The Mediating Effect of Firm Performance on the Relationship between Ownership Structure Dimensions and Corporate Social Responsibility Disclosure by Firms Listed in Nairobi Securities Exchange, Kenya

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Abstract
Firm performance is one of the most important concepts of business strategy. Regardless of its importance and ubiquitous use, there is no consensus about its precise definition and dimensionality. This paper examined the mediating effect firm performance on the relationship between firms’ ownership structure and its disclosure of CSR activities. Firm performance was proxied by return on assets. Ownership structure dimensions are managerial, institutional, foreign and ownership concentration. The paper employed Baron and Kenny mediation procedure. The results showed that firm performance mediated positively the relationship between managerial, institutional and ownership concentration and the corporate social responsibility disclosure at coefficient's 0.165, 0.025 and 0.024, respectively. Further, there was negative (-0.001) mediation effect on the relation between foreign ownership and the corporate social responsibility disclosure. The form of mediation was partial mediation. The positive relationship suggests that for a company to engage and disclose its CSR activities, performance plays a critical role. It confirms that firms with a better firm financial performance leads to better quality CSR reporting and that the older the companies compounded with stable financial performance the more aggressive they participate in the CSR activities. Firms need to utilize various risk management practices such as identification, analysis, monitoring and evaluations of the firm activities to enhance efficiency in firm performance and in return engage and disclose more on CSR issues. This may be achieved through establishment and implementation of risk identification, monitoring and evaluation policy framework which significantly influence firm performance and thereby enhances shareholder capabilities to identify, analyze and evaluate all risks that hinder the institutions from achieving its objectives.

Keywords: Firm performance • CSR disclosure • Ownership structure dimension • Kenya

Introduction
This article aimed at investigating the mediating effect of firm performance on the relationship between firm ownership structure dimensions and the corporate social responsibilities disclosure. Firm Performance refers to the execution or fulfillment of a duty or function or the process of carrying out a function under test conditions; usually the objectives [1]. As such, any meaningful evaluation of firm performance should be approached from the objectives of the firm. The stakeholder theory [2] describes the firm as a constellation of interests which presents legitimate expectations about the objectives of the firm. This, therefore, gives different definitions to firm performance by various stakeholders depending on their intrinsic needs from the firm. Similarly, different disciplines will always define performance based on their professional orientation.

Performance is the ability to distinguish the outcomes of organizational activities [3]. Performance can either be financial and nonfinancial performance. The non-financial performance can be measured using operational key performance indicators such as market share, innovation rate or customer satisfaction [4]. In this study, it is hypothesized that, firm performance related positively to CSR. Employee learning and growth, internal processes, customer satisfaction and financial performance are employed as indicators of firm performance based on firm efficiency and profitability. According to Anderson the fast-changing business climate demands satisfaction of the multiple stakeholders of the firm. Failure to take cognizant of social responsibility on all stakeholder’s results in stakeholder reactions including employees withdrawing their loyalty, customers refusing to buy the firm’s products, communities not tolerating the firm, and the government taking legal action. According to [5], the ownership structure essentially defines distribution of voting power and the control among shareholders and thereby restrain managerial decisions to divert from shareholders’ interests.

Background Information
The effects of ownership concentration on firm performance are theoretically complex and empirically ambiguous. Concentrated ownership is widely acknowledged to provide incentives to monitor management. Large shareholders might have the greater incentive to improve firm performance than do dispersed shareholders. The empirical corporate governance literature offers no plain response to the costs and benefits of concentrated ownership with corporate performance others a negative association [6]. The effective control of large shareholders enables them to influence key decision-making and affect key corporate policies [7]. Yasser and Mamun in their study of the impact ownership concentration on firm performance concluded that ownership concentration gives the owners better control and motivation to monitor over the firm’s activities, hence mitigating the agency problems.

