

Effect of Corporate Social Responsibility Disclosure on Financial Performance of Manufacturing Firms Quoted on Nairobi Securities Exchange

Charles Muriungi Mugambi^[a]; Olanrewaju Isola Fatoki^{[a],*}

^[a]KCA University, School of Business, Nairobi, Kenya.
*Corresponding author.

Received 21 January 2019; accepted 27 March 2019
Published online 26 April 2019

Abstract

The purpose of this study was to determine the effects of corporate social responsibility disclosure on the organization's financial performance. Specifically, the study examined the effect of environmental disclosure, community disclosure, employee disclosure and financial performance of quoted manufacturing companies in Kenya. The study was anchored on stakeholder's theory, legitimacy theory and stewardship theory. The study employed census research design. The target population was all the manufacturing firms that are listed in the NSE from 2007 to 2017. The researcher identified manufacturing firms because they impact heavily on environment through waste and pollution they discharge and in addition they are capital and labour intensive organizations. This study used secondary data and content analysis of data from the published financial records and analysis of other reports of the companies. Stata version 12 was used to analyze the data using both descriptive and inferential methods. The findings were presented in form of tables and figures. It was expected that the study findings help business owners and managers to make more informed decisions on whether or not to adopt corporate social responsibility disclosure. The study also expected to help investors to understand the relationship between corporate social responsibility and financial performance which will help them design and allocate their portfolio in a manner that maximizes returns by investing in firms and organizations that make decisions based on ethical concerns. Further, the study also expected to enrich the discussion on corporate social responsibility and contribute to the existing literature and theories.

The study found positive and non-significant effect of environmental disclosure, community disclosure and financial performance of quoted manufacturing companies in Kenya. Moreover, employee disclosure had inverse and non-significant effect on financial performance of quoted manufacturing companies in Kenya.

Key words: Environmental disclosure; Community disclosure; Employee disclosure; Financial performance; Quoted Manufacturing company

Mugambi, C. M., & Fatoki, O. I. (2019). Effect of Corporate Social Responsibility Disclosure on Financial Performance of Manufacturing Firms Quoted on Nairobi Securities Exchange. *Canadian Social Science*, 15(4), 15-25. Available from: <http://www.cscanada.net/index.php/css/article/view/10976>
DOI: <http://dx.doi.org/10.3968/10976>

INTRODUCTION

Value of corporate social responsibility amongst corporations cannot be ignored indeed its acceptability has amplified worldwide (McWilliams, 2015). Business environment is dynamic with heterogenous stakeholders whose interests differs with some expecting social benefits and other wealth and profit maximization. To strike a balance corporate social responsibility (CSR) have been adopted by enterprises (Carroll & Shabana, 2010). Although, CSR have short term cost implications its benefits have consistently promoted positive and environmental changes. According to Schneider and Schmidpeter (2012) CSR has become an increasingly visible and central aspect of organization's and corporations all across the globe sine the government and customers have become more concerned about aspects of sustainability and environmental impact that these organization's and corporations make in their operations as they pursue profits. Globally there have been calls that business organizations should give back

to the society in which they operate. The basis of these calls is that the activities of business corporations have negatively impacted the society and individuals as a result of pollution, industrial waste, poor quality products and neglecting the rights, safety and welfare of employees (Akinpelu, Ogunbi, Olaniran & Ogunseye, 2013). The value of social responsibility, either collectively or individually, has been evolving throughout history and major institutions throughout the world now realize that CSR is an important part of companies' operations because of its positive effect on society, which in turn affects positively on staff and the general public (Masruki, Zakaria & Ibrahim, 2012). Promoters of corporate social responsibility argue that institutions must integrate economic, social and environmental concerns into their business strategies, going beyond compliance and investing more on human, their social activities and environmental capital (Masruki et al., 2012).

Although, there are several definitions of CSR, Commission for the European Communities (2002) posited that CSR is voluntary integration and interaction with external environments so as to meet environmental and social needs. Similarly, Hopkins (2002) CSR is the ability of corporate institution to meet community needs in acceptable manner and improvement of their quality of life without jeopardizing profit and wealth maximization objective. On the other hand, Boulouta and Pitelis (2014) perceived CSR as methodical approach to addressing commercial, ecological and communal needs and ultimately achieving symbiotic benefits between shareholders and other stakeholders.

Both listed and non-listed companies Kenya have embraced CSR. Even CSR in developing economies is at infancy stages, efforts attained borrows heavily from developed economics. Kenyan situation is defined by provision of moral industrialization, African Union Nepad provisions, inventory network directions and African peer review mechanisms. Indeed, Kenyan companies CSR activities are on environmental, community and society need for example Wings to fly by Equity bank, Haller park by Bamburi ltd (Mbogoh & Ogutu, 2017). Courtesy of these CSR activities Kenya have amplified social, economical and nature conservation as well as healthy business environment.

