounting and reporting framework affect four profitability variables Return on Capital Employed (ROCE), Earnings a negative per Share (EPS), Net Profit Margin (NPM) and Dividend per Share (DPS). It was revealed from the statistical test that while environmental disclosure had a significant impact or influence on the four variables, it had a negative relationship with ROCE and EPS, a positive relationship with NPM and DPS.

Munasinghe and Kumara [15], in their study, discovered that CSR/TBL disclosure has a significantly positive relationship between CSR/TBL and ROE and ROA. The Spearman Rank order Correlation was employed to conduct the test. It was, thus, concluded that increase fortune/benefit accruing from TBL disclosure such as on ROE and ROA is enough reason for companies to voluntarily initiate TBL/CSR activities.

Given the findings from previous empirical works, we argue that as firms increase their disclosure regarding social, environmental and economic initiatives, expenditure and investments, long-run economic benefits will be reaped by these firms. This is because the primary motive for increased social, environmental and economic activities is to improve bottom line in the very near future which is possible through decreased cost of operations, reduced operating and investing risk, amongst others. Hence, we hypothesize:

- H1: TBL Disclosure has a significant impact on Return on Assets (ROA) of Quoted Companies in Nigeria.
- H2: TBL Disclosure has a significant impact on Return on Equity (ROE) of Quoted Companies in Nigeria.
- H3: TBL Disclosure has a significant impact on Net Profit Margin (NPM) of Quoted Companies in Nigeria.

**RESEARCH METHODOLOGY**

This research employed *ex-post facto* design. The *ex-post facto* research design according to Onwumere [19] is the type of research involving events that have already taken place. Data already exist as no attempt will be made to control or manipulate relevant independent variables apparently because these variables are not manipulatable. This design is suitable for the purpose of this research because it is not possible to directly manipulate or control any of the independent variables. This research uses non-financial annual Nigerian data of firms listed in Nigerian Stock Exchange (NSE) for the period between 2005 to 2016 obtained from firm annual reports. For accurate analysis, we deleted all the firms that did not have a complete and consistent record on the variables included in the analysis over the 12-year period.

To test the hypotheses formulated in the study, multivariate regression models are employed following Suttipun [1] and Kwaghfan [8]. Multiple regression analysis is very relevant in investigating the predictable power of the independent variables on the dependent variable. The analysis was guided by the specified model in each hypothesis. Eviews Software 9.5 is utilized for analysis and interpretation of data.

To test hypothesis one, Return on Assets (ROA) which is the dependent variable is regressed on Economic Performance disclosure index (ECP), Environmental performance disclosure index (ENV) and Social Performance disclosure index (SOC) as the independent variables.

$$ROA_{it} = \beta_0 + \beta_1 ECP_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + e_{it} \dots \dots \dots (1)$$

To test hypothesis two, we repeat the model for hypothesis one after replacing Return on Assets (ROA) with Return on Equity (ROE) as the dependent variable.

$$ROE_{it} = \beta_0 + \beta_1 ECP_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + e_{it} \dots \dots \dots (2)$$

To test hypothesis three, we repeat the model for hypothesis one after replacing Return on Assets (ROA) with Net Profit Margin (NPM) as the dependent variable.

$$NPM_{it} = \beta_0 + \beta_1 ECP_{it} + \beta_2 ENV_{it} + \beta_3 SOC_{it} + e_{it} \dots \dots \dots (3)$$

To accept each hypothesis, we expect that the calculated F-statistics > critical F-stat of 2.61 (which indicates significant at the 5% level). Otherwise, each hypothesis is rejected.

**ANALYSIS  
Regression Results**

**Table 1: Multivariate Analysis of TBL Reporting and Return on Assets (ROA)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003429	0.047796	0.071733	0.9430
ECN	-0.030904	0.014890	-0.262166	0.7939
ENV	0.124809	0.014715	1.686003	0.0460
SOC	0.130531	0.017199	1.775169	0.0500
R-squared	0.473153			
F-statistic	6.468701			
Prob(F-statistic)	0.049426			

Dependent Variable: ROA  
Source: E-views 9 Computation, 2017

Table 1 revealed that environmental and social performance disclosure have positive relationships with the return on assets of quoted companies in Nigeria. This implies that an increase in environmental and social disclosure result in an increase in the return on assets of quoted companies in Nigeria. Stated differently, an increase in Environmental performance

disclosure brings about a 12.4% increase in ROA, holding other factors constant. In the same vein, social performance disclosure leads to 13.1% increase in the return on assets of quoted firms in Nigeria.

However, there is a negative relationship between Economic performance disclosure and ROA.

An increase in ECN initiative disclosure will decrease ROA. In other words, when other variables are held constant, a one per cent increase in that economic performance reporting will decrease ROA by 3%.

