**Effect of Sustainability Accounting on Universities Financial Performance in Nigeria**

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**Abstract**

The study was on the effect of sustainability accounting on Universities financial performance in Nigeria. The objective of the study was to examine the effect and usefulness of sustainability on financial performance of Universities in Nigeria. The Study is established on stewardship theory and stakeholders’ theory. Descriptive and Ex-post facto research design was adopted in the Study. Panel least square regression was used to analyze the data to test for the relationship between the sustainability accounting variables (corporate social responsibility expenditure, total personnel costs) and Financial Performance (Return on Equity). Findings revealed that there is an insignificant positive relationship between corporate social responsibility expenditure and financial performance of Universities in Nigeria. Also, total personnel cost has no significant effect on return on equity of Universities in Nigeria. The Study concluded that Universities should adopt sustainability accounting initiatives to enable them identify, allocate and measure environmental and social cost affecting the Universities and provide them with strategies and techniques for managing corporate, environmental, social and economic performance. Therefore, it was recommended that professional and regulatory bodies should put more effort into developing standards to regulate and guide sustainability accounting in the Universities financial system.

**Keywords:** Corporate Social Responsibility Expenditure, Financial Performance, Return on Equity, Stakeholders’ Theory, Stewardship Theory, Total Personnel Cost.

**1.0 Introduction**

Institutions all over the world are increasingly being challenged to expand on and enlarge their financial reporting system to include those targeted at social efforts being made to improve the environment. To this extent, sustainability accounting as a business philosophy is fast gaining momentum in this millennium, especially in the face of the adoption of International Financial Reporting Standards (IFRS) which emphasizes a lot on disclosure. Sustainability accounting can be defined as the integration of reporting and accounting for social, environmental and economic issues in corporate reporting or simply the ‘Tipple bottom line reporting (Elkington, 2004).

The concept of sustainability reporting views as important both the traditional concern of business organizations strategies for profit maximization, diversification, product differentiation as well as globally assessing a firm’s performance on its environment. However, the evolution of strategic thinking underscores the need to include activities that seek to integrate social and environmental issues into the business decision making process, more so as firms that properly integrate their environment and people are viewed as socially responsible.

According to Caroll (1991), the issue of Corporate Social responsibility (CSR) and sustainable development which are linked to sustainability accounting have attracted worldwide attention, especially in the media and in academia. Modern tertiary institutions expectations are beyond making and maximizing profit towards being socially responsible to the society. Since these institutions do not exist in isolation but exist within a society, therefore tertiary institutions need to contribute positively to the development of society in which they are operating. Educational sector occupies important key position in the economy of a nation. In Nigeria, virtually all the Universities report their expenses on social responsibility towards sustainable development in their annual reports. Most of them strive to meet the demand of charitable organizations, government agencies, and religious Organizations. Responsibility is reflected in disclosure made by these companies or business concerns known as corporate social and environmental responsibility reporting. Henderson and Pierson (2004) explain that social and environmental reporting is an aspect of sustainable development reflecting concerns about environmental protection, inter-generational equality, the Earth and its resources. When people come together to establish a firm, they do so to allocate their resources for the purpose of a common goal and such may be to earn profit. To achieve this goal, they also interact with the society on the basis of their motives stakeholders and groups that keep interested in the operations of the
organization. Stakeholders include the customers, workforce, lenders, suppliers, government and local communities and even the environment. Many scholars are trying to understand how sustainability accounting affects the performance of the University financial system. Olayinka and Temitope (2011) opined that financial performance is a subjective measure of how well a firm can use assets from its primary mode of business and generate resources. Also, Nigerian tertiary institutions' efforts on social responsibility have produced multiplier effects on the sustainable development. These social responsibilities cost them some expenses which have effects on their financial performance. Thus, this topic seeks to examine the effect of sustainability, accounting on the performance of the University system in Nigeria.

