



Corporate Social and Environmental Reporting (CSER) and Financial Performance: The Mediating Role of Competitive Advantage

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Authors' contributions

This work was carried out in collaboration between both authors. Author ACO designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors ACO and MEO managed the analyses of the study. Author MEO managed the literature searches. Both authors read and approved the final manuscript.

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ABSTRACT

The paper examined the mediating effect of competitive advantage on the relationship between CSER and financial performance in Nigeria. The study adopted the ex-post causal research design because it seeks to examine the causality between CSER and financial performance within a mediation context. A sample size of 100 companies from all sectors listed on the Nigerian Stock exchange (NSE) between 2007 and 2016 was used. Panel regression analysis was used in the estimation of the data. The mediation Model was tested based on Baron and Kenny's (1986) conditions for mediation. Results from the study revealed that competitive advantage mediates in the relationship between CSER and financial performance. This result confirms the Resource Based Theory (RBT) that engaging in social and environmental reporting activities can enhance a company's competitive advantage which will ultimately improve the financial performance in Nigeria. The study recommends that corporations in developing and emerging markets should begin to think differently about CSER as a proactive and strategic tool towards enhancing competitive advantage and consequently financial performance rather than just in response to the demand for CSER globally.

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1. INTRODUCTION

Over a decade, Corporate Social and Environmental Reporting (CSER) has become a significant issue in developing countries following the increasing effects of corporate activities on social and environmental sustainability. To retain public confidence and expectations and to boost global competitiveness, many firms have increased their communication with internal and external stakeholder groups through the disclosure of social and environmental effects of their business actions in the annual reports [1,2].

Following the Resource Based Theory (RBT), CSER is used to draw critical and invaluable resources from the natural environment hence CSER can play a substantial role in boosting a firm's competitiveness and financial performance in the long-run [3,4]. These resources which comprise physical and financial including intangible assets such as employees' skills, superior management, social and environmental sensitive suppliers, cooperative partners, organisational processes and intellectual capital should be such that can give the company a competitive edge over its rivals [5]. Furthermore, a growing body of the CSER literature suggest that firms can gain sustainable competitive advantages by reducing its social and environmental impacts of business actions on society through pollution control, product stewardship, product and market place differentiation, research and development and innovation, employee motivation and ability to increase competitors' cost by controlling future industry standards which may eventually enhance future financial performance [3,6].

Contrary to this view, some scholars such [7] argue that the disclosure of social and environmental information may adversely affect financial performance as it involves increased cost, triggers conflicts of interest among stakeholders and may hamper competitiveness as it exposes the firm's worth to competitors especially from same industry. However, the study argues that a firm's financial performance can be enhanced in the long run if it acquires specific capabilities in developing valuable social and environmental resources through cost and differentiation based competitive advantage. Despite the number of substantial evidence on the relationship between social and environmental reporting and firm financial

performance, mixed and inconclusive results from empirical studies have emerged [8]. While some studies reveal a positive relationship between the variables for example [1,9], some others [10] reveal negative results. Furthermore, some other studies have reported neutral results [11] while some others such as [4] reported no significant relationship.

One of the fundamental reasons deduced for the mixed and inconclusive results is the failure of most of previous studies to consider the significance of an intermediary process in the relationship between CSER and financial performance. Lin et al. [12] stated that there are a number of variables which play an important role in explaining the relationship between the CSER and financial performance hence the exclusive examination of the direct effect of CSER on financial performance may not suffice. Lopez-Gamero et al. [13] in their study revealed that a firm's unique resource and competitive advantage are valid mediators in the relationship and such integrated relationship could help to elucidate the inconsistencies in prior results and obtain empirical inferences from such results.

It is against the aforementioned methodological limitations from previous studies that this study advanced a more robust perspective in estimating the relationship between CSER and financial performance by introduction of a mediating variable. The study addressed this gap in knowledge by developing a mediating Model supported by the Resource Based Theory (RBT) which posits that CSER enhances competitive advantage which consequently improves a firm's financial performance. This study thus examines the mediating role of competitive advantage in the relationship between CSER and financial performance in Nigeria which very few empirical studies have done. The study utilised Nigerian companies because CSER is still evolving and more recently there is a significant increase in environmental and social issues inherent in the Nigerian business environment. This study would therefore be extremely valuable to foster the standardization of CSER and its implication for enhanced financial performance in Nigeria. The rest of the paper is structured into the following sections; Literature review, hypothesis development, theoretical framework and Model specification, methodology, results and discussion and finally the conclusion and recommendation.

