

# CORPORATE CITIZENSHIP REPORTING AND MANAGERS PAY: A STUDY OF SENIOR MANAGEMENT AND BOARD INFLUENCE

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## **Abstract**

This research study explores the determinants of the executive compensation from a social, sustainability, governance, and financial perspectives. The quantitative research method is used for this research study. This research finds that there is a significant positive correlation between executive compensation, social and environmental performance, corporate governance, employee participation, and market and financial performance. However, it also finds that there is a weak negative correlation between executive compensation and sustainability costs. The negative correlation between social performance and sustainability costs. The negative correlation between sustainability costs and corporate governance. The positive correlation between social performance, corporate governance, and stock price.

**Key words:** Managers Pay, Social Responsibility, Sustainability, Corporate Board, Environmental Reporting, Board Power, Financial Performance

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## **1 Introduction**

### **1.1 Purpose and Background of study**

This study is unique from the executive compensation and corporate social responsibility literature, as it focuses on the framework that includes the executive compensation, corporate contribution to social welfare, employee participation, environmental costs, ownership structure, and market volatility and operational performance in the environmental companies<sup>1</sup>, a comprehensive empirical approach. Also, the ever increased additional demand from the stakeholders, shareholders, governments, and the public, concerning the high executive pay and corporate contributions towards the social performance and environmental preservation practices, make this study the foremost priority among the scholars of management. Waldman et al. (2006) stated that the CEOs are assigned with the responsibility of designing short and long-term corporate strategy and of which, the foremost objective is to enhance corporate image and brand name for their companies, and this is achieved through social responsibility. The study conducted by the Rodrigue et al. (2012), who find that 33% of the US firms include sustainability performance benchmarks in their executive compensation contracts.

The triple-bottom-line analysis of sustainable development includes economic, environmental and social aspects. The corporate citizenship demands ethical business behavior, good corporate governance, active participation in the social welfare, and balancing the needs of shareholders and environment protection practices such as, recycling and waste management. The objective of the corporate sustainability within the framework of the stakeholder theory, to create long-term shareholder value by taking responsibilities for and initiatives in respect of the economy, environment, and society. A proponent of the CSR believes that the CSR relates to intangible resources that may be valuable to the firm and therefore to its shareholders. It is also an important part of the corporate development and to society in terms of how companies operate, sustain, and succeed in the market and contribution to social welfare. As Frooman (1997) stated, the CSR contributes positively towards wealth maximization objective and in some circumstances it is pre-requisite.

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<sup>1</sup> Biomass and Biofuel, Biotechnology, Fuel Cell Technology, Recycling and Waste Management, Renewable Companies, Pharmaceuticals, and Vehicle and Battery Technology.

### **1.2 Executive Compensation and CSR**

The managers as agents have a duty to maximize shareholders wealth; however, at the same time they would also like to fulfill compensation contract requirements for bonus eligibility. This indeed has led to a conflict of interest. According to Fabrizi (2012), monetary incentives for the CEO and profit maximization for the shareholders have a negative effect on the CSR. The CEO of companies design strategies and approve the CSR activities to the extent of his personal benefits. Deckop et al. (2006) believes that firms are under increasing pressure to be both profitable and socially responsible. Other believes that the CSR is for the long-term profitability that forgo the short-term profits and executive bonuses. That is, the CSR activities requires high initial investments that are not immediately rewarded, a lower profits in the short-run.

The CSR is not part of the strategic goal, therefore, the budget allocation towards social contributions is limited. The power of wealth maximization can make the firms blind and irresponsible; hence, the social contribution to society is very limited. Also, the CSR reporting requires an understanding of the social norms and practices; that is, knowledge of laws and conformity to the laws, a costly undertaking for most companies, especially to small-sized companies. Another issue with the CSR is it is voluntary and not required for the stakeholders' and the US Security Exchange Commission reporting. Therefore, the quality, relevancy, and the extent of the information provided in the annual corporate citizenship reporting varies, subject to the interest and risk management of the senior management. This has implications towards generating intangible corporate values and declaring executive bonus.

The environmental cost reporting is an important challenge companies are facing towards the CSR reporting, perhaps due to insignificant transactions towards environmental preservation activities or lack of capability towards communication of environmental accounting. This indeed undermines the CSR reporting. Also, inadequate or no disclosures on social performance, which portrayed firms as non-participation in the social welfare and environmental protection programs, a poor presentation of social accounting. As Joshi et al. (2001) stated that the accounting systems are designed to capture all the transactions into one account that makes it difficult to segregate social and environmental costs from others. Only visible costs can be noticed and disclosed. This indeed a misreporting.