There is no theoretical and empirical clarity on the nexus between corporate social responsibility and financial performance of listed and non-listed companies consequently amplified currency value to quench existing gaps. Conflicting empirical results have been recorded with some studies reporting positive and others inverse. Moreover, others have reported significant and non-significant relationship (Theofanis, 2010; Boulouta & Pitelis, 2014; Chetty, Naidoo & Seetharam, 2015). Furthermore, these inconsistencies may be attributed to geographical and economic differences with some studies hailing from developing and developed economies,

hence to localize an empirical enquiry. According to El_Ghoul, Guedhami and Kim (2017) corporate involvement in CSR promotes respect which is reflected through increased sales revenue, attraction and retention of qualified employees, increased market shares, enhanced competitive advantage and better prospects for financial performance. This is in line with past conclusions that financial sustainability of dependent on its performance in CSR since its signals healthy and guaranteed long term success. Contrasting effect of CSR activities was reported in China by (Zu, 2009) who found that there are negative short-term implications on companies' financial capabilities. This trend is reversed with consistent involvement in CSR activities. This implied that some CSR activities demanded huge initial outlay.

1.1 Problem Statement

Corporate Social Responsibility disclosure is a voluntary action where firms adopt strategies that align their business operations to the interests of the stakeholders. While pursuing CSR disclosure is a voluntary action by the business, in the modern day, many firms have integrated CSR disclosures in their strategic plans as a result of society pressure (Grayson & Hodges, 2017). Whereas CSR is taken to positively impact on the business, some opponents of it argue that it involves a set of actions which potentially increases the operating costs. This shows that while CSR is crucial in the current corporate world, debate on this concept is still in conclusive.

In Kenya, the concept of CSR disclosure is gaining momentum as firms acknowledge its key role to organizational performance. This is particularly the case among large firms which utilize it as a corporate positioning tool. Research has shown that by integrating CSR disclosures in business operations, these firms have been able to enjoy high profit due to positive market perception. These firms have also benefited from operational efficiency through reduction of waste with policies compelling the businesses to safeguard the environment in which they operate. In this regard, Wafula, (2012) posits that it is important to integrate CSR practices in the business operations in order for the firm to explore profitable prospects.

A number of studies have been conducted on CSR in Kenya, Okwoma (2012) analyzed the relationship between corporate social responsibility and the financial performance of commercial banks in Kenya and established a positive relationship. Mwangi (2011) focused on the effect of CSR on the financial performance of companies quoted at NSE and found out that there was an upward trend in performance of those firms that had integrated CSR practices in their operations. In other findings, Mwangi and Jerotich (2013) focused on nexus between corporate social responsibility practices and financial performance of firms in the manufacturing, construction

and allied sector of the Nairobi Securities Exchange and reported insignificant positive effect on the financial performance of the firms. Surprisingly, none of these studies was customized on manufacturing company's despite of them having huge threats to environmental pollution. It is against this background that the researcher sought to establish the effect of corporate social responsibility disclosure on the financial performance of manufacturing firms quoted on the Nairobi Securities Exchange.

1.2 Objectives

The main objective of the study was to determine the effect of corporate social responsibility disclosure on financial performance of manufacturing firms quoted on the NSE. Specifically, the study sought:

- To determine the effect of environmental disclosure on financial performance of manufacturing firms in Kenya
- To find out the effect of community involvement disclosure on financial performance of manufacturing firms in Kenya.
- To establish the effect of employee disclosure on financial performance of manufacturing firms in Kenya.

1.3 Hypothesis

The following hypothesis were tested:

Ho₁: Environmental disclosure does not have a significant effect on financial performance of manufacturing firms in Kenya

Ho₂: Community involvement disclosure does not have a significant effect on financial performance of manufacturing firms in Kenya.

Ho₃: Employee disclosure does not have a significant effect on financial performance of manufacturing firms in Kenya.

2. REVIEW OF LITERATURE

2.1 Theoretical Review

2.1.1 Stakeholders Theory

Stakeholders theory was brought forth by (Freeman, 1984). It argued that business administration is hierarchical in nature and propelled by ethics of overseeing its associations. The theory was anchored on proposition that business organization have heterogeneous stakeholders whose needs are different. These stakeholders include and not limited to management, customers, neighbors and government. Consequently, there is need for participatory managerial approach as such to enhance symbiotic benefits amongst heterogeneous stakeholders.

According to Uddin, Hassan and Tarique (2008) there is need for recognition of value contribution from different stakeholders since this will enhance attainment of quality leadership within an organization. Principally, involvement of external stakeholders would ensure mutual understanding of community needs, sociological

and ecological gaps which if addressed would infuse competitive advantage. Moreover, this amplifies flourishing of healthy and adjusted corporate benefits within the society of their operations (Tjia & Setiawati, 2012). According to Uddin et al., (2008) the key role of CSR is to propel partnership hypothesis. This is achieved courtesy of organization illustrative process on how it intends to achieve social and ecological benefits (Branco & Rodrigues, 2006). Thus, involvement in CSR ought to be propelled by the need to achieve social, environmental, ecological as well as foster financial performance so as to maximize on shareholders wealth.

This theory was essential in the study since it anchored on the need for corporate organization involvement in all activities which are not only geared towards profitability but also promoting social, community and environmental benefits. Detailed explanation on involvement in CSR activities in annual financial statements will promote information disclosure and minimize levels of information asymmetry which will ultimately promote financial and non-financial performance within a corporate entity.

