SUSTAINABILITY AND PROFITABILITY OF NIGERIA LISTED INSURANCE COMPANIES

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Abstract
Despite the fact that there are various studies that have been conducted on sustainability, most studies have concentrated on the manufacturing sector with few attention on the financial sector, especially the insurance companies; this is in spite of the contributions of this sector to the Nigerian Stock Exchange and the Nigerian economy at large. The three categories of sustainability such as social performance sustainability, environmental performance sustainability and economic performance sustainability have not been given their due share. Emphasis was placed on deposit money banks in Nigeria while the insurance sector was largely ignored. Nonetheless, it is important to note that the financial sector is largely made up of insurance companies. The purpose of this study is to examine the effects of sustainability performance on profitability of listed Nigeria insurance companies. The data were obtained from the annual accounts and reports of quoted insurance firms in Nigeria and was analysed. Findings revealed that while social sustainability has positive and significant effect on profitability, environmental sustainability has negative and significant effect on profitability. However, economic sustainability failed to show any significant effect. Conclusively, the paper provided a more understanding of sustainability reporting and contributes to the discussion by examining the influence of three factors of sustainability on profitability: social sustainability, economic sustainability and environmental sustainability.

Keywords: Economic, environmental, profitability, social, sustainability

1. Introduction
Profitability is an important element that enhances the going concern of any organization. Firm's profitability is a concerned issue to stakeholders that are having a direct and/or indirect interest in its activities. It is considered as a source of firm value, shareholders' value and wealth. Erasmus (2008) considered profitability as valuable tool for the evaluation of past financial performance as well as current financial position. Profitability is basically considered as essential indicator of performance measurement (Mohammed et al., 2018).

Corporate profitability is seen and measured as how well companies use their own assets for generating revenue for the economic wellbeing of shareholders (Dioha et al., 2018). The term described the overall financial picture for particular time frame. Profitability is considered as key to a firm's total income, its generated profits, and the rise of firm's value because of appreciation in the company's worthiness. Literature suggested that to achieve long term goal, environmental and societal factors must be considered and using resources efficiently. It is generally accepted that the profit level enhances sustainability; so also, losses directly and negatively affect business.

Sustainability has several definitions by scholars and with various interpretations. Up till now, there is no consensus from scholars on the interpretation of sustainability; in spite studies on sustainability and related discipline and with the practical applications. The most notable and used definition of sustainability is one from Btrundtland Report (1987) that defined it as development that give an ability of meeting the current needs of the organization while not compromising the ability of future generations in meeting their own demands. More so, corporate sustainability is also seen as the commitment of business to contribute to sustainable economic development, and to work with employees, and their families (WBCSD, 2002). There is scholarly and practical argument on sustainability indicators. However, GRI established 4 indicators and measurements and their impacts. These are economic aspect, environmental aspect, social aspect and governance aspect (Davis, 2015). However, in this paper, governance was not considered.

Companies across the globe have impacts that come from their day to day business activities that generate social issues, heats, environmental disasters and pollution challenges. Thus, business organizations are required to be responsible for its social and environmental aspects same as treating their economic aspect. This responsibility is considered paramount for future survival. It is wholly believed that the dynamic nature of businesses and their complex environments affect realisable profit and the sustainability performance of the concerned firms (Aggarwal, 2013). Therefore, profitability of firms and their sustainability performance are linked. Profitability has potential to influence company sustainable performance. Thus, profitable companies are more sustainable. Firms that have good profit profile tend to sustain for longest period of time.

Practically, insurance corporations are currently facing sustainability challenges that are believed come as a result of their profitability performance. These issues can be clearly seen from Nigerian Stock Exchange, as a regulatory body had to delist about ten companies in the sector because of sustainability issues that led to their failures. Some companies that are affected include Baico Insurance, Acen Insurance, Amicable Insurance, Security Assurance, Sun Insurance, Confidence Insurance, Investment and Allied Insurance and so on and so forth (NSE, fact book, 2020). Why these companies failed to sustain under the watchful eyes of the stock exchange and maintain their going concern is still issues that requires scholarly and empirical study. However, despite the impediment of sustainability in the insurance sector, there are limited relevant researches that are conducted with view to conclude how profitability affects the sustainability. Most of the literatures reviewed showed that scholars examined influence of sustainability reporting on financial performance. That is, sustainability leads to financial performance and their results. For example, Aggarwal (2013) reported that only one variable (governance) has positive and significant effect while others do not. However, Nnamani et al. (2017) documented significant positive effect. This study opined that for a firm to be sustained, it must make profit.