2.0 Review of Literature

2.1 Conceptual Framework

2.1.1 Sustainability Accounting

According to Soderstorm, (2016), environmental catastrophes brought environmental issues to the forefront since the late 1960s, and such events stimulated the flow of concern which has led to sustainability reporting. Sustainability reporting is a practice that enhances goal setting, performance measurement and change management of organizations towards a sustainable global economy and it uses the medium of sustainability report. In addition, Isa (2014) posits that “Sustainability reporting is considered as a wider level of transparency and accountability to stakeholders for social activities of firms” because according to Asaolu, Agboola, Ayoola, and Salauwu, (2011), the traditional financial statements can no longer provide a complete assessment of corporate performance and shareholder’s value creation. Daub (2016) asserts that as an organization expands, its effects (positive and negative) through its business activities also increase and the more it becomes visible to the public. Thus, an organization becomes responsible to the society in explaining its actions and their consequences in details to its society, hence the justification for sustainability reporting. Christofi, Christofi, and Sisaye (2012) argue that sustainability reporting has made enormous progress over the last two decades. Furthermore, Jackson, Boswell, and Davis (2011) argue that increasing demands from stakeholders for more all-encompassing information about the operations and financial standing of businesses are influencing some companies to incorporate information on sustainability in their reports. Consequently, sustainability reporting has become an increasingly popular practice among global companies and financial regulators.

A sustainability report as defined by the Global Reporting Initiative (GRI) is, “a report published by a company or organization about the economic, environmental and social impacts caused by its everyday activities.” These reports further enable companies to provide information regarding the non-financial aspects of its operations, ultimately allowing companies to actively engage in a solution towards improving firm accountability, transparency, and corporate image. As a pioneer in sustainability reporting, the GRI has transformed sustainability reporting into a practice that is adopted by organizations all over the world. Whether impacts are positive or negative, a sustainability report also encompasses the company’s values, governance model, and its approach towards creating a sustainable global economy. Much like the financial documentation required for public companies, non-financial reporting can also allow markets to respond ever to keep shareholders informed and provide an element of transparency into firm activity. Reporting on other areas such as the economic, social, and environmental profile is becoming an adopted practice throughout the world, as there is an emerging trend of firms reporting on non-financial issues (Kolk, 2003; KPMG, 2015). Although compliance and disclosure of CSR reporting are mandatory in some regions and countries, it still remains a voluntary measure in the United States.

2.1.2 Personnel Cost

An employer’s personnel costs constitute all the money spent by an employer on its employees. When creating a business plan, an employer must determine both how many employees it needs and how many employees it can afford, based on budgetary constraints. Businesses with limited budgets, particularly small businesses, require special attention in reconciling these needs, as a small business can easily fail with inadequate staffing or an inflated budget (Hearst, 2019). Therefore, Personnel costs are defined as the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the reference period. Personnel costs also include taxes and employees’ social security contributions retained by the unit as well as the employer’s compulsory and voluntary social contributions.

2.1.3 Concept of Performance

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“Performance” is used to indicate the hard work to attain a particular goal. The attainments of goal include a combination of human, fiscal and natural resources. The performance is an activity applied to a part or all of performance of actions in a time period, often with connection to previous or proposed expenditure efficiency, management responsibility or accountability (Muhammad, Mohammad & Muhammad 2015). According to Nirmal (2004) Performance not only indicates demonstration of something but it also indicates the satisfactory output of an organization.

2.1.4 Universities Financial Performance

Financial performance is a subjective measure of how well an organization either private or public can use assets from its primary mode of business and generate revenues. The term is also used as a general measure of an organization overall financial health over a given period. Eshna (2019), a financial performance report is a summary of the financial performance of a company that reports the financial health of a company helping various investors and stakeholders take their investment decision. Financial performances represent the operation to carry out monetary actions. Generally, financial performance indicates measures to which economic goals being or has been achieved. Economic activities are course of action of measuring the outcome of an organization's guidelines and action in fiscal shape. It is used to calculate organization's overall economic fitness over particular time period. The financial performance of the organizations can be calculated by its economic outcome and by its size of earnings (Muhammad, Mohammad & Muhammad 2015).

According to Montanaro (2013), financial performance may be used to signal academic performance, reducing information asymmetry, and simplifying monitoring of providers.

There are many ways to measure financial performance, but all measures should be taken in aggregate. Line items, such as revenue from operations, operating income, or cash flow from operations, can be used, as well as total unit sales. Furthermore, the analyst or investor may wish to look deeper into financial statements and seek out margin growth rates or any declining debt. The University Financial System (UFS) encompasses financial accounting, research grant accounting, and financial and management reporting (Osho, 2017). In the opinion of Somoye and Osho (2017) as cited by Osho (2017), University cannot do without appropriate finance either through internally generated revenue or receiving or government subvention which will require appropriate management in term of spending within the global village of the institution and the management will be laid upon a competent and qualified chartered accountant that will integrate accounting, auditing and investigate skill.