2. LITERATURE REVIEW

The study hinged on the resource based theory of a firm which posits that a firm that has the ability to develop invaluable, costly to replicate resources and capability is more likely to create a key source of sustainable competitive advantage [14]. A firm may consider its inner potentials and outer environmental aspects capable of creating valuable, rare, non-imitable, non substitutable resources in order to gain a competitive edge in form of manufacturing and production efficiency and reputation which in turn influences its long-run financial performance [14]. Furthermore, the competitive advantage of a firm can be reliable and sustained if it is aware of uncertain environmental (and subsequently social) factors which can make competitors outwit it or reduce its worth to consumers [5]. However, [15] argued that not all firms may realise the benefits of competitive advantage in the same manner because these social and environmental strategies capable of creating competitive advantage require substantial investment, continuous improvement, long term commitment to the environment and a significant organisational capability.

From review of empirical studies, [13] explored the mediating role of competitive advantage and resources of a firm in the relationship between environmental management practices and financial performance using the resource based theory. Data on environmental management practices and financial performance were collected using questionnaire design from 350 Spanish hotels. The structural equation modelling technique was employed and the study revealed that a firm's unique resource and competitive advantage through differentiation are valid mediators in the relationship between proactive environmental management practices and financial performance.

Russo and Fouts [3] explored the relationship between environmental disclosure practices measured by a firm's environmental performance and economic performance among 243 firms within the period 1991 to 1992. The relationship was also moderated by the ability of the industry to create a competitive advantage focused on the resource based theory. The environmental performance ratings were obtained from Franklin Research and Development Corporation's database and the economic performance measured by ROTA was obtained by COMPUSTAT. The study employed the OLS regression technique and revealed a positive and

significant relationship between environmental and economic performances and was further enhanced by industry competitive advantage.

Lin et al. [12] examined the mediating role of intellectual capital and industry type as a moderating variable on the relationship between corporate social responsibility reporting and financial performance. The study consisted of 500 largest companies in the US stock market and secondary data was collected from Kinder Lydenberg Dommini rating system and Compustat databases from 1998 to 2008. The sample data consisted of 1144 firm-year observations. Regression analysis was used to test the mediation hypothesis based on [16]. Results indicated that corporate social responsibility reporting positively affects intellectual capital which in turn enhances financial performance. [6] examined the mediating effect of competitive advantage on the impact of environmental activities on firm financial performance in Spanish wineries. A sample size of 142 wineries out of population of 4598 wineries was employed in Nov, 2015. The study revealed that positive environmental activities can be obtained through cost based and differentiated based competitive advantage. However, the results revealed that there was no significant evidence of impact of cost based competitive advantage on financial performance and revealed a negative impact of differentiated competitive advantage on financial performance.

Muhammad et al. [17] examined the mediating role of Intellectual capital (IC) in the relationship between CSR reporting and corporate financial performance using the resource based theory. The measures of financial performance used in the study were return on equity and return on assets and intellectual capital was measured using Value Added Intellectual Coefficient. The study used a sample of 120 non-financial Karachi Stock Exchange (KSE) listed companies covering 8 non-financial sector of Pakistan within the period of 2009-2014. The results of this study showed that intellectual capital partially mediates the relationship between CSR reporting and corporate financial performance.

Peng et al. [18] study aims at exploring the intervening variables (social capital) which may mediate the relationship between CSR reporting and CFP in Taiwan. The sample companies were essentially environmentally sensitive firms selected from high-technology and traditional manufacturing industries. A sample of 43 corporate social responsible firms and 43 non-

corporate social responsible firms were selected for the study. Social capital was employed as the mediating variable and was measured using interlocking directorates. The result from the regression analysis showed that social capital plays a mediating role in connecting CSR reporting and corporate financial performance (CFP). This implied that CSR reporting had a positive impact on the social capital and social capital subsequently produced a positive effect on financial performance.