2.2 EMPIRICAL REVIEW

2.2.1 Environmental Disclosure and Financial Performance

Magara, Aming'a and Momanyi (2015) analyzed the impact of environmental accounting on financial performance of corporate firms in Kisii County. Descriptive research design was adopted. Secondary data was collected from annual financial statements, Correlation, descriptive and regression analysis were used to analyze the data. The study found out that environmental accounting has improved revenue generation, cash flows, and returns on assets of the firms. These findings could not be generalized in listed manufacturing companies since the two sectors are operating in different sectors. Moreover, despite the study collating panel data none of regression diagnostic tests was carried out prior to fitting the model.

Carmen-Pilar, Rosa and Lisa (2011) showed the effect of CSR currently and whole deal corporate financial performance of European associations recorded in the Stoxx Europe 600 document and Stoxx Europe Sustainability list from 2007 to 2010. Results revealed that the use of a CSR framework, the component of financial improvement of the country and firm size choose the ROE of the firm. The CSP variable is positive and in a general sense related to the ROE of associations. As such, associations with even more socially fit activities upgrade the investors' arrival by recognizing higher CFP. Along these lines, firms in continuously made countries gain out and out favored financial performance over various associations masterminded in less made countries. It was appropriate to execute panel data diagnostic tests prior to

fitting the model. This study was carried out in developed economies thus its findings cannot be generalized to Kenyan situation which is a developing economy.

Theofanis (2010) studied corporate social responsibility and financial performance on Greek companies. Analysis of CSR as the independent variables was done using content analysis of sustainability reports in generating a compound score of company's CSR level. The study found a positive and significant relationship between stock returns and CSR. This result concluded that a company which adopts CSR strategy and practices may obtain higher stock values due to the fact that stakeholders (shareholders) evaluate positively these activities. There are expected effect of economic differences between Greek and Kenya and also the study considered all listed companies which though there expected industry specific characteristics which would have influence on CSR activities and financial performance.

Ghelli (2013) studied corporate social responsibility and financial performance using fortune 500 data. The study found that in the manufacturing sector the relationship between CSR and performance was positive significant in both directions, while in the retail trade industry the relationship was in some cases even negative and never significant. The study concluded that depending on the sector in which the analysis is conducted the results will be different. The manufacturing and retail trade industries are two different sectors: the way in which the businesses are run, the differences in the environment and context in which they operate, and the different needs that the stakeholders have, could explain the difference in the results. Although, this study drew respondents from manufacturing sector there was need to carry out classical regression assumptions prior to fitting the model to minimize possibilities of model misspecification.

2.2.2 Community Involvement Disclosure and Financial Performance

Mwangi and Jerotich (2013) investigated the association between corporate social duty and financial performance of firms Nairobi Securities Exchange. Exploratory research design was adopted and purposive sampling applied to select only those companies listed in manufacturing, construction and allied segment of NSE. Panel secondary data was collected from annual financial statements and descriptive and inferential statistics were used to analyze the data. Results of the study revealed positive and significant effect between CSR and financial performance of listed companies. It was concluded that there was need to sensitize both listed and non-listed companies to participate in CSR activities since it signaled the desire of listed companies to create mutual co-existence. Although, the study drew local respondents there was need for future scholars to carry out diagnostic tests prior to fitting models so as to minimize possibilities of model under or over specification.

In a study carried out by Gatimbu and Mukaria (2016) aimed at determining the effect of community involvement disclosure on financial performance of NSE listed firms in Kenya. The study used panel data from the annual reports and financial statements of listed firms and analyzed 32 companies. The study revealed that community disclosure with p-value < 0.05 had significant difference in the mean financial performance and they concluded that firm's community involvement disclosure leads to increased financial performance. There were methodological gaps which emanated from failure of the study to carry out diagnostic tests prior to fitting the model. This would have jeopardized the findings by drawing biased findings.

Okwoma (2012) thought about the effect of corporate social duty on the money related performance of banks in Kenya. This examination used a longitudinal research structure and anchored the year 2007 to 2011 the two years through. Capital-related performance was assessed by use of accounting extents that included ROA, ROE and data got from supervisory reports accumulated by the national bank of Kenya. CSR was evaluated using money related spending on CSR works out. The examination found that CSR had a positive and enormous effect on ROA and ROE. The examination further found that CSR contributed in a general sense to the financial performance of large and medium-size business banks anyway did not have any primary effect on the ROA of little business banks.

2.2.3 Employee Disclosure and Financial Performance

A study carried out by Kent, Windsor and Zunker (2011) provided evidence about voluntary employee disclosures in Australian annual company reports. The study employed Ullmann's (1985) strategic framework for social reporting, which examined the company's provision and quality of voluntary employee disclosure in relation to employee stakeholder power represented by employee share ownership and trade union membership. The results indicated that employee share ownership empowers employees in relation to the propensity and quality of corporate employee disclosures.

