



CORPORATE SOCIAL RESPONSIBILITY AND COMPANY PERFORMANCE

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Abstract

The study examined the impact of corporate social responsibility on company performance. A descriptive research design was adopted. Corporate social responsibility was measured using CSR index. Company performance was measured using market to book value (MBV), company size (Size), and return on capital employed (ROCE). Descriptive statistics, regression and correlation analysis were carried out. Descriptive statistics were done to describe the data set of 500UK firms, regression statistics and correlation analyses were done. Findings showed significant positive relationship between corporate social responsibility, market to book value and return on capital employed. The study however found no significant relationship between CSR and size. The study found theoretical implication for stakeholder theory of corporate social responsibility as shareholders wealth is maximized. The study recommended that for an increased financial performance, UK firms after an industry examination should intensify more efforts in carrying out their corporate social responsibilities which can serve as a source of competitive advantage.

Keywords: CSR, return on capital employed, company size, market to book value

1. Introduction

Before the early 20th century, company performance has been measured quantitatively. Management of much multinationals see performance as a function of return on capital employed, return on equity, profitability, liquidity, turnover and many more. However, as the intensity of competition increases at both the firm and industry levels, companies have shifted from quantitative performance to being qualitative in response to shareholders' wealth.

In addition, through the introduction of forces affecting companies' performance and the strategic choice of a company to achieve its goals and objectives, companies have

decided to adopt strategies such as low pricing strategy, product differentiation and focus strategy. The outcome of this is the increase in market share and market growth rate of the company. This is one of the easiest ways a company can achieve competitive advantage over its competitors. Moreover, why companies may have tried to utilize its internal strengths to achieve an increased market share, return on capital employed, increased size, these companies need also manage the opportunities in the external environment and ensure that they give back to the society they belong. This is the only way a company may have good relationship within the society it belongs and have smooth operations. This relationship may be defined as a result of good corporate social responsibility.

Corporate social responsibility defines the ability of a company to be socially responsible to the growth and development of the environment in which it operates. It defines the voluntary services given by a company to the society. The effect is the increased in purchasing behavior and good brand image the company will have in the society. The ability of a company to engage in environmental protection, charitable programmes and community relations have made them to exhibit sound and increased performance over their competitors that see corporate social responsibility as mere issue.

The concept of corporate social responsibility has been examined by much literature both in the developed and undeveloped economies (India, Pakistan, Vietnam, Nigeria & Ghana). With the number of existing literature on relationship between corporate social responsibility and company's performance (Abdulrahman, 2013; Iqbal, Ahmad, Hamad, Bashir, & Sattar, 2014; Mishra & Suar, 2010; Ofori, Nyuur & S-Darko, 2014; Siddiq, 2014; Trang & Yekini, 2014; Uadiale & Fagbemi, 2012), none specifically has examined the UK context when measuring corporate performance using both financial (return on capital employed, market book value) and non-financial performance (Size, Industry type etc). In India, Mishra and Suar (2010) examined the performance of Indian companies via corporate social responsibility. In Pakistan, Iqbal et al. (2014) studied corporate social responsibility on the banking sector financial performance. Trang and Yekini (2014) investigated the link between CSR and financial performance in listed companies of Vietnam. In Nigeria, Abdulrahman (2013) and Uadiale and Fagbemi (2012) examined corporate social responsibility on financial performance of companies in Nigeria. While Abdulrahman (2013) only examined profit after tax as a variable of financial performance, Uadiale and Fagbemi (2012) used both return on assets and return on equity as measures of financial performance Ofori, Nyuur & S-Darko (2014) studied relationship between corporate social responsibility and financial performance among Ghanaian firms.