### **1.3 Significance of this study**

The significance of this research study is to explore the potential effects of the social and environmental effect on the executive compensation. Is social and environmental performance influences executive compensation?. Is institutional ownership has any impact on the executive compensation through financial performance?. Are employee stock ownership leads to increase in the executive compensation?. All these important theoretical questions will be addressed in this empirical study. Therefore, this research will try to find the nature and extent of the linkage between executive compensation, corporate social and financial performance, ownership structure, stock price, environmental compliance, and employee participation. This leads to the research question and hypotheses developments for this research study.

### **1.4 Research question and hypotheses**

#### *Research question:*

What relationship is there between the executive compensation, corporate social performance, market and financial performances, corporate governance, environmental compliance, and employee participation?.

#### *Hypotheses:*

H<sub>0</sub>: There is no relationship between the executive compensation, corporate social performance, market and financial performance, corporate governance, environmental compliance, and employee participation.

H<sub>1</sub>: There is a relationship between the executive compensation, corporate social performance, market and financial performance, corporate governance, environmental compliance, and employee participation.

## **2 Literature review**

### **2.1 Corporate Citizenship Reporting and Executive Compensation**

According to Callan et al. (2011), the CSR is a determinant of the executive compensation system. McGuire (2003) study finds that there is a weak positive linkage between the executive long-term compensation and corporate social performance; however, the executive bonus payments were unrelated to the CSP. This is supported by Frye et al. (2006) study who find that the relationship between the CEO pay and firm performance is weaker in the socially responsible companies and that these companies offer CEOs with higher base salaries. Bryan et al. (2015) believed that the CSR activities increase the executive pay; however, they are more beneficial

to the shareholders relative to the senior management, an agency cost. On the other hand, Ye et al. (2011) find in their empirical study that the increase in the CSR activities leads to 2.78% decrease in the total cash compensation. This is supported by the Rekkes et al. (2014) study, who find that the CSR is negatively related to the total executive compensation. Fabrizi et al. (2012) study also find that the monetary incentive design to maximize CEO compensation has a negative effect on the CSR. They also find that the non-monetary incentive has a positive impact on the CSR. This suggests that the long-term compensation system has a positive influence on the CSR.

## **2.2 CSR and Business Ethics**

Fulop et al. (2010) believed that preserving ethical norms and social responsibility is difficult due to the complexity of moral beliefs and ethical standards among individuals and groups, in transitional economies. Bailey and Spicer (2007) believed that the business ethics focused on the specific business environment and system, and it is an integral part of the social culture framework. Zhang and Rezaa (2009) finds that when firms involved in high standards of ethical practice provide good short-term financial performance, also in transitional economies. This is supported by McWilliams et al. (2006) study, who find that the CSR and business ethics have been viewed as instrumental actions for improving long-run firm performance. It is also supported by Pfeffer and Salancik (1978), who find that business ethics policies minimize firm's legal liability and promotes a perception of being a good corporate citizen. Muller and Kolk (2010) believed that the CSR and business ethics are important variables to be used to study the firm performance. Stage (2006) finds that firms who favors CSR and ethical practices, tends to receive favorable corporate reputation and greater social acceptance. On the other hand, Durkheim (1966) believed that unplanned corporate changes to achieve better performance and modernization undermines the ethical business norms and invites cultural deviance and demoralization. This is supported by Bowie (1998), who believed that the business ethics may be viewed as a constraint on shareholder wealth maximization. In contrary, according to McMurrian and Matulich (2006) finds that there is a positive relationship between firm's ethical behavior and social activities, and profitability. The positive corporate image generated from the firm's ethical practices, assists towards achieving competitive advantage such as marketing products. Also, firm's ethical practices could reduce the cost of business transactions, thereby higher profitability, and building a foundation of trust with stakeholders.