Measuring company performance (CP) is common in CSR studies, however, there is little consensus regarding the measurement instrument to apply. Several studies have used market measures [8] while other studies have used accounting measures [9,10] used three accounting measures: ROA, ROE and ROS. [11] Measured company performance (CP) using three accounting returns including the ratio of operating earnings to assets, the ratio of operating earnings to sales, and excess market valuation. [12] Used ROA, ROE and ROS to measure CP, while [13] utilized ROA and loan losses

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and only applied ROA. In addition, some studies have used both accounting data and non-accounting data with three variables such as ROA, stock market return and Tobin’s q ratio (Q). Moreover [14] used stock returns as a dependent variable to measure CP.

These two methods show different perspectives on the evaluation of a company’s CP and have different theoretical implications [15]. McGuire et al. stated that each method is subject to certain biases [16]. The use of these two different methods of measuring CP means that it is difficult to compare the results of the different studies directly. Several accounting measures have been used to evaluate CP, including ROE, ROS and ROA. The reason for using these three variables to measure CP is that these data are less likely to have been manipulated, and are also the most widely used measurements of a company’s performance [17].

The inherent limitation of these financial accounting measures is that they only capture historical aspects of CP. Secondly, these data may be biased by managerial perceptions and the different accounting procedures adopted by different companies [18]. However, market-based CP avoids certain of the limitations associated with accounting limitations since it shows forward-looking factors and focuses on market performance [19]. These measures are less subject to accounting procedures and are the investors ‘index of choice for evaluating a company’s ability to generate future returns. However, the use of stock market-based measures of CP also has limitations.

**Methodology**

To examine whether financial performance mediated the relationship between ownership structure dimensions and corporate social responsibility disclosure [20], multiple regression approach was used, while taking into consideration the recent critique and modifications suggested by [21]. According to Baron and Kenny, testing for mediation effect can be done in three steps: first, regressing the mediator on the independent variables. Second, regressing the dependent variable on the independent variables. Third, regressing the dependent variable on both the independent variables and mediator. They pointed out that the independent variable in the first two models is expected to show a statistical significance, while the third model is expected to show a statistical significance of the mediator variable and the insignificance of the independent variable.

Recently, Zhao demonstrated that the significant relationship between independent variable and dependent variable is not necessary and can be misleading. This is because it represents the total effect of the sum of direct and indirect effects, including the mediator, and that mediation must be only established by the existence of an indirect effect. Put simply, to demonstrate mediation all that matters is that the indirect effect is significant. In order to determine the existence of the significant mediating effect of the firm performance on the relationship between ownership structure dimensions and corporate social responsibility, since there is only one mediating variable, the paper used simple mediation approach. Conceptually, simple mediation means that a change in independent variable X, leads to change in M (path a), and the change in M leads to a change in Y (path b) (as shown in the (Figure 1)

The path ab, which is the product of two paths that connect the predictor X to the mediator M and the mediator M to the outcome Y.

Simple mediation model based on preacher and Hayes, 2004. Where, X: Independent Variable, M is the mediating variable, Y is the dependent variable, a is the effect of X on M, b effect of M on Y, c’ is the direct effect of X on Y, ab is the indirect effect of X on Y, c total effect of X on Y (ab+c'). Applying the above mediation model, the following equations helped in testing the mediation effect of firm performance on the relationship between ownership structure dimensions and the corporate social responsibility disclosure.

First Equation 1 was used to estimate the direct effect

Y=α₀+cX………………………………………………………………………………1

Secondly, Equation 2 and equation 3 are used to estimate the parameters a and b;

M=β₀+aX……………………………………………………………………………2

Y=α₀+bM……………………………………………………………………………3

To measure the indirect effect of mediator M, the significance of the value a*b was estimated using Lavaan package in R statistical software. The significance of the value c+(a*b) test the total mediation effect. If the indirect effect ab is greater or smaller than zero or in other words if is statistically significant, one can claim that some form of mediation exists (Zhao et al. 2010). The rule of the thumb is that if one wants to claim for a complete mediation, the indirect effect (a*b) proportion on total effect should be at least 0.8 [22]. The four steps approach proposed by Baron&B Kenney in which several regression analyses are conducted, and significance of the coefficients is examined at each step as depicted below.