2.1.5 Conceptual Framework of Sustainability Accounting on Universities Financial Performance in Nigeria

![Conceptual Framework of Sustainability Accounting on Universities Financial Performance in Nigeria](http://www_ijmsbr_com)
2.2 Theoretical Framework
2.2.1 Stewardship Theory
This theory came out as an outcome of the seminar work done by Donaldson and Davis (1991). The theory is based on the postulation that there is no conflict of interest between the owners and the management; as a result, directors are inspired to formulate policies that would maximize performance and the corporate value. Stewardship theory is perceived as a useful and helpful utility in collective than personal interest and hence whilst the actions of management would be maximizing shareholders' wealth, it would at the same time be meeting their personal needs.

Davis, Schoorman, and Donaldson, (1997) opined that the managers protect and maximize shareholders wealth through organisation performance, by so doing, their diverse functions are maximized. To attain this objective, the owners must establish suitable empowering governance structures and standards, information and authority to ease the independence of management to make corporate policies that would maximize their value as they achieve organisational rather than personal objectives. For Chief Executive Officers (CEOs) who are stewards, their professional actions are best aided when the corporate governance structures (shareholders control) give them high power and discretion Donaldson and Davis (1991).

Davis et al. (1997) pointed out five mechanisms of the executive values of stewardship as trust, open communication, empowerment, long-term orientation, and performance enhancement.

2.2.2 Stakeholder's Theory
According to Freeman (1994), stakeholder theory emphasizes that some individuals or groups are very important for the stability of the company. This explanation is seen as organisation oriented explanation, but in an earlier research freeman reported that stakeholder theory refers to any group or individual whose interest influences or can be affected by the accomplishment of the company goals. The stakeholder in most organisations usually includes investors (owners), workers, clients, creditors, suppliers, non-governmental organizations, various interest group, and government.

Furthermore, Stakeholder theory attempts to describe, prescribe, and derive alternatives for corporate governance that included and balanced a multitude of interests. The hypothesis has pulled substantial concentration and support since its early proposition. Stakeholder theory includes the managerial power model, which claimed that the principle of a corporation is the maximisation of firm value. Nevertheless, this strengthened the problem of managers acting in their own self-interest, as they support policies that led to the protection of their positions and powers in the company (Kay & Silberston, 1995).

Without a doubt, the management control model claimed that the idea of a business is the maximisation of total corporate value. On the other hand, this involved the lack of shareholders involvement in the daily running of the business, giving management the chance to formulate policies without putting the interest of the company’s investors into consideration, (Freeman, 1984).

2.3 Empirical Review
Previous related studies have found different results on the effect of sustainability accounting and financial performance of firms. Among the studies reviewed are; Nnamani, Onyekwelu, Ugwu, (2017) evaluates the effect of sustainability accounting on the financial performance of listed manufacturing firms in Nigeria. Firms used for the study were chosen from the Nigerian brewery sector. Data were sourced from the financial statements of three sampled firms. Data were analyzed using the ordinary linear regression. The study reveals that sustainability reporting has a positive and significant effect on financial performance of firms studied. Following the findings, the study recommends that firms in Nigeria should invest reasonable amount of their earnings on sustainability activities while specific accounting templates be articulated by professional accounting regulating bodies to guide firms' reportage on sustainability activities. The Financial Reporting Council of Nigeria (FRC) and others alike should make sustainability reporting compulsory while adequate sanctions are spelt out and enforced on defaulting organizations to serve as a deterrent.

Olayinka and Temitope (2011) empirically examined the relationship between corporate social responsibility and financial performance in Nigeria. These variables studied are Return on Assets and Return on Equity, community performance, employee relation, and environmental management system. The result shows that CSR has a positive and significant relationship with the financial performance measures.

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Appah (2011) carried out a study on Corporate Social Accounting Disclosure in the Annual Reports of Nigeria companies. The objective of this study is to examine the practice of social accounting disclosure in Nigeria companies. The research adopted descriptive research design; secondary data only was used. A sample size of 384 from infinite population the formula is $Z^2pq/(e)^2$. The research hypothesis was tested using chi-square ($X^2$). The findings reviewed that the inclusion of social cost and the disclosure of information by the organizations in the financial statements of will enhance disclosure of information disclosure in the financial statement of the organization.