A research carried out on Jordanian public industrial firms by Mohammed (2015), showed a positive significant impact of operating performance measured by ROA for a sample on corporate social responsibility towards employee's dimension. The study aimed at testing the impact of company size and financial performance on corporate social responsibility disclosure from employees and environmental dimensions with reference to the disclosure frequency and quality of these disclosures among Jordanian industrial public share holding companies. The researcher analyzed the contents disclosed in the annual reports for 2013. The study applied a CSRD checklist for measuring the extent of CSRD in the annual reports and regression analysis was used to examine the issue. This was a cross sectional study thus it would not have been easy to examine past trend on both disclosure and financial performance. Further, it was appropriate

to carry out classical regression diagnostic tests so as to minimize possibilities of model misspecification.

Oti and Geraldine (2018) carried out an analysis of environmental and social disclosures and financial performance of selected quoted oil and gas companies in Nigeria between 2012 and 2016 and found out that disclosure on employee health and safety and community development do not significantly. Results of the study revealed positive and significant effect. It was appropriate to carry out diagnostic test prior to fitting the model to minimize possibilities of drawing biased findings.

Table 1
Operationalization of Variables

Variable	Type of variable	Indicators	Scale of measurement
Financial Performance	Dependent	Return on assets	Ratio
Environmental disclosure	Independent	Firm environmental policy Key person's view on environmental policies Firm activities on regular environmental review	Ratio
Community involvement	Independent	Donation welfare Culture of protection of community welfare Safe assurance policy	Ratio
Employee Disclosure	Independent	Firm activities associated with labour organizations Guidelines on employee promotions Details of employees' welfare allocations	Ratio

3. RESEARCH METHODOLOGY

3.1 Research Design

A research design refers to is a conceptual structure outlining the manner in which research is undertaken (Kothari, 2004). To carry out the study, the researcher used descriptive research design. Descriptive research includes surveys and fact-finding enquiries of different kinds with major purpose of describing the state of affairs as it exists at present (Kothari, 2004). Since descriptive design can utilize quantitative and qualitative research methodologies, it was found to be suitable and applicable to this research because the study was built on mixed research paradigm and it enabled the researcher to determine the effect of the independent variables on the dependent variable. The research design relied on secondary data mainly from published audited annual financial statements. However, there is no set quantitative metric that can be used to measure CSRD instead qualitative data was assessed and systematically condensed into quantitative score for CSRD utilization.

3.2 Target Population

Population to all individuals or things with comparable qualities that one wishes to ponder (Kothari, 2004). The populace is a lot of individuals or things with comparable qualities that an analyst plans to contemplate and to make factual derivations or determinations (Sekaran & Bougie, 2013). The population of interest in this study includes eight manufacturing firms that were listed in the NSE under manufacturing and allied sector for 2007 to 2017.

2.3 Conceptual Framework

A conceptual framework refers to the pictorial representation of the research variables (Sekaran & Bougie, 2013). In this study, the independent variable was corporate social responsibility disclosure. This was denoted by environmental disclosure, community disclosure and employee disclosure. The dependent variable in this study was financial performance which will be measured in terms of Return on assets.

3.3 Sample Size and Sampling Technique

A sample refers alludes to a subsection of the objective populace that is chosen and utilized in an examination and the discoveries used to make general decisions about the whole population (Kothari, 2004). The researcher used census approach since the target population is accessible, where all the manufacturing firms listed on the NSE under the manufacturing and allied sector was studied. The study covered 11-year period; 2007 to 2017.

3.4 Data Collection Instruments

The study utilized auxiliary information. This information was gathered from the inspected and distributed financial summaries of the chose firms. The analyst contented investigation and examined the exposures in the fiscal reports of the three components of CSRD. The content investigation, by and large, incorporates deciding the develops of enthusiasm, looking for data about these builds and arranging subjective data to determine quantitative scales that can be utilized in resulting factual examinations. The technique is viewed as most reasonable for this exploration since it will empower the study to assess printed information. The primarily preferred standpoint of substance examination is to decipher the substance or logical significance of content information (Sekaran & Bougie, 2013).

3.5 Data Analysis Methods and Procedures

After data collection, data was reviewed carefully to check for consistencies and completeness. Stata was used to analyze the data. Inferential and descriptive statistics were used to analyze the data. Descriptive statistics was in form

of measures of central tendency, dispersion and range. Inferential statistics involved linear regression analysis. This was used to test the effect of the independent variables on the dependent variables. The model was as follows;

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \epsilon_{it}$$

Where: Y_{it} = Financial performance; β_0 = Constant (intercept); β_1 = Coefficient of environmental disclosure; β_2 = Coefficient of community disclosure; β_3 = coefficient of employee disclosure variable; X_{1it} = environmental disclosure; X_{2it} = community disclosure analysis; X_{3it} = employee disclosure; ϵ_{it} = Error term.

The findings were presented in form of tables and figures.

3.5.1 Model Specification Test

Model specification test was done to determine the appropriateness of the regression model.