Step 1: A simple regression was conducted with X predicting Y to test path c alone.

Y=β₀+β₁X+c…………………………………………………………………………4

Step 2: Conduct a simple regression analysis with X predicting M to test for path a

M=β₀+β₁X+c…………………………………………………………………………5

Step 3: conduct a simple regression analysis with M predicting Y to test the significance of path b alone

Y=β₀+β₁M+c…………………………………………………………………………6

Step 4: Finally, conduct a multiple regression analysis with X and M predicting Y

Y=β₀+β₁X+β₂M+c……………………………………………………………………7

The purpose of step 1-3 is to establish that zero-order relationship among
When the mediator (FP) is controlled. According to Stakeholder theory, positively affects CSR disclosure with coefficient $5.88 \times 10^{-4}$ (p-value=0.024) effect of X on the mediator M. Finally, finding the effect of X and M on the explanatory (X) and the outcome variable (Y). Next is the investigating the sets of regression equations: The first step entails regression between the explanatory (X) and the outcome variable (Y). Next is the investigating the sets of regression equations: The first step entails regression between the explanatory (X) and the outcome variable (Y). Next is the investigating the sets of regression equations: The first step entails regression between the explanatory (X) and the outcome variable (Y). Next is the investigating the sets of regression equations: The first step entails regression between the explanatory (X) and the outcome variable (Y).

Mediation processes are framed in terms of intermediate variables between an independent variable and a dependent variable, with a minimum of three variables required in total. For instance, in this study the intermediate variable is the firm performance, independent variable is each of the ownership structure dimensions and CSR the dependent variable. The firm performance is hypothesized to transmit the causal effect of ownership structure dimensions to CSR disclosure. The total effect of ownership dimensions on CSR is referred to as total effect, and that effect is then partitioned into a combination of a direct effect of ownership structure dimensions on CSR disclosure and an indirect effect of ownership structure dimensions on CSR transmitted through the mediator (Firm Performance).

Mediating effect of firm performance on the relationship between Managerial Ownership and Corporate Social Responsibility disclosure.

According to [23], statistical analysis of mediation has been indispensable tool in understanding investigation processes thought to be causal. Before investigating the mediation analysis, the study adopted Baron & Kenny's steps suggest by Baron & Kenny. The steps comprised of three sets of regression equations: The first step entails regression between the explanatory (X) and the outcome variable (Y). Next is the investigating the effect of X on the mediator M. Finally, finding the effect of X and M on the outcome variable Y.

The results presented in Table 1 shows that managerial ownership structure positively affects CSR disclosure with coefficient $5.88 \times 10^{-4}$ (p-value=0.024) when the mediator (FP) is controlled. According to Stakeholder theory.

| Regressions | Estimate | Std. Err | z-value | P>|z| |
|-------------|----------|-----------|---------|-----|
| CSR-MO      | 5.88e-4  | 2.5e-4    | 2.259   | 0.024|
| FP-MO       | (a) 0.185 | 0.001     | 187.297 | 0.000|
| CSR         |           |           |         |     |
| FP          | (b) 0.894 | 0.021     | 41.606  | 0.000|
| MO          | (c) -0.164 | 0.004     | -41.114 | 0.000|

Mediating effect of firm performance on the relationship between managerial ownership structure and CSR disclosure.

**Table 1.** Mediating effect of firm performance on the relationship between managerial ownership structure and CSR disclosure.