Unlike earlier studies, [19] used multiple mediating variables namely; sustainable competitive advantage, reputation, and customer satisfaction as three probable mediators in the relationship between CSR reporting and firm performance. The study was conducted using 205 Iranian manufacturing and consumer product firms. The findings reveal that the link between CSR reporting and firm performance is perfectly mediated by reputation and competitive advantage. The positive effect of CSR reporting on firm performance is due to the positive effect CSR reporting had on competitive advantage, reputation, and customer satisfaction. The study recommended a role for CSR reporting in indirectly promoting firm performance through enhancing reputation and competitive advantage while improving the level of customer satisfaction. This study is imperative because it would give a better explanation of the relationship between the two variables and also clarify reports of mixed findings from prior studies. The finding from this study would serve as a reference point in the study of CSER, competitive advantage and its implication on financial performance.

2.1 Hypothesis Development

Following the discussions from the previous section, we hypothesize that there is an integrated link between CSER, competitive advantage and firm financial performance such that CSER improved the competitive advantage of a firm and in turn led to an enhanced firm's financial performance. We, therefore, theorize that competitive advantage has a significant mediating role in the association between CSER and firm financial performance.

H₀1 Competitive advantage has no significant mediating effect on the relationship between CSER and financial performance.

3. RESEARCH DESIGN

3.1 Theoretical Framework and Model Specification

The Resource Based Theory (RBT) is similar to the Resource Dependency Theory as propounded by [20]. It is concerned with the approach organisations use in gathering resources from the environment. The theory portrays a firm as an open system which depends on the events and possibilities derivable from the outer environment (Table 3.1).

According to Hart [15], the resource based theory claimed that companies may be inevitably compelled to develop intangible resources or structurally adjust their operations to ensure compliance with social and environmental protection policy from the society, hence enhancing their resource use efficiency. Such resources developed or created by the firm are expected to be rare, unique, non-imitable and non-substitutable to secure a competitive advantage for it [21]. A company may also be compelled to enhance the value and brand image of the products and services which will serve as an incentive to employees to remain, boost customers' trust and consequently, bring about competitive advantage and an overall enhanced economic and financial performance of the firm. The firm's ability to create a connection with the environment that ensures access to such unique and distinguishable resources provides benefits such as an enhanced brand name and public repute of the firm [22], greater employee affinity, enhances customer loyalty, and accordingly, boost competitive advantage and financial performance [23]. Following the resource based theory, we expect that higher reporting of social and environmental information would boost the competitive advantage of a firm and ultimately enhance financial performance. Hence, we develop a research framework for this study;

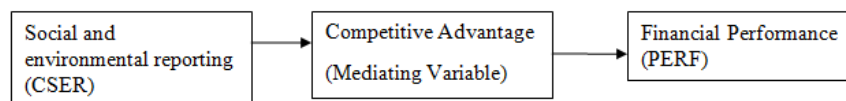


Fig. 1. Schematic framework

Source: Researcher's compilation (2019)

Based on the resource based theory, the Model of the study is specified below

Table 3.1. Operationalization of variables

Variables	Definition	Measurement	Used by	Apriori Sign
Dependent variable PERF	Financial Performance			
	Return on Asset (ROTA)	Net profit to total asset ratio	[24,25]	
	Return on Equity (ROE)	Net profit to total equity ratio	[25]	
Independent variable CSER	Corporate Social and Environmental Reporting	Social and Environmental Disclosure Index (SEDI)	[24,1]	+ve
Mediating Variable C.Adv	Competitive Advantage (Value added Competitive Advantage)	Value added from internal operations divided by total assets	[26]	+ve
Control variables FSIZE	Firm size	Log of total assets	[10]	+/-

Source: Researcher's compilation, (2019)

Model 1. Corporate Social Environmental Reporting – Financial Performance Model

$$PERF = \beta_0 + \beta_1 CSER + \beta_2 Fsize + \varepsilon_1 \quad (1)$$

Model 2. Mediation Model – mediating equation (1) with Competitive advantage, we have

$$PERF = \beta_0 + \beta_1 CSER + \beta_2 Cadv + \beta_3 Fsize + \varepsilon_1 \quad (2)$$