Table 2
Diagnostic Tests

Test	Test used	Conclusion
Use of pooled or random effects model	Poolability- test	If P value >0.05, use pooled regression model.
Random or fixed effects	Hausman test	If p value >0.05, use random effects model.
Heteroskedasticity	Modified Wald Test	If P value <0.05, presence of non-uniform variance.
Serial correlation	Wooldridge Drukker test	If P >0.05, no serial correlation

4. FINDINGS AND DISCUSSION

4.1 Introduction

This section presents study findings of unbalanced panel data collected from annual financial statements for periods 2007 to 2017. Long panels were considered since there were only eight manufacturing companies listed within the period under consideration. To enhance research confidentiality dummy codes were adopted as names of listed manufacturing companies. The chapter has exploratory data analysis, followed by diagnostic tests and finally conceptualized model in chapter was presented.

Test for Multicollinearity

Pearson correlation and variance of inflation factor (VIF) were used to test multicollinearity. Multicollinearity test was carried out to find out whether there is correlation between each dimension of the CSR (environmental disclosure, community disclosure and employee disclosure). A VIF of more 10 will indicate presence of multicollinearity.

Test for homoscedasticity

Modified Wald test introduced by Trevor Breusch and Adrian Pagan 1979 will be used to tests for heteroskedasticity. It tested whether the variance of errors from a regression is dependent on values of the independent variables. If the P- value obtained is below 0.05 ($p < 0.05$), which is the significance level we reject the null hypothesis that the residuals is constant and infer that heteroscedasticity is present. In addition, the following tests as summarized in Table 2 were carried out:

4.2 Exploratory Data Analysis

Pictorial presentation shown in Figure 2 shows that the first quoted manufacturing company has downward financial performance in initial periods followed by upward trends. The five-manufacturing had stagnant followed by declining trend, increment and downward trend which was reversed in the later stages. Manufacturing company number six was only listed for three years within the period under investigation and its performance was stagnant. Manufacturing company number eight registered declining trend throughout the period under consideration.

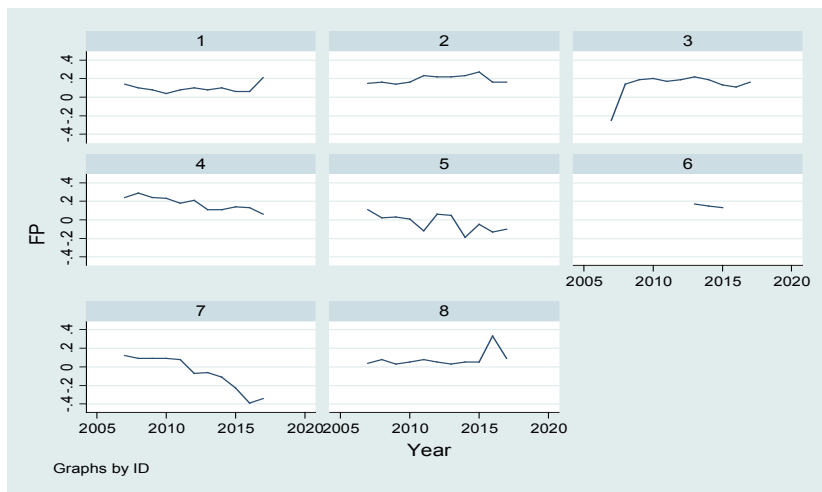


Figure 2
Trend Line for Financial Performance

As shown in Figure 3, it can be inferred that quoted manufacturing companies had different slope coefficients.

Quoted manufacturing companies had different slope coefficients and intercepts.

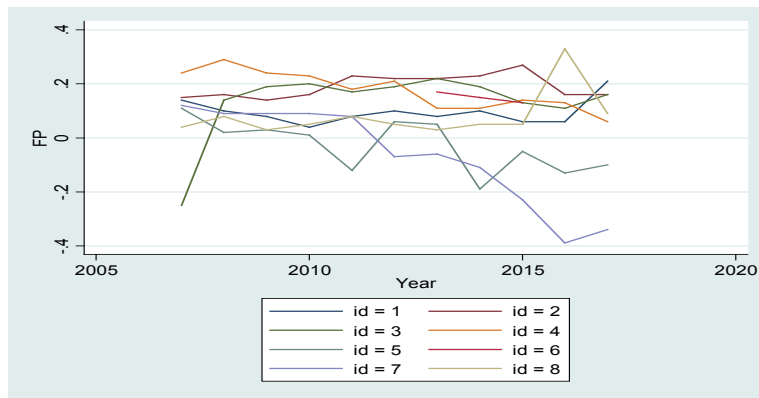


Figure 3
Financial Performance Overlay Graph

4.2.1 Multicollinearity Analysis

Correlation analysis was carried out to show the strength of the effect of independent and dependent variables. Study findings are shown in Table 3, it was found that there was positive and non-significant effect of environment disclosure and financial performance of quoted manufacturing companies in NSE ($\rho = -0.05$, p value >0.05). Secondly, there was negative and non-significant effect of community disclosure on financial performance of quoted manufacturing companies in NSE ($\rho = -0.03$, p value >0.05). Environmental disclosure had positive and significant effect on community and employee disclosure respectively. An examination of variance inflation factors and tolerance revealed that independent variables were not highly related which concurred with correlation coefficients between independent variables. According to Baltagi (2005) independent variables are not collinearly related if VIF is less than 10 or tolerance limits are greater than 0.1.