## **2.3 CSR and Financial Performance**

Preston and O'Bannon (1997) find that when the financial performance meets its target, managers may reduce social expenditures to achieve short-term profit maximization to achieve bonus objectives. Conversely, when financial performance is below expectation, managers may engage in social programs to offset their disappointing results. On the other hand, Mahoney and Roberts (2007) study find no significant relationship between the corporate social performance and financial performance except for the environmental activities. McWilliams and Siegel (2001) believed that there are too many intervening variables to detect the direct relationship between the corporate social and financial performances. Waddock and Graves (1997) and Hillman and Keim (2001) find a positive relationship between the corporate social performance and financial performance. This result is confirmed by Allouche and Laroche (2005b) and Wu (2006) in their meta-analysis. Also, Nelling and Webb (2006) study, applying the Granger causality technique, find a positive relationship based on the ordinary least square (OLS) regression models. McGuire et al. (1988) finds that lagged financial performance measures to strengthen current corporate social performance measures. They also find that prior performance is closely related to the corporate social performance than subsequent performance. Bowman & Haire (1975) found a statistically significant inverted U-relationship between the corporate social and financial performances. The mixed results may perhaps due theoretical and empirical limitations McWilliams and Siegel (2000), stakeholder mismatching (Wood and Jones, 2005), the carelessness of "contingency factors" (Ullmann, 1985), measurement errors (Waddock and Graves, 1997), or inaccurate or weak empirical analysis (McWilliams and Siegel, 2000).

## **2.4 Corporate Governance and Corporate Social Responsibility**

Jo and Harjoto (2011) believed that the CSR can be viewed as a component of the corporate governance, encouraging good business practices that promote accountability and transparency to the shareholders and the society in general. Neubaum and Zahra (2006) study find that there is a positive relationship between institutional ownership and the CSP. This is supported by Johnson and Greening (1999) study, who stated that a higher proportion of external directors enhances CSP; therefore, legitimacy. Mattingly and Berman (2006) believed that effective governance should minimize negative CSR by minimizing negative impacts to CFP. Similarly, they also believed that the effective governance leads to a positive impact to the CSR, which then have a positive influence to CFP. Waddock et al. (2002) believes that management participation in the social performance activities leads to increase in their pay and also fulfill the ownership objective. Desender and Epure (2013) believes that the concentrated ownership leads to more power over management to control agent

compensation activities such as the CSR practices. Lorsch and MacInnes (1989) finds in their survey of executive directors of the S&P firms that, the directors were more interested towards achieving stakeholder goals than the shareholder objectives. This is supported Desender and Epure (2013) study, who find that the external shareholders and debtors dominance in the ownership structure leads to the management giving preference to activities that serve the interest of stakeholders than shareholders.

### 3 Research methodology

#### 3.1 Research Method and Data Collection

This research study, on the relationship between the executive compensation, corporate social performance, market and financial performance, corporate governance, sustainability costs, and employee participation, requires collecting, counting, and classifying data, and performing analyses on statistical findings. As such, the quantitative research method will be selected for this research study. This research study will collect financial data from a highly credible source, the US Securities and Exchange Commission (SEC) EDGAR filings database. The sample of top forty companies will be selected from the list of top one hundred environmental companies provided by the United States Environmental Protection Agency (EPA). To fulfill this study objective, companies who have consistently involved in the CSR reporting and have a complete record of financial information in the SEC EDGAR filings database, will only be selected. As such, most of the environmental companies will be ignored. The random sample method will be selected for this research study to avoid selection bias, as it is the purest form of probability sampling. The survey method to collect data from 2012 to 2014. Also, this research study will use regression model for the modeling and analysis of the numerical data, and will assume a confidence interval or alpha of five percent (typical in academic research).

#### 3.2 Statistical Model

This research study will try to understand the linkage between the executive compensation, social and financial performance, sustainability costs, corporate governance, employee participation, and stock price, a multi-equation model.

#### 3.3 Regression Model

$$Y^2_1 = c + B_1 \hat{D}_{p1} + B_2 \hat{D}_{p2} + B_3 \hat{D}_{p3} + B_4 \hat{D}_{p4} + B_5 \hat{D}_{p5} + B_6 \hat{D}_{p6} + B_7 \hat{D}_{p7} + \epsilon$$

Executive Compensation = Social Performance + Sustainability Costs + Employee Involvement + Corporate Governance + Market Performance + Net Income + Sales + Error.