Mediation processes are framed in terms of intermediate variables between an independent variable and a dependent variable, with a minimum of three variables required in total. For instance, in this study the intermediate variable is the firm performance, independent variable is each of the ownership structure dimensions and CSR the dependent variable. The firm performance is hypothesized to transmit the causal effect of ownership structure dimensions to CSR disclosure. The total effect of ownership dimensions on CSR is referred to as total effect, and that effect is then partitioned into a combination of a direct effect of ownership structure dimensions on CSR disclosure and an indirect effect of ownership structure dimensions on CSR transmitted through the mediator (Firm Performance).


The paper further aimed at investigating the mediating effect of firm performance on the relationship between institutional ownership structure dimension and CSR disclosure. The results in Table 2 indicates that the relationship between CSR and institutional structure was positive and significant at 5 percent level of significance (p-value=0.018). It means that controlling for firm performance and that the firm’s shares are owned by institutions either private or nonprivate, there is a tendency for firms to engage and disclose CSR.

The direction of indirect and the direct effects points in different direction. This kind of partial mediation as per Zhao is referred to as competitive management is advocated to redesign and tactfully deploy best practices in understanding the nature of the relationship between the dimensions of ownership structure and the various groups of stakeholders inclusive of management. Firm performance had a positive and significant (0.185, p-value=0.000) relationship with managerial ownership structure. According to Barron & Kenny, for a variable to mediate the relationship between the explanatory and the explained variable, it should be demonstrated that a significant relationship between the mediator and the independent variable exist (Table 1).

In path analysis, the indirect effect (a*b) found to be positive and significant. It can be easily be demonstrated that $0.185 \times 0.894 = 0.165$. This measures the mediation effect of firm performance on the relationship between managerial ownership structure and CSR. The total effect incorporates the direct and the indirect effect. That is $c=c^a+ab$ for example 0.00059=0.165-0.164 as you can see in the Table 1 above.

Since the value $c=0.164+(0.185 \times 0.894)$ has not been reduced to zero then the type of mediation attained in this study is referred to as partial mediation. This implies that firm performance plays pertinent role for managerial ownership structure of the firms’ engagement and disclosure of corporate social responsibilities. If the value obtained was equal to zero, then we could say there was complete mediation. The relationship between firm performance (the mediator) and the CSR disclosure was positive and significant (0.894 (p-value=0.000)). The implies that firms focuses on the profitability when deciding to disclose CSR activities due to the lack of regulation and stakeholder influence.[24] found that firms that perform better demonstrated extra anticipation of reporting CSR activities than those with worse performing. The main objective of disclosing CSR is to provide the necessary information that will affect the perception of the society and the stakeholders about the firm and its management. There is a likelihood of surplus financial resources when a firm performs better and this therefore, more likely to invest in CSR activities. While a lower economic performance world lead to decrease CSR related activities and its disclosure.

[25] Further explained that firms with good performance lead to more information relating to CSR to legitimize their existence. This is because management opportunities and suppliance to issue circulation of more CSR activities to stockholders. [28] Found a positive association between firm financial performance and CSR disclosures related to the environment. [27] Stated that a firm with good financial performance positively engaged and disclosed CSR activities. [28] Investigated the nexus between firm performance and CSR information of listed firms in China in the year 2008. The results confirmed that firms with a better firm financial performance led to better quality CSR reporting. This positive relationship suggest that CSR commitment generates the condition of preparing reports which meet the needs of stakeholders even if there is no substantial improvement in CSR commitment and performance. [29] Argued that the older companies with stable performance are more aggressive to participate in the CSR activities.


**Table 2.** Mediating effect of ownership structure and CSR disclosure.

| Parameters | Estimate | Std. Err | z-value | P>|z| |
|------------|----------|-----------|---------|-----|
| Indirect effects | 0.165 | 0.004 | 40.616 | 0.000|
| Direct effect | -0.164 | 0.004 | -41.114 | 0.000|
| Total effect | 0.001 | 0.001 | 0.726 | 0.468|

Note: FP represent Firm Performance. MO-Managerial Ownership, CSR- Corporate Social Responsibility. Sobel z-test statistic was used in testing significance of indirect effect ($a*b$).
Concentrated ownership is one of the most form of ownership in companies as it is composed of dispersed form of ownership in companies as it is listed firms in Nairobi Securities Exchange.