Table 3
Correlation Analysis

	FP	ENV DISC	COM DISC	EMP DISC	VIF	Tolerance
FP	1					
ENV DISC	-0.05	1			1.96	0.51
COM DISC	0.66	-----	1		1.59	0.63
EMP DISC	-0.03	0.61	0.36	1	1.42	0.71
	0.80	0.00	0.00	-----		

4.3 Diagnostic Tests

Prior to fitting conceptualized model several diagnostics were carried out, they included Langragian multiplier test, testparm test, heteroskedasticity test, serial correlation test and Hausman. Results in Table 4 shows the test for null hypothesis of uniform variance across entities

or no panel effect against an alternative that there is panel effect. Since the p value was less than 0.05, there was enough evidence to reject null hypothesis at 5 % level of significance and conclude that there were panel effects and pooled effects regression model was not the appropriate to fit in examination of the effect of corporate social responsibility on financial performance of quoted manufacturing companies listed in NSE.

Table 4
Chi-Square Values for the Breusch-Pagan LM Test

Model	Dependent variable	χ^2 -value	p-value
1	Financial Performance	51.57	0.0000

Secondly, Testparm was applied to test for fixed time effects. Testparm states a null hypothesis that there were time fixed effects against an alternative that there is no time fixed effects. Results shown in Table 5, there was enough evidence to warrant rejection of the null hypothesis at 5% level of significance since P value was less than 0.05. Consequently, we conclude that there was time fixed effects and we can either introduce dummy variables or fit two-way model analysis. In this study two-way analysis model was fitted.

Table 5
Test Results for Fixed Time Effects

Model	Dependent variable	F-value	p-value
1	Financial Performance	6.20	0.0153

Thirdly, heteroskedasticity test was carried Modified Wald test was applied. The test stated null hypothesis that there was constant variance versus an alternative that there is no uniform variance. Results shown in Table 6 revealed that there was enough evidence to warrant rejection of null hypothesis at 5 % level of significance. Hence, it was concluded that there was no uniform variance and the most appropriate model to fit was either fixed generalized model or fit a model with robust standard error. In this study a model with robust standard errors was fitted to examine the effects of corporate social responsibility on financial performance of quoted manufacturing companies

in Kenya. Further, serial correlation evaluation was carried out using Woodridge test for autocorrelation with a null hypothesis that there is no first order serial correlation against an alternative of first order serial correlation. Results in Table 6 revealed that there was enough evidence to warrant rejection of the null hypothesis and conclusion that there was first order serial correlation. To mitigate this robust standard error.

Table 6
Test for Heteroscedasticity and Serial Correlation

Model	Test for heteroscedasticity		Serial Correlation		
	Dependent variable	χ^2 -value	p-value	F-value	p-value
1	Financial Performance	21.15	0.023	28.35	0.00

4.3.1 Panel Data Descriptive Analysis

Results shown in Table 7 average environmental disclosure amongst quoted manufacturing companies was 77%, community disclosure averaged at 51% and employee disclosure averaged at 67%. Most of quoted manufacturing companies had almost the same level of environmental community disclosure as accounted for by 18% standard deviation.

Table 8
Hausman Test

	Coefficients		(b-B) Difference	sqrt(diag(V _b -V _B)) S.E.
	(b) fixed	(B) random		
env_disc	.0343741	.0159119	.0184623	.0061916
com_disc	.0318268	.0256297	.0061971	.
emp_disc	.0082841	.0236235	-.0153394	.0090075

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

$$\begin{aligned} \text{chi2}(3) &= (b-B)' [(V_b-V_B)^{-1}] (b-B) \\ &= 9.02 \\ \text{Prob>chi2} &= 0.0290 \\ (V_b-V_B \text{ is not positive definite}) \end{aligned}$$

Regression results shown in Table 9 revealed that environmental disclosure, community disclosure and employee disclosure jointly had significant effect on financial performance of quoted manufacturing companies in Nairobi securities exchanges as accounted for by F statistics of 3.45 and p value <0.05. An R squared of 0.54 indicated that 54 percent of changes in financial performance of quoted manufacturing companies can be accounted for by environmental disclosure, community disclosure and employment disclosure while the remaining percentage can be accounted for by other factors excluded in the model.

The first hypothesis of the study stated that environmental disclosure had no significant effect on financial performance of quoted manufacturing companies in Kenya. The study found positive and non-significant effect on financial performance of quoted manufacturing

Table 7
Panel Data Descriptive Analysis

Variable	Mean	Std. Dev.	Min	Max	
Environmental disclosure	overall	0.77	0.20	0.03	1
	between		0.06	0.65	0.83
	within		0.19	0.04	1
Community disclosure	overall	0.51	0.18	0.06	0.98
	between		0.06	0.42	0.59
	within		0.17	0.09	0.90
Employee disclosure	overall	0.67	0.20	0.08	0.96
	between		0.07	0.57	0.79
	within		0.19	0.08	1