Following [16], to establish a mediation,

- CSER must affect PERF (ROTA, ROE) in model 1
- CSER must affect COMPETITIVE ADV in

$$COMPETITIVE ADV = \beta_0 + \beta_1 CSER + \beta_2 Fsize + \varepsilon_1 \quad (3)$$

and

- When PERF (ROTA, ROE) is regressed on both CSER and COMPETITIVE ADV in Model 2, COMPETITIVE ADV must affect PERF (ROTA, ROE)
- Partial mediation existed where the effect of CSER on PERF (ROTA, ROE) was less in Model 2 than in Model 1. while perfect mediation existed where CSER had no effect on PERF (ROTA, ROE) in Model 2.

3.2 Methodology

The study adopted the ex-post causal research design because the study seeks to examine the direct and indirect (with respect to the mediation Model) relationship between the reporting of social and environmental information and PERF among listed firms (both financial and non

financial) over a period of ten (10) years. The year 2007 was chosen because it was the most recent year and had available data for the study. The study was restricted to data from the listed companies within the period earlier mentioned due to availability and accessibility. Furthermore, the coverage period coincided with the period within which the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI) signed a treaty to align their work with advancing the adoption of CSER geared towards achieving the sustainability development goals (SDGs). The total population of this study consists of the total number of one hundred and seventy eight (178) listed companies (both financial and non-financial) on the Nigerian Stock Exchange (NSE) as at 31st December, 2016 (NSE website, 2016). In order to obtain a sizeable and reliable sample size for the study, the lottery method of the simple random sampling technique was used to select the sample from the population ensuring that all sectors were represented. Consequently, a sample size of 100 companies from all sectors listed on the Nigerian Stock exchange (NSE) between 2007 and 2016 was used. The study employed the Content Analysis Disclosure Index technique to generate data for CSER constructed using the annual reports of the sampled companies based on the GRI framework. The return on assets (ROTA) measured by Net profit to total asset ratio and return on equity (ROE) measured by Net profit to total equity ratio (accounting-based measures) were used to generate a proxy for financial performance. The mediating variable –competitive advantage (C.Adv.) was measured by Value added from internal operations divided by total assets. [26] pointed out that the value of competitive advantage in a firm is calculated as the ratio of added value to net or gross output of a firm and

concluded that it has a direct relationship with value added hence can be extracted and used as proxy for competitive advantage. The firm size was measured by the log of total assets. The Panel regression analysis was employed in the data estimation. The mediation Model would be tested based on the conditions for mediation as espoused by [16]. The econometric software used for data importation and analysis is STATA 13.

4. RESULTS AND DISCUSSION

Table 4.1 provided the descriptive statistics of the data. From the Table, we observed that CSER has a mean of 0.43357 with maximum and minimum values of 1 and 0 respectively. The mean value of CSER suggested that the average CSER score from the sampled companies which communicated information on social and environmental issues was quite low. The findings were consistent with those of [4,24,27]. The standard deviation of 0.1999 suggested that there was low variability of the firm specific scores away from the mean. Hence, there was the need for companies to improve their reporting on CSER related issues. The accounting based measure (ROTA) had a positive mean value of 4.19 with maximum and minimum values of 232.6198 and -88.985 respectively. It suggested that the average ROTA value of sampled companies was quite low. The standard deviation of 13.4056 revealed the dispersion of the firm specific values from the distribution mean. The mean for ROE was 25.245 with maximum and minimum values being 102.72 and -2087.7 respectively with a standard deviation of 357.9041 which suggested a significant variability in the ROE values away from the mean.

The mean value for FSIZE was 7.2113 with maximum and minimum values of 9.6377 and

4.937 respectively and a standard deviation of 0.9092. The mean value for C.Adv was 0.274 with a maximum value of 2.175 and a minimum value of -0.317 respectively. The standard deviation showing the dispersion of the data about the mean was quite low at 0.231. The Jacque-bera (J.B) statistics which accounted for the degree of skewness, kurtosis and normality of the data revealed that the series was normally distributed over the period of time covered given that the J.B values had p-values less than 0.05. It implied the absence of significant outliers in the data.