This paper examines the relationship between corporate social responsibility and company performance among 500 firms in the United Kingdom. Using bivariate and multivariate analysis, we found significant relationship between corporate social responsibility, market to book value and return on capital employed. We however found no significant relationship between corporate social responsibility and firm size. Thus, the findings found theoretical implication for stakeholder theory of corporate social responsibility as shareholders wealth is maximized through effective corporate

social responsibility practices. The contribution of this paper is that why many existing literatures looked at financial performance indices as measure of company performance, this study extends the research area to non-financial performance using firm size and also looked at effect of industry on corporate social responsibility. So, this study not only buttressed existing results on corporate social responsibility and financial performance and supported the theory of stakeholder theory but also contributes to literatures on whether corporate social responsibility influence firms' size or not.

2. Theoretical Framework

Two major theories were used to describe the relationship between corporate social responsibility and corporate performance. These theories are social exchange theory (Cropanzano & Mitchell, 2005) and stakeholder theory (Jamali, 2008; Kumar & Tiwari, 2011) or instrumental stakeholder theory as noted by Gherghina, Vintilă and Dobrescu (2015). Stakeholder theory establishes relationship between relevant stakeholders such as customers, employees, shareholders and the shareholders wealth maximization. Gherghina et al. (2015) explained that the instrumental stakeholder theory describes a positive relationship between corporate social responsibility and firm values. Gherghina et al. (2015) noted that the use of shareholders funds effectively for corporate social responsibility undertakings will improve the value of shareholders.

The ability of the firm to be involved in corporate social responsibilities may make the society to view the firm in terms of good reputation and good image, which can indirectly affect the return on capital. Also, the theory explains that shareholders are given returns by the firms due to stewardship of resources invested in the business. The stakeholder theory thus links the society as well as the shareholders in bringing about corporate performance. The social exchange theory explains that as the society purchases from the firm, the firm also gives to the society by engaging in CSR programmes. Therefore, the stakeholder theory explains the relationship between CSR, return on capital employed (ROCE) and market book value (MBV). The social exchange theory indirectly explains the relationship between CSR and firm size.

Empirical Evidences

This review was done to examine the relationship between corporate social responsibility and company performance. Gherghina et al. (2015), using NASDAQ stock market for sampled U.S. companies in the 2008-2011 periods, with panel data regression models, showed that corporate social responsibility influenced positively U.S. firms' value. However, Gherghina et al. (2015) used firm size, leverage, growth, and listing as factors affecting corporate social responsibility. Their study found significant negative relationship between corporate social responsibility index (CSRI) and firm size. Based on their findings, we proposed a negative relationship between firm size and corporate social responsibility. Jo and Harjoto (2011) examined corporate social responsibility on firm value. Using Tobin's Q as a measure of financial

performance found that engagement in CSR has positively effect on firm value. Based on this literature, this study proposes a positive relationship between return on capital employed as a measure of financial performance and corporate social responsibility. Brown and Caylor (2009) used 51 governance provisions variables (both mandated and non-mandated governance provisions by three major U.S. stock exchanges) on operating performance. Their findings revealed that only six of the governance provisions variables have positive relationship with both return on assets (ROA) and return on equity (ROE). Using the long of market to book value as one of the control variables in their model, they also found a positive relationship with corporate social responsibility. Based on these findings, we also proposed a positive relationship between market to book value (MBV) and corporate social responsibility.