Setyorini and Ishak (2012) examined Corporate Social and Environmental Disclosure; A Positive Accounting Theory View Point. The center objective is to provide an examination of Indonesian corporate social and environmental disclosure in the Positive Accounting Theory (PAT) perspective. It used descriptive research design also, and secondary data only was used. The population of the study was listed companies since they are required to publish their annual report yearly in the Indonesian stock exchange from 2005 until 2009. The study applied sampling method on the sectors of the listed companies in the Indonesian stock exchange. There were approximately 336 to 398 companies listed on Indonesian stock exchange from 2005-2009. The findings review that if the association is driven more by political cost considerations, it can be expected that corporate social and environmental disclosure is positively associated with earnings management.

Onyekwelu and Ekwe (2014) examined whether corporate social responsibility predicates good financial performance using the banking sector in Nigeria. The study adopted the ex-post facto as it made use of historical research design and secondary data used. The analysis was done using the Ordinary Least Square Regression. The findings show that the amount committed to social responsibility vary from one bank to the other. The data further revealed that the sample banks invested less than ten percent of their annual profit to social responsibility. The researchers recommended that companies in Nigeria particularly profitable one should give greater priority to Corporate Social Responsibility because this has the tendency to assist them to survive and maintain their profitability and also diffuse the tensions and hostilities usually experienced by companies in their localities.

Onyekwelu and Ugwuanyi (2014) carried out research on Corporate Environmental Disclosure and market value of Quoted Companies in Nigeria. The broad objective of this study was focused on ascertaining the aggregate and individual impact of Corporate Environmental Disclosure was regressed on market value. The descriptive research design was adopted, and secondary data only was used. A sample size of fifty firms quoted in Nigeria Stock Exchange (NSE) was purposively selected for analysis based on the availability of environmental disclosures in their annual reports. The hypothesis was tested using correlation coefficient. The findings review that the inclusion of environmental disclosure will enhance market value. The study recommends that business should take caution in areas where environmental activities impact negatively on the value of the firm and also invest in areas that enhance value for the firm.

Juhammeri (2014) studied Corporate Social and Environmental Disclosure on Website. This study was centered on examining and information disclosure of companies and website. The study made use of historical research design, and secondary data were used. The findings show that 57.57 per cent of the samples listed companies provided social and environmental information in their 2012 annual reports and their websites. Commercial banks and insurance companies made most disclosure of social and environmental accounting, while companies in the hotels and tourism sectors and industrial sector made the least disclosure.

3.0 Methodology
This study used a mainly secondary source of data. Descriptive and Ex-post facto research design was adopted for the Study. The study utilized data gotten from relevant journals, articles and seminar papers. Data were extracted from the University Financial Statements for a ten year period covering 2009 to 2018. Multiple regression analysis was employed as a means of testing the impact of sustainability accounting on Universities financial performance in Nigeria.

Model Specification
In this study, the model shall contain two equations. Whilst the first is on determinant of sustainability accounting in the Universities, the second is on effect of sustainability accounting (SA) on financial performance using corporate social responsibility (CSR), total and personnel cost (TPC) as the independent
variables and regressed against the dependent variable Return on Equity (ROE) used as proxy for financial performance.

The model used will be expressed mathematically as thus:

Equation one and two can be written as

\[ SA = \{CSR, TPC\} \] .......................................... (i)

\[ ROE = f(\{CSR, TPC\}) \] ...................................... (ii)

Multivariate Regression model would be; \( Y = \alpha + \beta_1 \times_1 + \beta_2 \times_2 + \beta_3 \times_3 + \beta_4 \times_4 + \ldots + \beta_n \times_n + \varepsilon \)

Thus, Regression equation becomes; \( ROE = \alpha + \beta_1 [CSR] + \beta_2 [TPC] + \varepsilon \)

Where \( Y = \) the value of dependent variables; \( \alpha = \) the constant term; \( \beta = \) the coefficient of the function; \( X = \) the value of independent variables; and \( \varepsilon = \) error term.

4.0 Analysis and Findings

4.1 Test of hypotheses

**Hypothesis one**

\( H_0: \) Corporate social responsibility Expenditure has no significant effect on return on equity of Universities in Nigeria.