The variance inflation factor (VIF) explained how much of the variance of a coefficient estimate of a regressor was inflated as a result of collinearity with the other regressors. Essentially, VIF values above 10 were seen as a cause for concern because they indicated the presence of multicollinearity. From the Table 4.2 none of the variables had VIF values more than 10, hence there was no indication of multicollinearity.

As shown in the results, the R^2 for the ROTA Model is 0.0092 which implies that the Model explains about 0.9% of the systematic variations in the dependent variable. The F-stat was 4.609 with ($P = 0.00$) indicating that the hypothesis of a significant linear relationship between the dependent and independent variables was accepted at 5% level of significance. It is also indicative of the joint statistical significance of the Model. The beta for CSER is positive (7.8031) and significant ($P = 0.00$) at 5%. The beta for FSIZE is negative (-1.2021) but significant ($P = 0.03$) at 5% and Durbin-Watson statistics of 1.535. The R^2 for the ROE Model is 0.491. The F-stat was 8.5674 with ($P = 0.00$) indicating that the hypothesis of the existence of a significant linear relationship between the dependent and independent variables was accepted at 5% level of significance. It is also indicative of the joint

Table 4.1. Descriptive statistics

	CSER	ROA	ROE	FSIZE	C.Adv
Mean	0.43357	4.198609	25.24541	7.211272	0.274956
Median	0.357143	3.462141	11.56186	7.077112	0.226031
Maximum	1	232.6198	102.72	9.637756	2.175454
Minimum	0	-88.9854	-2087.7	4.937655	-0.31792
Std. Dev.	0.199556	13.40564	357.9041	0.909296	0.230858
Skewness	0.797486	4.536814	24.24384	0.419118	2.289048
Kurtosis	2.982601	94.59274	687.072	2.867026	13.18274
Jarque-Bera	104.5259	348040	19321718	29.59318	5120.92
Probability	0.00	0.00	0.00	0.00	0.00
Observations	986	986	986	986	986

Source: Researcher's Compilation (2019)

statistical significance of the Model. The beta for CSER is positive (8.5228) and significant ($P = 0.00$) at 5%. The beta for FSIZE is negative (-7.3215) and significant ($P = 0.000$) at 5%. The Durbin-Watson statistics is 1.6 suggesting no significant serial correlation challenges.

The results in Tables 4.3 and 4.4 were estimated to test the [16] conditions for mediation. The mediation of competitive advantage in the relationship between CSER and financial performance was tested based on the method proposed by [16]. They posited that the following conditions must hold to establish mediation: CSER must affect financial performance, CSER must affect competitive advantage and when financial performance is regressed on both CSER and competitive advantage, competitive advantage must affect financial performance. Perfect mediation holds if CSER has no effect on financial performance.

Accordingly, the results from Table 4.3 showed that CSER affects financial performance (ROTA & ROE) in the first Model which satisfies the first condition. Furthermore, from Table 4.4 CSER has a positive and significant impact on competitive advantage (0.0720, $P = 0.00$) which satisfies the second condition. Finally, when financial performance is regressed on both CSER and competitive advantage, competitive advantage must affect financial performance and perfect mediation holds if CSER has no effect on financial performance to satisfy the third condition. From Table 4.4, we observed that C-adv had a positive and significant impact on ROA (24.059, $P = (0.00)$) and C-adv had a positive and significant impact on ROE (12.6760, $P = 0.00$).

Again, it was observed that CSER is not significant in the regression of financial performance on C-adv and CSER. Hence, as seen from the results and in line with [16], conditions to establish a perfect mediation were all satisfied. Consequently, competitive advantage is a valid mediating variable in the relationship between CSER and financial performance (PERF).

Table 4.2. Multicollinearity test

Variable	VIF
C	NA
CSER	1.634559
C.Adv	1.046876
FSIZE	1.199036

Source: Researcher's compilation (2019)

Table 4.5 shows the mediating regression results of Competitive advantage on the relationship between CSER and Financial performance (ROTA). The Hausman test for choosing the FE Model over the RE Model with a P value of 0.279 at 5% significance level indicated that the FE method may give a biased and an inconsistent estimator when compared to RE Model which confirmed the preference for the RE. As shown in the results, the R^2 for the RE Model is 0.132 which implies that the Model explains about 13.2 % of the systematic variations in the dependent variable. The F-stat is 30.265 (P -value = 0.00) is significant at 5% and suggest that the hypothesis of the existence of a significant linear relationship between the dependent and independent variables cannot be rejected. The Durbin-Watson statistics value of 1.6 indicates the absence of serial correlation.