Mediating effect of firm performance on the relationship between institutional ownership structure and CSR disclosure.

Table 2.

| Regressions       | Estimate | Std. Err | z-value | P>|z| |
|-------------------|----------|----------|---------|-----|
| CSR~IO            | 5.25e-5  | 2.24e-2  | 2.34    | 0.019|
| FP~IO (a)         | 0.016    | 0.000    | 328.347 | 0.000|

CSR

FP (b) 1.567 0.036 43.034 0.000

IO (c) -0.025 0.001 -42.667 0.000

Variance

FP 0.452 0.028 16.248 0.000

CSR 0.318 0.019 16.248 0.000

Defined parameters

Indirect effects 0.025 0.001 42.667 0.000

Direct effect -0.025 0.001 -42.667 0.000

Total effect 0.0001 0.0001 1.767 0.077

Note: FP represent Firm Performance. IO-Institutional Ownership, CSR-Corporate Social Responsibility. Sobel z-test statistic was used in testing significance of indirect effect (a*b).

It signifies that though firm performance mediates the relationship, firms in NSE that are owned majorly by institutions engages in CSR. In path analysis, the results can be graphically presented as shown in the Figure 2. It can also be proved that the total effect c = c0 + ab, that is 0.0001 = 0.025 + 0.016 * 1.567.

Mediating effect of firm performance on the relationship between Foreign Ownership and Corporate Social Responsibility disclosure.

Foreign ownership is the number of shares owned by either foreign individuals or foreign institutions. Machmud and Djakman outlined that in Europe countries are very much concerned with the social issues such as education and environment just to mention a few.

Multinational companies changed their behavior to maintain legitimate operation and reputation of the company. In Japan according to study by Suzuki Tanimoto foreign ownership in public companies has become a driving factor in adoption of CSR disclosure.

This article found that the CSR disclosure in Kenya is positively influenced by the foreign ownership with a coefficient 0.031 (see Table 3) when the firm performance is included as mediator. Rustiarini (2011), Haniffa and Cooke found that foreign ownership structure positively affects CSR disclosure. Companies with foreign ownership primarily gain legitimacy derived from its stakeholders who are usually based on the home market.

Looking into the path analysis, the firm performance had a negative relationship with CSR contradicting previous other researches done by [31,32] have focused on the existence of the relationship between CSR and firm performance. CSR disclosure should improve companies' competitiveness, reputation and positively affect relationship between CSR activities of a company and its financial performance in the long-term perspective.

According to results (see Figure 3 or Table 3), foreign ownership positively and significantly influences firm performance with coefficient 0.069 and probability of 0.000.


Kenya is composed of dispersed form of ownership in companies as it is an emerging economy. Concentrated ownership is one of the most form of ownership structure dimension in the Nairobi Securities Exchange, George and [32]. It provides the block shareholders with improved incentives at low cost to monitor management and thus affecting firms' performance. The study found that CSR and concentrated ownership are positive (4.689e-5) and significantly (0.019) correlated. Firm’s financial performance was positively (0.014) affected by this concentrated ownership in NSE. This conforms with study by [33] that the correlation between concentrated ownership structure and firm’s financial performance was positive (Figure 4).
Conclusion and Recommendation

In conclusion, firm performance mediates the link between ownership structure dimensions and firm’s CSR activities engagement and its disclosure. This paper greatly expanded the understanding that links between ownership structure dimensions, firm performance and disclosure of CSR participation. It further points out that both local and foreign ownership as common with financial institutions in Kenyan economy. Therefore, there will have to prompt Kenyan government to appropriately come up with Corporate Social Responsibility laws that will regulate and guide its implementation and disclosure by corporates and other well-wishers in the Kenyan context.

References