The purpose of designing this statistical model for the executive compensation and CSR literature are to understand the dynamics of the relationship between these variables, in the top US environmental companies. This is indeed a multi-dimensional approach to explore the possible determinants of the executive compensation framework, especially social and environmental performance. Executive compensation factor will be based on both monetary and non-monetary and short and long-term payments. The financial performance factor will be based on sales and net income, to understand any influence of the environmental companies' financial performance to executive compensation. Social performance factors will be based on companies' social involvements, namely, charities, sponsorship to social programs managed by the non-profit organizations (NPOs), research grants for environmental studies, education grants to promote education in the communities, and environmental tax credits that are not explicitly stated as environmental expenditures in the financial records. This factor is important to understand whether social performance has any role to play on the executive compensation. Sustainability costs, also an important factor, will be based on the recycling and waste management, environmental preservation programs, and environmental liabilities and fines, to understand the nature and extent of influence to the executive compensation. Employee participation will be based on the employee stock options, to understand employee stock ownership, especially of management on the executive compensation. Corporate Governance will be based on stock ownerships over five percent, to understand the influence of institutional ownerships to the executive compensation. Market Performance will be based on the stock market price at year-end, to understand the market influence to the executive compensation. Net Income, a bottom-line, to understand the association between executive compensation, sales, social and environmental costs, and other costs.

<sup>2</sup>  $Y_1$  = Executive compensation;  $c$  = constant predictor;  $B_1$  = influential factor for Social Performance;  $B_2$  = influential factor for Sustainability Costs;  $B_3$  = influential factor for Employee Involvement;  $B_4$  = influential factor for Corporate Governance;  $B_5$  = influential factor for Stock Price;  $B_6$  = influential factor for Net Income;  $B_7$  = influential factor for Sales;  $\epsilon$  = error;  $\hat{D}_{p1}$  = value of Social Performance;  $\hat{D}_{p2}$  = value of Sustainability Costs;  $\hat{D}_{p3}$  = value of Employee Participation;  $\hat{D}_{p4}$  = value of Corporate Governance;  $\hat{D}_{p5}$  = value of Stock Price;  $\hat{D}_{p6}$  = value of Net Income, and  $\hat{D}_{p7}$  = value of Sales.

## 4 Results

### 4.1 Correlations

**Table 1.** Correlations

		Execu. Comp.	Social Perform.	Sust. Costs	Employ. Part.	Corp. Gov.	Stock Price	NI	Sales
Pearson Correlation*	Executive Compensation	1.000	.218	-.063	.353	.328	.558	.491	.381
	Social Performance	.218	1.000	-.108	-.058	.284	.098	.380	.229
	Sustainability Costs	-.063	-.108	1.000	-.079	-.060	-.203	.149	.125
	E. Participation	.353	-.058	-.079	1.000	.009	.543	.019	.021
	C. Governance	.328	.284	-.060	.009	1.000	.349	.444	.254
	Stock Price	.558	.098	-.203	.543	.349	1.000	.204	.110
	NI	.491	.380	.149	.019	.444	.204	1.000	.785
	Sales	.381	.229	.125	.021	.254	.110	.785	1.000
Sig. (1-tailed)**	Executive Compensation	.	.008	.246	.000	.000	.000	.000	.000
	Social Performance	.008	.	.120	.001	.001	.144	.000	.000
	Sustainability Costs	.246	.120	.	.256	.256	.013	.052	.052
	E. Participation	.000	.264	.196	.	.462	.000	.419	.419
	C. Governance	.000	.001	.256	.462	.	.000	.000	.000
	Stock Price	.000	.144	.013	.000	.000	.	.013	.013
	NI	.000	.000	.052	.000	.000	.013	.	.
	Sales	.000	.006	.088	.003	.003	.117	.000	.

\*.05 \*\*.025

The table 1 had shown the correlation results between the executive compensation social and financial performance, sustainability costs, employee participation, corporate governance, and stock price, in the environmental companies. The correlation between executive compensation and social performance was .218, a significant ratio. This suggested that social participation (such as charities, social program's development, education grants to institutions) not only enhances the business image but also had a positive impact on the executive compensation. The correlation result between the executive compensation and sustainable (environmental) costs was -.063, a negative ratio, indicated that perhaps executive compensation contracts were designed based on profitability and strategic goals achievements, not on environmental compliance. Wood and Jones (2005) study, who found a negative relationship between the environmental performance and shareholder wealth. However, Mackey et al. (2007) believed that, the environmental preservation practices may create product differentiation in the market, which will have a greater probability to improve the present value of a firm's future cash flow by enabling a firm to differentiate its products, avoiding costly environmental fines, and minimizing a company exposure to risk. This is supported by the Aiguilera et al. (2007) and the meta-analysis of Orlitzky et al. (2003) studies, who stated that there was a positive link between the environmental costs and economic performance.