Table 4.3. CSER → Financial performance Results

	ROTA	ROE
C	9.445* (4.499) {0.035}	74.0668 (5.5799) {0.000}
CSER	7.8031* (2.1925) {0.000}	8.5228 {2.359} {0.000}
FSIZE	-1.2021* (0.5695) {0.0350}	-7.3215* {0.8640} {0.0000}
R2	0.0092	0.4907
Adj R2	0.007	0.4334
F-Stat	4.609	8.5674
P(f-stat)	0.010	0.000
D.W	1.535	1.6

Source: Researcher's compilation (2019), () are standard errors; { } are P-values, * sig at 5%

Table 4.4. Competitive advantage → CSER & Financial Performance Results

	ROTA	ROE	C.Adv
C	-12.5234 (1.8562) {0.000}	*79.9809 (9.3274) {0.000}	0.8636 (0.0430) {0.000}
C.Adv	24.059* (1.1297) {0.000}	12.6760 (2.904) {0.000}	
CSER	-0.6482 (0.7258) {0.3721}	6.4695 (2.7340) {0.1082}	0.0720* (0.0143) {0.000}
FSIZE	1.4257* (0.2624) {0.000}	-8.1999* (1.3174) {0.000}	-0.0855* {0.006} {0.000}
R2	0.750	0.542	0.859
Adj R2	0.718	0.483	0.841
F-Stat	23.233	9.55	47.824
P(f-stat)	0.000	0.000	0.000
D.W	1.7	1.9	2.04

Source: Researcher's compilation (2019), () are standard errors; { } are p-values, * sig at 5%

Table 4.5. CSER, Competitive advantage and ROA Results

	FE	RE
C	-13.568* (1.9051) {0.000}	-12.588 [4.654] {0.007}
CSER	0.1336 (0.4649) {0.7738}	5.4195* (2.4299) {0.0259}
CAdv	24.0554* (1.767) {0.000}	21.4087 {2.3499} {0.000}
FSIZE	1.6872* (0.2386) {0.000}	1.1462 (0.6238) {0.066}
R2	0.7191	0.132
Adj R2	0.6865	0.128
F-stat	22.013	30.265
P (f-stat)	0.000	0.000
D.w	1.6	1.6
Hausman		0.279

Source: Researcher's compilation (2019), () are standard errors; { } are p-values, * sig at 5%

The performance of the variables reveals that CSER has a significant impact (5.4195, $P = 0.0259$) on ROTA when competitive advantage is introduced as a mediating variable. Competitive advantage has a positive (21.4087) and significant ($P = 0.00$) effect on ROTA. Firm size used as control variable is positive with a value of 1.1462 though not significant at 5%.

Table 4.6 shows the mediating regression results of Competitive Advantage on the relationship between CSER and Financial performance (ROE). The Hausman test for choosing the FE

Model over the RE Model with P -value of 0.029 at 5% significance level indicated that the RE method may give a biased and an inconsistent estimator when compared to FE Model thus confirming the preference for the FE. As shown in the results, the R^2 for the FE Model is 0.386 which implies that the Model explains about 38.6% of the systematic variations in the dependent variable. The F-stat value of 5.406 (P -value = 0.00) was significant at 5% and suggested that the hypothesis of a significant linear relationship between the dependent and independent variables could not be rejected. It

was also indicative of the joint statistical significance of the Model with a Durbin-Watson statistics value of 1.7. The performance of the variables reveals that CSER has a significant impact (5.3149, $P = 0.020$) on ROE when competitive advantage is introduced as a mediating variable. However, competitive advantage has a positive (18.4095) and significant ($P = 0.00$) effect on ROA. Firm size used as control variable is positive though not significant at 5%.