This study significantly contributes to assisting management as per information of some factors that are considered paramount important for their sustainability and how that to be affected by level of profit realized by each firm. The study immensely contributes to increasing the accountability of management for non-financial activities that have impacts on the society and for its going concern. Thus, the study has importance in ensuring the sustainability companies, especially ones in Nigeria and not just for the aim of pointing out the tendencies of firms' scandals, but most significantly the survival of insurance corporations as well as good and healthy financial capital market. Also the study is considered importance to policy makers. It also important as it extends literatures on profitability and sustainability performance. However, the study is limited to insurance firms listed with Nigeria Stock Exchange (NSE) market as at 31 December, 2019; it covers a period of ten (10) years (2010-2019).

2. Literature Review and Hypothesis development

2.1 Conceptual Review

Foremost used and acknowledged definition, sustainability was presented by the organisation on environment that referred as 'Brundtland reports' in the year 1987. The commission described development that meets up the present needs not losing firm's tomorrow needs. The concept was in use since the year 1980s when it issued its first environmental report. According to Elkington (1998) opined that it was developed to emphasize on 3 key areas of sustainability namely; economic side, social side and environment side.

Report on sustainability is prepared and published by a firm in order to provide descriptions of its TBL performance and equally to the different firm's stakeholders.

The guidelines on sustainability reporting highlighted that the environmental issues of sustainability concerns about how organizations impact on natural systems together with ecosystems, water, air, and land. The second aspect is social; which concerns about the impacts organizations have on the social ecosystems within the boundary it operates. The final and third is the economic aspect of an organization. The concern is on economic benefits of stakeholders of a firm. Thus, sustainability performance can be viewed as the capacity in meeting their present organisational needs of either short or long with no compromising future needs or ability to meet up.

2.2 Theoretical Review

Legitimacy in the words of Lindblom (1993) is a condition which exists when an entity's value system is in harmony with the value system of society. This theory holds an argument essential to societal expectations in order maintain the firm's survival for long-period. The literal proponent of legitimacy theory argues that sustainability reporting helps government regulatory actions and boycotts by the stakeholders, and it equally strengthens the firm's license to keep in operation (Patten, 1992; Deegan, 2002). This theory is considered as the best that describes how firms attain sustainable performance as requisite for its survival for long period.

The agency theory is the theory that describes the existing principal-agent relationship. The theory recognises agents as mangers while principal as the business owners. Agency theory gains significance in the solution of corporate scandals. Many literatures document the existing of conflict between companies' agents and owners. This conflict affects the market by under-valuing the shares and demanding sufficient disclosure. Disclosing sustainability performance reduces firms' investors' risks and increases market value (Warren & Thomsen, 2012).

This paper relied on Stakeholders' theory. Stakeholders are individuals/group of individuals/companies in position to influence others, or to be influenced because of operational activities or by the decisions of firm. Freeman and Phillips (2002) upheld that companies have to have good accountability to the various ranges of stakeholders such as government, creditors, community, environment, future generations, and so on. In his study, King (2002) recognized sustainability reporting as important integration for strengthening firms and societies where they operate. Therefore, ignoring any stakeholder's interests may taint firm's image from public, and thus, would unfavourably affect its financial goals and its sustainability.

Firms are charged to be responsible to a variety of stakeholders because of their potentialities of having positive or negative. Freeman and Phillips (2002) suggested stakeholders are group(s) or individual(s) who can influence, affect achievement of the firm's objectives. Therefore, it is required that any company should consider wholly not only to the interests of their shareholders, but to all other stakeholders of a firm so as to enjoy positive societal perception and advantages.

2.3 Empirical Review

A study conducted by Aggrawal in (2013) on effect of corporate sustainability performance. The objective was to find whether companies with sustainable performance are more profitable. The study measured sustainability using four components (Community, Employees, Environment and Governance). The study reveals that four components of sustainability only one component (Governance) have significant positive effect while the other three have no significance influence. No adequate sustainability activities or high costs of such activities by the sampled firms and/or other reason. However, firms that financially performing is more profitable and that profitability enhance the sustainability of those firms. Thus, firms' profitability level leads sustainable performance.

Kwaghfan (2015) used 64 sampled quoted companies from the period of 2002 to 2012. The study finds positive effect (ROA), (ROE), Earnings per Shares, NPM. The variables measured firm performance. Nugroho and Arjowo (2014) conducted a study; used manufacturing companies listed on the Stock Exchange Commission. The study measured financial performance by profitability, liquidity, leverage, activity, and dividend pay-out ratio. The samples were manufacturing companies. The method was the linear regression analysis. The results show that it positively influences ROA; SR disclosure increases of the profitability of the companies.