The correlation between the social performance and sustainability costs was -.108, a negative ratio. This indeed suggested that the majority of the companies had participated in the social programs and environmental preservation practices, but on the unequal monetary basis. That is, the social program expenditures exceeded environmental preservation costs, under the system of voluntary social accounting practices. However, it was believed that the sustainability costs may be much higher if the sustainability cost reporting was standardized by the SEC, to experience superior reporting. Gray (2001) believed that the environmental reporting by the companies was mostly incomplete, that is, a partial social reporting and poor standard of environmental and sustainability reporting, characteristics of non-legislative environmental reporting practices.

The correlation between the executive compensation and employee participation (employee stock ownership) was .353, a significant positive ratio, indicated that stock ownership especially by the management had a positive influence on their pay. The correlation between the social performance and employee participation was -.058. These results suggested that the company's social initiatives were not communicated properly to the employees. That is, the management had failed to communicate its social accounting practices and achievements company-wide, to motivate employees to become part of the ownership structure. In addition, either the management had failed to motivate employees to participate extensively in the stock options program; the existing management corporate policy which had limited the employees to purchase and exercise stock options; or the management ineffective communication system on the corporate social activities.

The correlation between sustainability costs and employee participation was -.079, a negative ratio, indicated that the employees simply viewed the management environmental preservation practices as the non-social performance or general operational costs. Also, most of the employees may not aware of the environmental performance of the company, again an indication of the management failure to communicate the environmental practices and achievements company-wide. Orlitzky (2005) stated that most of the academic researchers considered the corporate social responsibility as a cost factor, because it has no positive impact (revenues generation) on employees, investors, customers, and stakeholders.

The correlation between executive compensation and corporate governance was .328, a significant positive ratio. The correlation between social performance and corporate governance was .284, also a significant positive ratio. These results had indicated that the institutional ownership enforced good corporate citizenship practices, and the board gives the highest priority towards generating intangible resources such as the company image and brand name. Demsetz et al. (1997) study found that the CSP was positively associated with the board independence, but negatively associated with the ownership concentration. They also argued that CSP benefits may not transfer to shareholders in equal proportion as costs. The correlation between sustainability costs and corporate governance was -.06. This result indicated that the institutional ownership had negatively influenced the environmental costs, perhaps either due to misreporting of the environmental costs as general costs or immaterial for the board to allocate resources for the environmental preservation activities.

The correlation between the executive compensation and stock price was .010, indicated that the stock price had a weak positive influence on executive compensation, a market valuation impact. The correlation between the social performance and the stock price was -.098, indicated that a negative contribution of social activities to the stock price. Also, the correlation between sustainability costs and the stock price was -.203, a significant negative impact on the sustainability costs to stock price. These results had indicated perhaps due to the social and environmental costs were not linked to revenue generation, therefore, had impacted negatively to the bottom line and the stock price, consistent with the stakeholder theory. Van Dijken (2007) believed that the stock markets will not appreciate the unpublicized social participation, such as charities and other welfare programs by a firm unless these activities have influenced firm's reputation.

The correlation between executive compensation and net income was .491, a significant positive ratio. The correlation between social performance and net income was .380, also a significant positive ratio. The correlation between sustainability costs and net income was .149, also a positive ratio. These results had indicated that the social and environmental costs had positive linkages with the net income, consistent with the results of the relationship between executive compensation, social performance, and sustainability costs. According to Hillman and Kiem (2001), the corporate social responsibility was a single broad model that includes a series of actions focused on stakeholder and social management.

#### 4.2 Regression Model and Validity

##### 4.2.1 Model Summary

**Table 2.** Model Summary<sup>b</sup>

Model Summary <sup>b</sup>									
R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. of Estimation	R <sup>2</sup> Change	F Change	df <sub>1</sub>	df <sub>2</sub>	Si	F Change
.688 <sup>a</sup>	.473	.440	15653688.75816	.473	14.363	7	112	.000	.383
ANOVA <sup>a</sup>									
		Sum of Square	df	Mean Square	F	Sig.			
Regression		2463705792026 2900.00	7	3519579702894 700.000	14.363	.000 <sup>b</sup>			
Residual		2744425283457 5420.000	112	2450379717372 80.530					
Total		5208131075483 8320	119						
a. Predictors: (Constant), NI, Sales, Executive Compensation, E, Participation, Sustainability Costs, Social Performance, C, Governance, Stock Price.									
b. Dependent Variables: Executive Compensation									

The table 2 had shown average R<sup>2</sup> (timeliness) of 47.3%, indicated strong relationship between executive compensation, social and financial performance, sustainability costs, employee participation, corporate governance, and stock price. This result validates the statistical model and the correlation results. The research

study of McWilliams and Siegel (2000), achieved R<sup>2</sup> of 29%, the relationship between firm performance, capital social performance, and R&D to sales ratio. The F-test and p-value (sig.) results had shown the regression model was statistically valid to draw conclusion.