4.4 Panel Regression Results

To choose between random effects model and fixed effects model Hausman test is applied. The test states null hypothesis that random effects is the most appropriate to fit against an alternative that fixed effects is the most appropriate model. Study findings shown in Table 8 had chi square value of 9.02 and p value of 0.029 supported rejection of the null hypothesis at 5 % level of significance and conclusion that the most appropriate model to fit was fixed effects model.

companies in Kenya ($\beta = 0.12$, p value >0.05). In line with the first objective, the study probed to find effect of firm's environmental disclosure on financial performance in manufacturing firms listed at the NSE. Analysis output has shown in fact firm's environmental disclosure is not only insignificant but also positively influencing financial performance of manufacturing firm listed in Kenya. On the same vein, Najah and Jarboui (2013) research of big firms in France establishes that environmental accounting and disclosure of the same, boosts corporate financial performance as measured by return on equity. Further contravening current study, Oti and Gerldine (2018) in Nigeria researched listed oil and gas companies only to finds that environment disclosure on waste management had a positive and significant effect on financial performance. Probably this could be explained by the fact that being environment accountable would help garner support from outside thus tending to increase sales.

The second hypothesis of the study stated that community disclosure had no significant effect on financial performance of quoted manufacturing companies in Kenya. The study found positive and non-significant effect of community disclosure on financial performance of quoted manufacturing companies in Kenya ($\beta = 0.02$, p value >0.05). The output of the analysis has proven that indeed community involvement disclosure has nothing significant to do with the determination of manufacturing firms' financial performance in NSE. Contrarywise to the Gatimbu and Mukaria (2016) who researched the impact of community involvement disclosure on financial performance in Kenya listed companies and found that for sure this type of disclosure was relevant in increasing the finances of the firm.

The third hypothesis of the study stated that employee disclosure had no significant effect on financial performance of quoted manufacturing companies in

Kenya. The study found negative and non-significant effect of employee disclosure on financial performance of listed manufacturing companies in Kenya ($\beta = -0.04$, p value >0.05). Conversely, a research by Mohammed (2015) had showed a positive significant relationship on disclosure on employees and ROA for firm trading publicly in Jordan. Earlier on, in 1985, Ullmann revealed that Australian companies had enjoyed good profit related to their voluntary disclosure on employees, their share ownership and their trade union membership. Unlike these two studies, Oti and Geraldine (2018) found that disclosure on employee health and safety and integration into community development do not significantly affect financial performance of Nigerian oil and gas companies. A contradict is notable in these studies perhaps due their diversity in focusing on many issues affecting employees like their ownership in the company, health and safety, grouping and the like.

Table 9
Fixed Effects of Corporate Social Responsibility Disclosure on Financial Performance on Manufacturing Firms Quoted at Nairobi Securities Exchange

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ENV_DISC	0.12	0.10	1.21	0.23
COM_DISC	0.02	0.09	0.26	0.79
EMP_DISC	-0.04	0.09	-0.42	0.67
C	0.01	0.06	0.10	0.92
R-squared	0.54	Mean dependent variable		0.09
Adjusted R-squared	0.38	S.D. dependent variable		0.13
S.E. of regression	0.11	Akaike info criterion		-1.44
Sum squared residuals	0.65	Schwarz criterion		-0.82
Log likelihood	78.79	Hannan-Quinn criterion.		-1.19
F-statistic	3.45	Durbin-Watson stat		1.06
Prob(F-statistic)	0.00			

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The study findings have shown that corporate social responsibility disclosure indeed plays a significant effect on the financial performance of the listed manufacturing firms in NSE. This implies that an increase in the CSRD would actually be followed by increased profitability relative to the assets of the company employed. As per the first specific objective, the results of the analysis have approved existing literature that hold the statement that environmental disclosure does not have significant effect on financial performance of manufacturing firms in Kenya. Even if the relationship insignificant, it is a flowing positively. It can thus be concluded that firm wishing to increase their financial performance need not to commit a lot of their resources in disclosing environment related issues as do not account significantly in the performance thereof.

As per the existing finding that led to formulation of the hypothesis that, community involvement disclosure does not have a significant effect on financial performance of manufacturing firms in Kenya. This study actually reiterates the same. Empirically, it can be drawn that firms wishing to improve their financial performance would lose little by failing to disclosure on how they have involved community in their affairs. This study further approves the held believe that employee disclosure does not have a significant effect on financial performance of manufacturing firms in Kenya by providing an empirical evidence. A conclusion is thus drawn that a focus to revealing employee's issues on the company annual reports tell little in term of enhancing or even improving financial performance.

5.2 Recommendations

The following recommendations can be made as per the results of study: Going by the results contained herein, corporate planners and strategizers need not worry of the

emerging social risk related to environment, employees and community involvement as they are all irrelevant in regard to financial performance. The specific CSR practices studied are not advisable to be adopted by firm focused to fulfill a desire to earn more profit every time they are disclosed. Based on the results of the study, not all disclosures are relevant financially and therefore firms before fully engaging in different types of disclosure should review the existing literature to make sense of the best disclosure to adopt.