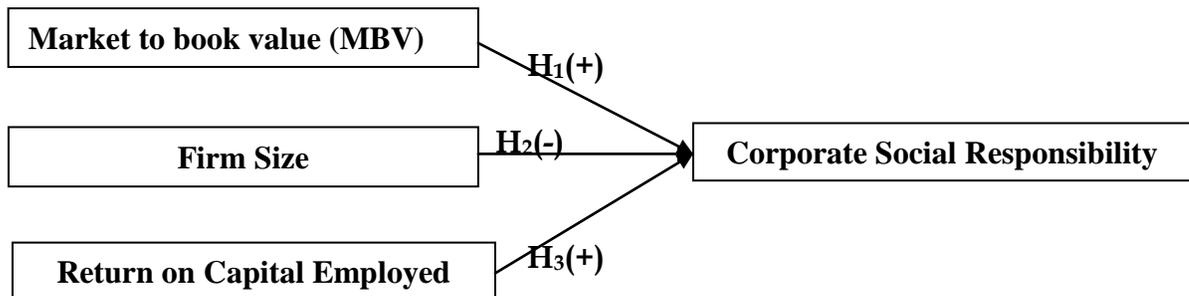


Figure 1.0: Theoretical model of the study

3. Methodology

A descriptive research design was adopted. Company performance was measured using market to book value (MBV), company size (Size), and return on capital employed (ROCE). Corporate social responsibility was measured using CSR index.

The relationship connecting the independent and dependent variables is given below:

$$CSR = a + MBVb_1 + SIZEb_2 + ROCEb_3$$

Where CSR = Corporate social responsibility

MBV = Market to book value

SIZE = Firm size

ROCE = Return on capital employed

Descriptive statistics, regression and correlation analysis were carried out. Descriptive statistics were done to describe the data set of 500UK firms, regression statistics were done to establish the extent of relationship between two or more variables and correlation analysis were done to establish the nature and degree of relationship between corporate social responsibility and variables of company performance.

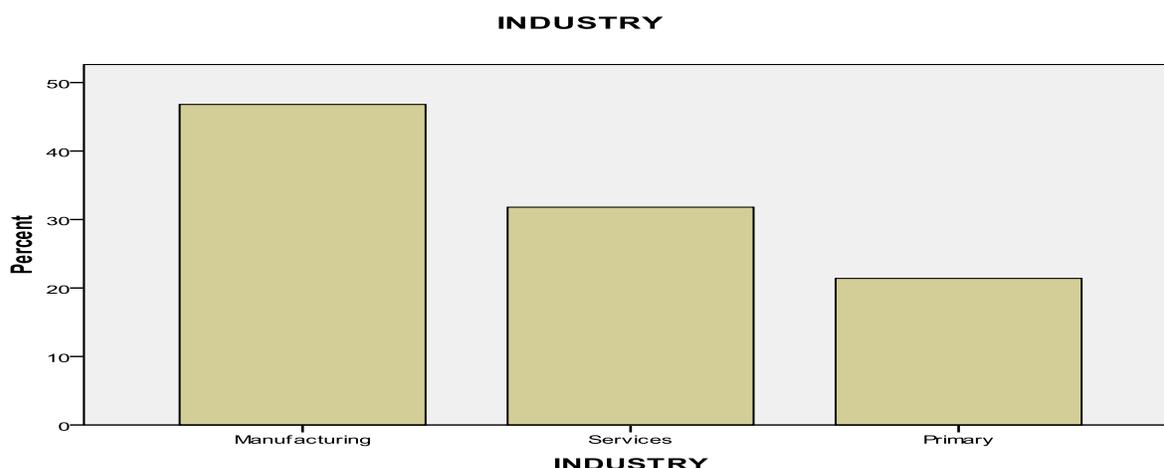
Industry was however measure along with each variable to actually see the effect it will have on the performance of industries that engage in corporate social responsibility. Logistic regression was adopted in this capacity of relationship between industry, CSR, MBV, SIZE and ROCE.

4. Data Presentation and Interpretation

Data sets of relevant variables were analyzed and the results presented below.