Table 4.6. CSER, competitive advantage and ROE Results

	FE	RE
C	-9.3035* (9.674) {0.336}	104.6802 {68.9577} {0.1293}
CSER	5.3149* (2.2819) {0.0201}	-11.2294 (43.165) {0.7948}
C.Adv	18.4095* (4.9333) {0.000}	1.3946 (70.659) (0.9843)
FSIZE	0.7304* (1.314)	-9.5245 {0.2106}
Adj R2	0.386	0.0016
F-stat	0.3146	-0.003
P (f-stat)	5.406	0.326
D.w	1.7	2.00
Hausman		Hausman

Source: Researcher's compilation (2019), () are standard errors; { } are p-values, * sig at 5%

On the overall, from the analysis of the results, it is observed that competitive advantage mediates the relationship between CSER and financial performance. The effect of CSER on financial performance using ROTA and ROE is significant and positive in the context of the mediating role of competitive advantage. The study also showed that CSER significantly influences competitive advantage. Furthermore, the study showed that competitive advantage in turn affects financial performance in terms of ROTA and ROE. Consequently, following the findings of the result on the mediating role of competitive advantage in the relationship between CSER and PERF (in terms of ROTA, ROE we fail to accept the null hypothesis that the mediating role of competitive advantage has no significant effect on the relationship between CSER and PERF.

The finding is in tandem with the work of [3,13] which revealed that an improved CSER allows firms to enhance their competitiveness in terms of cost reduction, attract customers leading to

increased sales, and build a strong reputation, therefore, positively impacting on a firm's overall financial performance. Also, the study is in tandem with [19] whose findings reveal that the link between CSR and firm performance is a perfectly mediated by competitive advantage and the reputation of the firm. However, the findings of this study deviate from the findings of [6,28] which did not give a substantive evidence of the mediating effect of competitive advantage on financial performance.

5. CONCLUSION AND RECOMMENDATION

In a world of growing competitiveness in the business and capital markets, CSER is increasingly being embraced as a strategic management tool in drawing critical and invaluable resources from key stakeholders and the environment in order to increase shareholder's wealth and as a source of competitive advantage. The instrumental stakeholder theory posits that an increased reporting of social and environmental information by companies attracts key investors, cooperative partners, and social and environmentally sensible customers which leads to increased patronage and marketability of equities (shareholder's funds), improved reputation and competitive advantage and in turn boosts the financial performance of the firm.

Following the resource based theory, companies who create valuable resources and firm-specific assets such as skilled manpower and organizational processes supported by unique social and environmental strategies such as emission reduction, product differentiation, improved manufacturing efficiency, increased employee motivation and influenced future industry standards which increased their competitor's cost, are more likely to improve firm's market productivity and financial performance.

A number of studies have examined the mediating role of competitive advantage in the correlation between corporate social responsibility and financial performance, for instance, [19] and corporate environmental variables and financial performance [12], but there is paucity of study especially in Nigeria which have examined the mediating role of competitive advantage in the relationship between both social and environmental reporting and financial performance. The study adopted the ex-post causal research design using sample

size of 100 listed companies from 2007 to 2016. The mediating role of competitive advantage in the relationship of CSER and financial performance was tested using the mediation Model suggested by [16]. The results showed that the introduction of the mediating variable had a positive and significant effect on the relationship between CSER and financial performance, and could not be ignored. This situation confirms the RBT that higher reporting of social and environmental information can enhance competitive advantage which will ultimately improve the financial performance in terms of profitability.

Consequently, this study made a methodological advancement in the area of research by operationalising an integrated approach by the introduction of competitive advantage as a mediating variable in providing a better explanation of the relationship between CSER and financial performance supported by the resource based theory. The study also provided an empirical insight into the significance of competitive advantage as a valid mediator which would serve as a reference point to future researchers.

Following the resources based theory, the findings from this study suggest that a firm's unique ability to create resources and capabilities required through unique social and environmental strategies can contribute to distinguished competitive advantage in order to improve financial performance. The study therefore recommends that corporations in developing and emerging markets should pay attention to areas that can facilitate proactive social and environmental objectives towards achieving sustainability development policies in order to gain competitive advantage over its rivals and consequently, enhance their financial performance. Future studies could explore possible resources derived from the environment and management capability which could drive competitiveness in order to enhance their financial performance. Lastly, although this study proposed an integrated model with the mediating role of competitive advantage, many other variables such as intellectual capital, capital intensity or corporate reputation can be used which could therefore, motivate the use of primary data.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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