The R-squared value of 0.473 revealed that about 47 per cent of the variations in return on assets of quoted firms in Nigeria is jointly explained by the variation in the disclosure of economic performance, environmental performance and social performance.

**Table 2: Multivariate Analysis of TBL Reporting and Return on Equity (ROE)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.033061	0.102297	0.323191	0.7475
ECN	0.40652	0.031869	0.145959	0.8844
ENV	0.151440	0.031493	1.633365	0.0466
SOC	0.177642	0.036811	2.109230	0.0383
R-squared	0.495477			
F-statistic	5.603704			
Prob(F-statistic)	0.050198			

Dependent Variable: ROE  
Source: E-views 9 Computation, 2017

Table 2 revealed that economic performance disclosure, environmental performance disclosure and social performance disclosure have positive relationships with the return on equity of quoted companies in Nigeria. This implies that increase in disclosure of economic, environmental and social performance will result in an increase in the return on equity of quoted companies in Nigeria. Stated differently, when other variables are held constant, 1 unit increase in Economic performance disclosure will bring about a 4% increase in ROE, a unit increase in

environmental performance disclosure will bring about a 15.1% in ROE and, and a unit change in social performance disclosure increases ROE by 17.8%, holding other factors constant.

Further view of the R-squared value of 0.495 revealed that about 49.5 percent variations in the return on equity of quoted firms in Nigeria is jointly explained by the variation in the disclosure of economic performance, environmental performance and social performance.

**Table 3: Multivariate Analysis of TBL Reporting and Net Profit Margin (NPM)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.808491	0.874611	0.924400	0.3583
ECN	0.129453	0.272475	0.475102	0.6361
ENV	0.184352	0.269261	0.684660	0.4957
SOC	0.161277	0.314721	0.512443	0.6099
R-squared	0.311919			
F-statistic	0.297536			
Prob(F-statistic)	0.827063			

Dependent Variable: NPM  
Source: E-views 9 Computation, 2017

Table 3 revealed that economic, environmental and social performance disclosure have positive relationship with NPM. This implies that increase in the disclosure of economic, environmental and social performance result in an increase in the net profit margin of quoted companies in Nigeria. Stated differently, when other variables are held constant, a one per cent increase in economic, environmental and social performance will increase net profit margin by 12.9%, 18.4% and 16% respectively.

Further view of the R-squared value of 0.311 revealed that about 22.8 percent of the variations in the return on assets of quoted firms in Nigeria is explained jointly by the variation in economic performance, environmental performance and social performance.

**Hypotheses Test and Decision**

**Hypothesis I:** Since the value of F-calculated of 6.47 is greater than the F-tabulated value of 2.61, we accept the research hypothesis that TBL Disclosure has a significant impact on return on assets of companies listed on the Nigeria Stock Exchange.

**Hypothesis II:** Since the value of F-calculated of 5.60 is greater than the F-tabulated value of 2.61, we accept the research hypothesis that TBL Disclosure has a significant impact on return on equity of companies listed on the Nigeria Stock Exchange.

**Hypothesis III:** Since the value of F-calculated of 0.30 is less than the F-tabulated value of 2.61, we reject the research hypothesis. Hence, TBL Disclosure and Reporting does not have a significant impact on net profit margin of companies quoted on the Nigeria Stock Exchange.

### SUMMARY AND CONCLUSION

Findings from the study show that TBL Reporting and disclosure provides a framework for creating value for shareholders through improved bottom line (profits). More specific findings from the study include:

- a. Environmental and social performance disclosure have positive impacts on ROA. On the average, increased TBL Reporting has positive and significant on Return on Assets. This result is consistent with Aggarwal [5] and Munasinghe and Kumara [15] who reported that TBL Reporting influences ROA positively.
- b. Economic, Environmental and Social disclosure impact positively on ROE. Overall, increased TBL disclosure impacts positively and significantly on Return on Equity of sampled companies. This result is consistent with Tsoutsoura [20] who found a positive relationship between social index and ROE. It is however inconsistent with the researches of Aggarwal [5] who found a negative impact of Sustainability Reporting on ROE
- c. Economic, environmental and social performance reporting have positive impact on NPM. Overall increased TBL Reporting and disclosure positively, but not significantly impacts Net Profit Margin of the sampled companies. This result is consistent with Aggarwal [5], Makori and Jagongo [14] who found a positive impact of Sustainability Reporting on NPM.

Overall, it can be seen from this study that TBL reporting and disclosure, especially environmental and social initiatives/performance disclosure have positive influence on bottom line performance indicators used in the study. Since, increased environmental and social reporting will surely improve firm profitability and value, firms should alongside economic performance disclosure, increase their disclosure of environmental and social initiatives and investments, whether they are compelled to do so.

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