Table 1. Industry

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Manufacturing	234	46.8	46.8	46.8
	Services	159	31.8	31.8	78.6
	Primary	107	21.4	21.4	100.0
	Total	500	100.0	100.0	



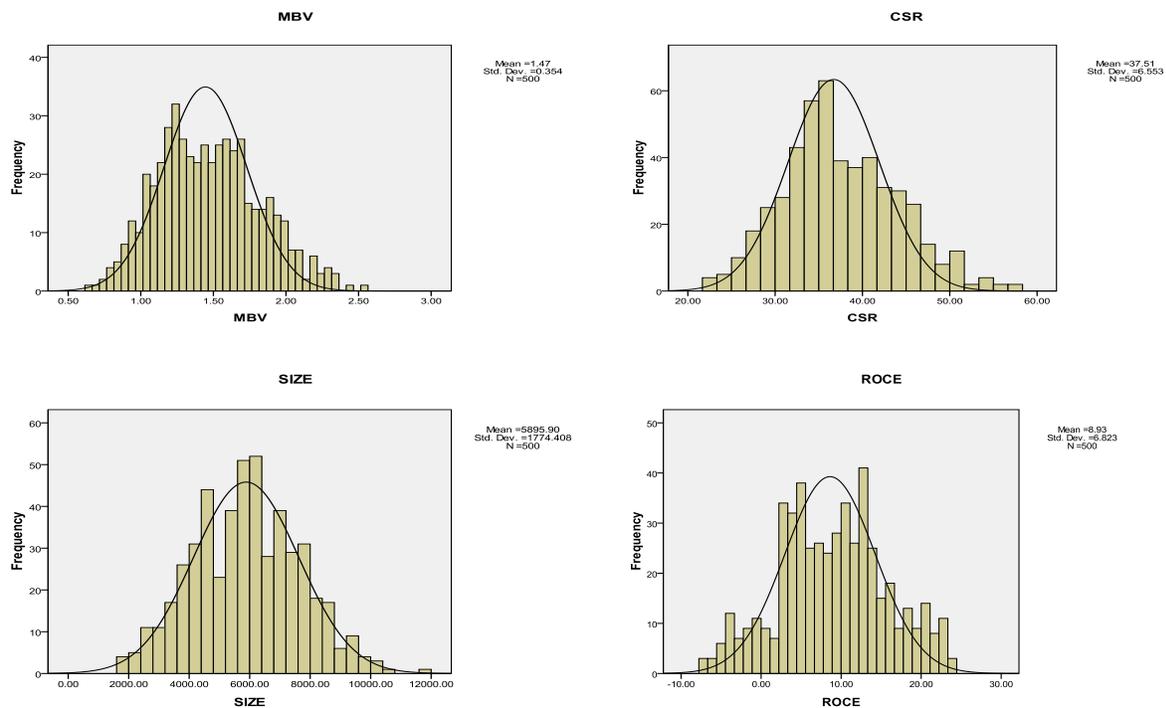
The table 1 and graph show that of the total sampled firms, manufacturing firms have 46.8% of the total 100%, followed by services firms and lastly by primary firms with 21.4%. It can be deduced from these results that the practice of corporate social responsibility is highly found among manufacturing firms than any other firms. It can also be alluded to the fact that manufacturing firms are mostly involved in environmental degradation, pollution and destruction, thereby causing harms and bring oil spillage to the communities in which they operate. In most countries where oil firms such as Shell, Chevron etc operate, communities in that area have always seek the protection of their environment for sustainable growth. In the case of the Nigerian oil industry, most multinationals engaged in oil exploration and mining activities in the Niger Delta areas have supported community development projects even to the extent of granting scholarships to indigenes as a way of demonstrating Corporate Social Responsibility in the region they operate.

However, service firms are also involved in corporate social responsibility. But, such CSR may arise as a result of high patronage from communities in which these firms are situated. In Nigeria, Commercial banks are highly involved in CSR than any other service firms.