**Table 3. Coefficients**

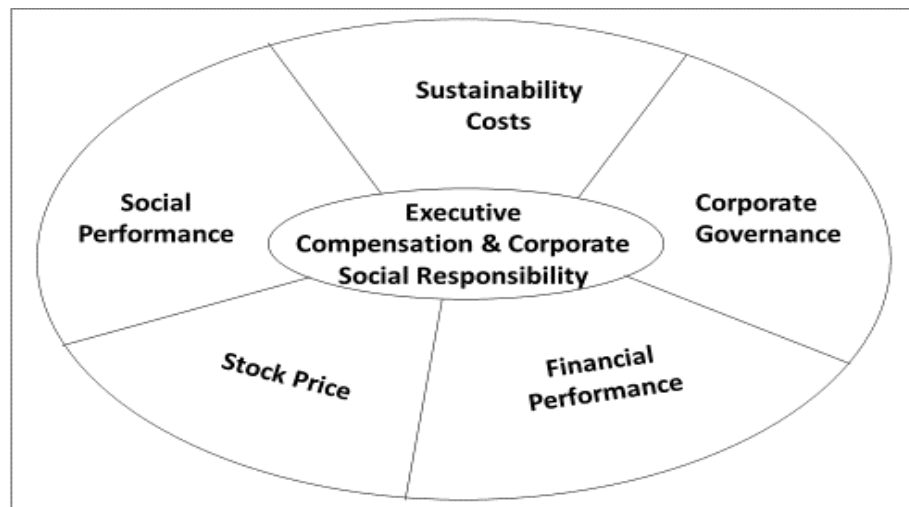
Model	Unstandardized Coefficients		Stand. Coef.	t	Sig.	95% Confidence Interval For B		Correlations			Collinearity Statistics	
	Beta	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
Const.	10452254.180	2422288.293		4.315	.000	5652778.635	15251729.7					
Social Perform.	.002	.005	-.070	.447	.656	-.008	.013	.218	-.042	.310	.802	1.247
Sustain. Costs	-.003	.007	-.025	-.381	.704	-.017	.012	-.063	-.036	-.026	.886	1.128
Employ. Participa.	.000	.000	.023	1.524	.130	.000	.001	.353	.143	.105	.662	1.510
Corp. Govern.	5.371E-6	.000	-.098	.049	.961	.000	.000	.328	.005	.003	.679	1.473
Stock Price	148420.621	34122.853	-.045	4.350	.000	80810	216030.879	.558	.380	.298	.559	1.788
Net Income	.002	.001	.868	2.81	.006	.004	.004	.491	.256	.192	.284	3.515
Sales	3.037E-5	.000	.046	.411	.682	.000	.000	.381	.039	.028	.367	2.224

**4.2.2 Regression Equation**

$$\text{Executive Compensation} = 10452254.180 + .002\text{Social Performance} - .003\text{Sustainability Costs} + 5.37\text{E-6}\text{Corporate Governance} + 148420.621\text{StockPrice} + .002\text{Net Income} + 3.037\text{E-5}\text{Sales}$$

In the table 3, the collinearity statistics had shown all the variables had a tolerance level close to one (statistical rule of thumb), suggested that multicollinearity was not a concern. Also, the variance inflation factor (VIF)<sup>3</sup> ranged from 1.128 to 3.515, indicated that the multicollinearity was not a concern in the statistical model to influence results. The betas for the social performance, sustainability costs, corporate governance, net income, and sales, all had a very weak positive impact to the executive compensation model. In contrary, the beta for the net income was large positive, indicated significant impact to the regression equation. The employee participation beta was zero, indicated no effect on the statistical model. The constant was a very large amount which also had influenced the Executive Compensation framework. The t-tests (relationship between the two variables) confirmed the insignificance except for the stock price and net income. The confidence interval test indicated the unstandardized coefficients were within the prescribed ranges.