Nnamani et al. (2017) evaluated listed Nigerian companies in brewery sector. This study shows how sustainability activities significantly increase economic performance. The study gives good three recommendations; however, the three sample sizes are very small to conclude. More so, the study used only five years, which was considered not wide enough to draw a conclusion because sustainability activities are of long term years with possibilities of covering more than five years.
Asuquo et al. (2018) investigated 3 brewery corporations in Nigeria for 5 years and concluded that sustainability reporting mechanisms have no significant effect on ROA, which is a measure of profitability. Also, Uwuigbe et al (2018) investigated deposit money banks for 3 years and reported that there was a bi-directional relationship between sustainability reporting and profitability.

Laskar (2019) investigated the impact using 28 nonfinancial corporations from India and 26 from the same sector from South Korea for 6 years and discovered it was positive for South Korean corporations and negative for Indian companies. Similarly, Yang et al. (2019) interrogated 122 Chinese firms and concluded that SR significantly increases firm profitability. Also, Iheduru and Okoro (2019) interrogated 20 corporations over 10 years and discovered that economic and social disclosure have positive but insignificant effect on ROE; while environmental disclosure has negative and insignificant effect.

These empirical studies are mostly conducted abroad, considering developed nations with very few works in Nigeria. Even the few studies in Nigeria considered other Nigerian sectors and failed to consider insurance sector despite its economic contributions and problems faced by the sector which led to delisting cases from the Nigerian Stock Exchange.

It is in view of these reasons that the study interrogated sustainability and profitability; thus, hypothesized in line with theoretical and empirical background that:

$H_0a_:$ Social sustainability does not have significant effect on profitability of listed Insurance firms in Nigeria.

$H_0b_:$ Economic sustainability does not have significant effect on profitability of listed Insurance firms in Nigeria.

$H_0c_:$ Environmental sustainability does not have significant effect on profitability of listed Insurance firms in Nigeria.

3. Methodology

We used correlational research design was adopted in the study. The population of the study comprise of 26 insurance companies. The sample size of the study are the 26 insurance companies; selected using census sampling technique, because the population is less than 30. The study covered a time frame of 10 years, covering a period of 2010 to 2019; the period represents most current accounts of the corporations. The data was extracted from corporations' annual reports and accounts. The paper models were hinged on stakeholders' theory and are:

$ROA_{it} = \beta_0 + \beta_1 SOCS_{it} + \beta_2 ECOS_{it} + \beta_3 ENVS_{it} + \varepsilon_{it}$……. (1)

$ROE_{it} = \beta_0 + \beta_1 SOCS_{it} + \beta_2 ECOS_{it} + \beta_3 ENVS_{it} + \varepsilon_{it}$ …….(2)

Whereas:

ROA = Return on Total Assets, measured by profit before tax divided by total assets in line with Yahaya (2017).

ROE = (Yahaya & Lamidi, 2015)

i = Company script

t = Year script

β^0 = Constant

$\beta_{1\text{-}3}$ = Coefficients

SOCS = Social sustainability (Kwaghfan, 2015)
ECOS = Economic sustainability (Nugroho & Arjowo, 2014)
ENVS = Environmental sustainability (Nnamani et al., 2017)
ε = Oversight script
The data was analysed using descriptive statistics and inferential statistics. Diagnostic checks such as normal distribution, multicollinearity, heteroscedasticity, panel effect and Hausman specification checks were carried at .05.

4. Data analysis and discussion of findings

4.1 Descriptive Statistics

Table 1: Results of Descriptive Analysis

Variable	Obs	Mean	Std. dev.	Min	Max
ROE	260	.854	.842	-.713	3.192
ROA	260	2.810	1.915	.0270	9.887
SOCS	260	.930	.410	-1.270	1.919
ECOS	260	2.353	2.227	-4.917	9.887
ENVS	260	1.616	.886	.012	4.878

Source: Authors' computation, 2020

From Table 1, observations total 260, which was derived from 26, quoted insurance firms multiplied by 10 years. The output variables are ROA and ROE, which represent the models have maximum mean of 9.887 and .0270 minimum mean for ROA and maximum mean 3.192 for ROE and -.713 minimum mean. The mean for ROA is 2.81% with standard deviation of 1.915 and for ROE the arithmetic mean is .854 with standard deviation of .842.