Table 2: Descriptive Statistics of CRS and Independent Variables

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
MBV	500	.64	2.56	1.4681	.35385	.125
CSR	500	21.80	57.00	37.5136	6.55310	42.943
SIZE	500	1869.00	11634.00	5895.9020	1774.40812	3148524.193
ROCE	500	-7.40	23.60	8.9326	6.82273	46.550
Valid N (listwise)	500					

From the table 2, market book value has a mean value of 1.4681 and a standard deviation of 0.35385. This shows that there is a normal distribution between the sampled firms as standard deviation is far less than the mean value. However, there is a high difference between minimum value of ROCE and its maximum value. This shows that firms that are highly involved in corporate social responsibility have higher return on capital employed than firms with little or no practice of corporate social responsibility. This is shown in the table, as the minimum value of ROCE is -7.40. It can also be said that most of the sampled firms engage in CSR, as mean value is 37.5136 close to CSR maximum value of 57.0



The graphs of MBV, CSR, SIZE and ROCE also affirm the results in the descriptive table. The graphs show that the data are highly normal distributed thus satisfying the conditions that various statistical analysis can be conducted on the data and valid for variable control data.

5. Bi-variate Analysis

Table 3: Relationship between market book value (MBV) and corporate social responsibility (CSR)

		MBV	CSR
MBV	Pearson Correlation	1	.710**
	Sig. (2-tailed)		.000
	N	500	500
CSR	Pearson Correlation	.710**	1
	Sig. (2-tailed)	.000	
	N	500	500

** . Correlation is significant at the 0.01 level (2-tailed).

From the table, the Pearson correlation value between market book value and corporate social responsibility is 0.710. This shows that there is a positive strong relationship between MBV and corporate social responsibility. This correlation value is also significant as the sig value is 0.000, which is less than the pvalue of 0.05. This can be concluded that there is a significant positive relationship between MBV and corporate social responsibility.

Table 4: Relationship between SIZE and corporate social responsibility (CSR)

		CSR	SIZE
CSR	Pearson Correlation	1	.052
	Sig. (2-tailed)		.245
	N	500	500
SIZE	Pearson Correlation	.052	1
	Sig. (2-tailed)	.245	
	N	500	500

From the table, the Pearson correlation value between size and corporate social responsibility is 0.052. This value is far less than 0.10. This connotes that size of a firm does not determine its practices of an effective corporate social responsibility. Aside being no correlation, the asymptotic significance is far greater than a decision value of 0.05. ($0.245 > p = 0.05$). This can be concluded that there is no significant relationship between size and corporate social responsibility.

Table 5: Relationship between ROCE and corporate social responsibility (CSR)

		CSR	ROCE
CSR	Pearson Correlation	1	.583**
	Sig. (2-tailed)		.000
	N	500	500
ROCE	Pearson Correlation	.583**	1
	Sig. (2-tailed)	.000	
	N	500	500

** . Correlation is significant at the 0.01 level (2-tailed).

From the table, the Pearson correlation value between market book value and corporate social responsibility is 0.710. This shows that there is a positive strong relationship between MBV and corporate social responsibility. This correlation value is also significant as the sig value is 0.000 which is less than the pvalue of 0.05. This can be concluded that there is a significant positive relationship between MBV and corporate social responsibility.

Table 6: Relationship between INDUSTRY and Corporate Social Responsibility (CSR)

		CSR	Industry
CSR	Pearson Correlation	1	.088*
	Sig. (2-tailed)		.049
	N	500	500
Industry	Pearson Correlation	.088*	1
	Sig. (2-tailed)	.049	
	N	500	500

*. Correlation is significant at the 0.05 level (2-tailed).

From the table, the Pearson correlation value between industry and corporate social responsibility is 0.088. This shows that there is a very weak relationship between industry type and corporate social responsibility. This correlation value is significant as the sig value is 0.049, less than pvalue of 0.05. While it can be said that the nature of industry can enhance corporate social responsibility, it can also be concluded that relationship between CSR and Industry is not important to firm performance..