**4.3 Derived Statistical Diagram**



<sup>3</sup> According to Kotos (2004), the VIF exceeds ten, then the variables were collinear to others.

## 5 Conclusion

This research had succeeded in understanding the relationship between the executive compensation, social, environmental, and financial performance, corporate governance, employee participation, and stock price. Firstly, this research study found a positive correlation between all the variables except for the sustainability costs. Secondly, social performance had thrice the effect relative to environmental costs to executive compensation. Thirdly, institutional ownership had a positive effect on the executive compensation and social performance than sustainability costs. Fourthly, the quality and frequency of CSR reporting vary from company to company; hence, the investors, stakeholders, and shareholders had to depend on the management goodwill. Fifthly, the market reacted unfavorably to the social and environmental performance activities. Sixthly, the increased strategy of CSR practices didn't motivate employee participation in the company's ownership structure.

There were a number of issues aroused from this research that invited further research. Firstly, the relevancy of the CSR reporting to investors, stakeholders, and shareholders. Secondly, will the environmental accounting be material to enforce separate presentation in the annual report. Thirdly, the extent of adoption of eco-balances and the ramification of the ecological footprint. Fourthly, will the executive compensation be linked with the management sustainability performance. Fifthly, the effect of globalization and its diversified culture on the CSR reporting and executive compensation. These issues invited scholars to investigate further and make an invaluable contribution to the CSR and executive compensation literature.

These results were possible after assuming three limitations. Firstly, the sample represented the specialized sectors related to environment such as, renewable energy, fuel cell technology, biomass and biofuel, recycling and waste management. Secondly, the study focused on the period from 2012 to 2014. Thirdly, the assumption that all the social and environmental information were disclosed in the CSR and annual reports.

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## Appendices

**Appendix A: Table 4.** Descriptive and Residuals Statistics

Descriptive Statistics			
	Mean	Std. Deviation	N
Executive Compensation	23802053.9167	20920279.00316	120
Social Performance	108050082.8583	309243198.36530	120
Sustainability Costs	82857165.4417	206806751.66286	120
E. Participation	2323168941.8000	10089358081.09482	120
C. Governance	6306138158.8083	15783766735.39416	120
Stock Price	57.1817	56.22753	120
NI	1543278982.8083	3194986943.05500	120

**Appendix B: Table 5.** Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	7305241	82802304	23802054	14388680
Residual	-31685066	75910808	.00000	15186309
Std. Predicted Value	-1.147	4.100	.000	1.000
Std. Residual	-2.024	4.849	.000	.970

a. Dependent Variable: Executive Compensation

**Appendix C: Table 6. Coefficient Correlations<sup>a</sup>**

Model		Sales	E. Participation	Sustainability Costs	C. Governance	Social Performance	Stock Price	NI	
1	Correlations	Sales	1.000	-.031	.039	.133	.103	.055	-.764
		E. Participation	-.031	1.000	-.037	.184	.063	-.573	.029
		Sustainability Costs	.039	-.037	1.000	.051	.172	.199	-.193
		C. Governance	.133	.184	.051	1.000	-.096	-.320	-.317
		Social Performance	.103	-.063	.172	-.096	1.000	.013	-.288
		Stock Price	.055	-.573	.199	-.320	.013	1.000	-.105
		NI	-.764	.029	-.193	-.317	-.288	-.105	1.000
		Covariances	Sales	5.474E-9	-4.046E-10	2.139E-8	1.083E-9	3.964E-8	.139
	E. Participation		-4.046E-10	3.054E-8	-4.719E-8	3.549E-9	5.697E-8	-3.415	4.211E-9
	Sustainability Costs		2.139E-8	-4.719E-8	5.432E-5	4.135E-8	6.552E-6	50.117	-1.201E-6
	C. Governance		1.083E-9	3.549E-8	4.135E-8	1.217E-8	-5.518E-8	-1.203	-2.948E-8
	Social Performance		3.964E-8	5.697E-8	6.552E-6	-5.518E-8	2.686E-5	2.371	-1.255E-6
	Stock Price		.139	3.415	50.117	-1.203	2.371	1164375939.155	-3.008
		NI	-4.758E-8	4.211E-9	-1.201	-2.948E-8	-1.255E-6	-3.008	7.091E-7
a Dependent Variable: Executive Compensation									