4.2 Results of Diagnostic Checks

Table 2: Results of Normality Check

Variable	Obs	QH	QH*	P-Value
ROE	260	0.961	0.635	< 0.0001
ROA	260	0.867	2.148	< 0.0001
SOCS	260	0.969	0.497	< 0.0001
ECOS	260	0.940	0.971	< 0.0001
ENVS	260	0.960	0.642	< 0.0001

Source: Authors' computation, 2020

Table 2 shows that all have their p-values less than .05. The regression equations will require robustness.

Table 3: Results of Multicollinearity Test

Variables	Variance inflation factor	Tolerance Level
ENVS	1.53	0.653
SOCS	1.42	0.707
ECOS	1.18	0.845
Mean VIF	1.38	

Source: Authors' computation, 2020

Table 3 indicates absence of multicollinearity among the explanatory variables given that their variance inflation factors are less than 3.3.

Table 4: Cameron & Trivedi's Decomposition of Information Matrix Test for ROE

Source	Chi^2	Df	P
Heteroskedasticity	107.42	9	.000
Skewness	25.61	3	.000
Kurtosis	8.28	1	.000
Total	141.32	13	.000

Source: Authors' computation, 2020

Table 5: Cameron & Trivedi's Decomposition of Information Matrix Test for ROA

Source	chi^2	df	P
Heteroskedasticity	43.9	9	.000
Skewness	8.97	3	.0292
Kurtosis	4.64	1	.0313
Total	57.5	13	.000

Source: Authors' computation, 2020

Tables 4 and 5 indicate that both models have heteroscedasticity problems with their p-values less than .05. The way forward is to robust their regression analyses.

Table 6: Results of panel effects check

Model	ROA	ROE
$Chibar^2(01)$	8.27	339.84
$Prob>chibar^2$	0.0020	.000

Source: Authors' computation, 2020

Table 6 indicates that the appropriate model moving forward is the Fixed Effect Model given that their p-values are significant ($\leq .05$).

4.3 Regression Analysis

Table 7: Results of Regression Analysis

Variables/Models	ROA Coef.	T	P>t	ROE Coef.	t	P>t
SOCS	1.478	2.93	0.007	-.060	-0.66	0.513
ECOS	-.0371	-0.49	0.627	-.010	-1.32	0.198
ENVS	-.583	-2.09	0.047	-.160	-2.95	0.007
_cons	2.465	4.09	0.000	1.191	8.93	0.000
Prob>F	.018			.023		

Source: Authors' computation, 2020

In Table 7, the results of Model ROA are better than Model ROE given that it has lower Prob>F value. Thus, the findings indicate that social sustainability is enormously important. Economics sustainability failed to find any significance. Environmental sustainability has negative and enormous influence. For every naira increase in social sustainability, profitability increases by N1.478. For every naira increase in economic sustainability, the results indicate no significance. However, for every naira increase in environmental sustainability, profitability decreases by N.583. Therefore, hypothesis 1 is hereby rejected. Hypothesis 2 is accepted because the t and p values are not significant (t-value = -.49, p-value = .627). Hypothesis 3 is hereby rejected.

5. Conclusion and Recommendations

Given the findings of the study, ROA Model was better than ROE Model using their Prob>F statistics. The aim which was to interrogate influence of sustainability on profitability was achieved. Table 7 shows that two key determinants of profitability are social sustainability (SS) and environmental sustainability (ES), while SS was positive, ES was negative. These results are not farfetched; SS is accepted as a corporate responsibility, while the society is struggling to accept ES a desirable thing moving forward. The recommendation is that considerable investment on SS should be encouraged while investments in ES should be linked to profitability for stakeholders to encourage. Greater investment in economic sustainability should be encouraged so that the desired effect will be felt.

Interests of every stakeholder should be on the implications of findings of the paper; particularly, governments and its regulatory agencies. For example, the Financial Reporting Council of Nigeria (FRCN) is expected to demand for greater accountability and disclosure of corporate social disclosure since it has shown that it enhances profitability in the long run. Activities include but not limited to sports engagement, sponsoring educational trips, art classes and theatre. However, given interests shown on the role of environment in business and its forces, caution should be exercised on how the result of the paper on environmental reporting is interpreted. On economic activities reporting, the result has shown that it was insignificant meaning that insurance corporations do not attach importance to disclosing their economic activities. However, policy wise, insurance corporations should be compelled to disclose their material economic activities; such as income-generating operations, production, consumption, savings, investment and wealth generating activities. This can do along with social, governance and environmental disclosures under integrated reporting segment.

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