**Table 4.1 Regression Result of Hypothesis One**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSRE</td>
<td>0.032426</td>
<td>0.027025</td>
<td>1.199849</td>
<td>0.2516</td>
</tr>
<tr>
<td>C</td>
<td>0.004346</td>
<td>0.016709</td>
<td>0.260127</td>
<td>0.7988</td>
</tr>
</tbody>
</table>

**Source:** Researchers’ Regression Result Output, E-views 7.

The first hypothesis states that corporate social responsibility expenditure has no significant impact on the return on equity of Universities in Nigeria. From Table 4.1 above, a p-value of 0.2516 suggests that the null hypothesis should not be rejected. Also, there is a positive relationship of 0.0324 with return on asset; the positive relationship is not significant at 0.05% level of significance. It implies that for every one 1 per cent increase in corporate social responsibility expenditure of universities, the return on equity will increase by 0.0324 per cent. Hence, it is concluded that there is an insignificant positive relationship between corporate social responsibility expenditure and financial performance of universities in Nigeria.

**Hypothesis two**

\( H_0: \) Total personnel cost has no significant effect on return on equity of Universities in Nigeria.

**Table 4.8 Regression Result of Hypothesis Two**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPC</td>
<td>-0.234762</td>
<td>0.124737</td>
<td>-1.882058</td>
<td>0.0824</td>
</tr>
<tr>
<td>C</td>
<td>0.034008</td>
<td>0.006457</td>
<td>5.266519</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

**Source:** Researchers’ Regression Result Output, E-views 7.
The result shown in table 4.2 revealed that there was an insignificant negative relationship between total personnel cost and return on equity. This was evident from the P-value (i.e. 0.0824>0.05) associated with total personnel cost which was lower than the benchmark of 5% specified for this analysis. The negative coefficient of -0.2347 implies that an increase in the total personnel cost of universities by one percent resulted in a 0.235 per cent decrease in their financial performance measured by return on equity. Therefore, the null hypothesis was accepted, and it was concluded that total personnel cost has no significant impact on return on equity of Universities in Nigeria.

4.2 Interpretation and discussion of results

The result from the hypothesis one revealed that corporate social responsibility expenditure has no significant impact on return on equity of Universities in Nigeria. This is evidenced by a p-value of 0.2516 which suggested that the null hypothesis should not be rejected. Also, there is a positive relationship of 0.0324 with return on asset; the positive relationship is not significant at 0.05 per cent level of significance. It implies that for every one 1 per cent increase in corporate social responsibility expenditure of universities, the return on equity will increase by 0.0324 per cent. Hence, it is concluded that there is an insignificant positive relationship between corporate social responsibility expenditure and financial performance of universities in Nigeria. This result is against the findings of Nnamani, Onyekwelu, Ugwu, (2017), their study revealed that sustainability reporting has positive and significant effect on financial performance of firms studied. Their study recommended that firms in Nigeria should invest reasonable amount of their earnings on sustainability activities while specific accounting templates be articulated by professional accounting regulating bodies to guide firms’ reportage on sustainability activities.

The result from hypothesis two indicated that there was an insignificant negative relationship between total personnel cost and return on equity. This was evident from the P-value (i.e. 0.0824>0.05) associated with total personnel cost which was lower than the benchmark of 5% specified for this analysis. The negative coefficient of -0.2347 implies that an increase in the total personnel cost of universities by one percent resulted in a 0.235% decrease in their financial performance measured by return on equity. Therefore, the null hypothesis was accepted, and it was concluded that total personnel cost has no significant impact on return on equity of Universities in Nigeria.

5.0 Conclusion

The study examined the relationship between sustainability accounting and financial performance of Universities system. The major objective of the study was to examine the impact of sustainability on Universities financial performance system. The study made use of secondary data. Descriptive and ex post facto research design was adopted. Panel least square regression model was adopted in testing the hypotheses formulated. Results from statistical analysis showed that; there is an insignificant positive relationship between corporate social responsibility expenditure and financial performance of Universities in Nigeria. Also, total personnel cost has no significant impact on return on equity of Universities in Nigeria.

The Study concluded that Universities should adopt sustainability accounting initiatives to enable them to identify allocate and measure environmental and social cost affecting the business and provide them with strategies and techniques for managing corporate, environmental, social and economic performance. From the conclusion drawn, the following recommendations were made;

1. Professional and regulatory bodies should put more effort into developing standards to regulate and guide sustainability accounting in the Universities financial system.
2. The application of sustainability accounting in Universities would enable managers to identify activities with greater environmental and social costs to the Organization; these could become useful measures of departmental performance evaluation and product profitability assessment.
3. A necessary step for reasonable disclosure of sustainability related concerns in the reports of organizations could serve as useful instruments in Stakeholders conflict management.

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