At the face of it, corporate social responsibility can be said to be overall important, however, as revealed by the results of the study not all are conclusively relevant for the growth of the firms. Therefore, firms should be cautious on what CSR to adopted and pilot check would not be harmful for advice. Probably, it is high time that the investors engage on corporate social responsibility without expecting some form of return as the study has proved that it is good but may have no significant impact on the firm financial position.

5.3 Areas for Further Studies

The study was informed by the contribution made by manufacturing firms onto the environment. Thus, it would be interesting to test the CSR on other industry such as pharmaceuticals. The study only involved stringently regulated companies in the NSE; perhaps a further study to include private firms would give more information. Use of secondary data sometime may not get the perception of the managers working in the companies; further studies can collect both secondary and primary data for conclusive reports. Of interest in further studies can be general performance of companies and not only in terms of financial gains since the same may have to do with what members of the public perceive the company.

REFERENCES

- Akinpelu, Y. A., Ogunbi, O. J., Olaniran, Y. A., & Ogunseye, T. O. (2013). Corporate social responsibility activities disclosure by commercial banks in Nigeria. *European Journal of Business and Management*, 5(7), 173-185.
- Boulouta, I., & Pitelis, C. N. (2014). Who needs CSR? The impact of corporate social responsibility on national competitiveness. *Journal of Business Ethics*, 119(3), 349-364.
- Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, 12(1), 85-105.
- Chetty, S., Naidoo, R. & Seetharam, Y., (2015). *The Impact of Corporate Social Responsibility on Firms' Financial Performance in South Africa*. Available at: [Accessed 15 Sep. 2018].
- Commission of the European Communities (2002). *Corporate Social Responsibility – Main Issues, MEMO/02/153, Brussels*.
- El Ghouli, S., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies*, 48(3), 360-385.
- Freeman, R. E (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Gatimbu, K., & Mukaria, K. (2016). Community involvement disclosure and financial performance of firms listed at Nairobi securities exchange, Kenya. *The SIJ Transactions on Industries, Financial and Business Management (IFBM)*, 4(10), 203-217.
- Ghelli, C., (2013). *Corporate Social Responsibility and Financial Performance: Empirical Evidence*. MSc Finance & Strategic Management, Unpublished Master's Thesis.
- Grayson, D., & Hodges, A. (2017). *Corporate Social Opportunity! Seven Steps to Make Corporate Social Responsibility Work for Your Business*. Routledge.
- Hopkins, M. (2012). *Corporate Social Responsibility and International Development: Is Business the Solution?* Routledge.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques*. New Age International.
- Magara, R., Aminga, N. N & Momanyi, E. (2015). Effect of environmental accounting on company financial performance in Kisii County. *British Journal of Economics, Management & Trade*, 10(1): 1-11.
- Masruki, R., Zakaria, N. & Ibrahim, N (2012). Value relevance of accounting numbers: Views and perceptions of the accounting Responsibility (CSR) disclosure of Islamic banks in Malaysia. *Journal of Muamalat and Islamic Finance Research*, 25(4), 345-354.
- Mbogoh, E., & Ogotu, M. (2017). Challenges of Implementing Corporate Social Responsibility Strategies by Commercial Banks in Kenya. *Journal of Business and Strategic Management*, 2(2), 1-16.
- McWilliams, A. (2015). *Corporate Social Responsibility*. Wiley encyclopedia of management, 1-4.
- Mwangi, C., & Jerotich, J., (2013). The Relationship between Corporate Social Responsibility Practices and Financial Performance of Firms in the Manufacturing, Construction and Allied Sector of the Nairobi Securities Exchange. *International Journal of Business, Humanities and Technology*, 3(2), 232-248.
- Najah, A., & Jarboui, A. (2013). The Social Disclosure Impact on Corporate Financial Performance: Case of big French companies
- Okwoma, D., (2012). *The effect of corporate social responsibility on the financial performance of commercial banks in Kenya*. MBA project, University of Nairobi
- Okwoma, D., (2012). *The effect of corporate social responsibility on the financial performance of commercial banks in Kenya*. MBA project, University of Nairobi

- Oti, A. & Geraldine., B (2018). Analysis of environmental and social disclosure and financial performance of selected quoted oil and gas companies in Nigeria (2012-2016). *Journal of Accounting and Financial Management*, 4(2), 345-357.
- Schneider, A., & Schmidpeter, R. (2012). Corporate social responsibility. *Verantwortliche unternehmensführung in der praxis*, berlin ua.
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A Skill Building Approaches* (6th Ed.). Chichester: John Willey & Sons Ltd.
- Theofanis, K., (2010). *Corporate Social Responsibility and Financial Performance: An Empirical Analysis on Greek Companies*. European Research Studies, XIII
- Tjia, O., & Setiawati, L. (2012). Effects of CSR disclosure to value of the firm: a study for banking industry in Indonesia. *Journal of Business Research*, 2(6), 235-241.
- Uddin, M. U., Hassan, M. R., & Tarique, K. M. (2008). Three dimensional aspects of corporate social responsibility. *Daffodil International University Journal of Business and Economics*, 3(5) 199-212
- Wafula, J., (2012). *Corporate Social Responsibility: A Perspective of Kenyan Firms*. Masters of Business Administration, Unpublished Kenyatta University, Kenya.