MULTIPLE RELATIONSHIPS BETWEEN SIZE, MBV, ROCE AND CSR

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.780 ^a	.609	.607	4.10923

a. Predictors: (Constant), ROCE, SIZE, MBV

From the table above, R shows a value of 0.780, denoting a strong positive relationship between ROCE, SIZE, MBV and CSR. R Square, which is the coefficient of determination, reveals a value of 0.609. This means that the extent to which ROCE, SIZE and MBV can determine corporate social responsibility is 60.9%. That is 60.9% of the variation in the corporate social responsibility is explained by the independent variables (MBV, ROCE and SIZE) while the Adjusted R Square makes an attempt to correct the R Square. It shows that 60.7% of the variation in the dependent variable (CSR) is accounted for by the independent variables taking into consideration all other variables that are not included in the model. Therefore, it is concluded that there is relationship between the CSR, ROCE, SIZE and MBV.

Table 8: ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13053.317	3	4351.106	257.679	.000 ^a
	Residual	8375.330	496	16.886		
	Total	21428.648	499			

a. Predictors: (Constant), ROCE, SIZE, MBV

b. Dependent Variable: CSR

The table above is an ANOVA table, which provides an F test of the relationship between the independent variable and the dependent variable and the significance of their relationships. From the table, it can be seen that the F test gives a value of 257.679, and a asymptotic significance of 0.000 (less than p value of 0.05). This suggests that the relationship between corporate social responsibility (CSR), return on capital employed (ROCE), SIZE and market book value (MBV) is significant. It can therefore be said that there is a strong positive relationship between CSR, ROCE, SIZE and MBV. With this significant value, it indicates that a relationship truly exists.

Table 9: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	18.359	1.007		18.232	.000
	MBV	10.510	.569	.568	18.462	.000
	SIZE	.000	.000	.033	1.164	.245
	ROCE	.337	.030	.351	11.388	.000

a. Dependent Variable: CSR

From the above table, the constant gave a value of 18.359 which is the intercept, hence establishing a positive relationship while the row contains the list of the variables that constitute the independent elements. MBV slope is given as 10.510 which is significant in the model with sig. value of 0.000. SIZE does not show any slope and having a sig. value of 0.245 (greater than p value of 0.50) suggests that SIZE is truly not a determinant of corporate social responsibility (CSR). ROCE also account a positive significant relationship with CSR in the model with slope of 0.337 and sig. value of 0.000. In the table, it shows that the most contributing variable that determines CSR is market book value. This states that if the market book value of the sampled firms is high, then firms have the high tendency of exercising corporate social responsibility.

The following presents a model connecting CSR, MBV, ROCE and SIZE.

$$CSR = a + MBVb_1 + SIZEb_2 + ROCEb_3$$

$$CSR = 18.359 + 10.510b_1 + 0.000b_2 + 0.337b_3$$

The model above provides answers to the connecting relationship or equation between corporate social responsibility, market book value, return on capital employed and firms' size. The CSR is the dependent variable that represents corporate social responsibility. The Constant gave a value of 18.359 and which is the intercept, hence establishing a relationship (positive). This value is constant and does not change irrespective of any changes in the dependent variable and independent variables (MBV, ROCE and SIZE). All the independent variables gave respective values or coefficient values that are also the slopes of +10.510, +0.000 and +0.337. The slope of SIZE is 0.000, which means that SIZE is not relevant in the determination of corporate social responsibility. This finding is said to be in line with the study of Udayasankar (2008) who did not establish a linear relationship between firm size and corporate social responsibility. Udayasankar (2008) established a U-shaped relationship between the two variables noting the nature of the relationship is due to underlying dimensions of broad categorization of firms. However, Chek, Mohamad, Yunus and Norwani (2013) established a positive relationship between size and level of disclosure as a measure of corporate social responsibility. While some authors have established that there is a relationship between SIZE and CSR, Mumtaz and Pirzada (2014) balanced the argument that differences in the nature of relationship (such as positive relationship, negative relationship and no relationship) between company SIZE and CSR is due to different methodology, mediating variables, statistical tools and different corporate social responsibility metrics. It can therefore be noted that the insignificant and no

relationship between SIZE and corporate social responsibility among UK firms may be due to different corporate social responsibility metrics and mediating variable of SIZE.

Table 10: LOGISTIC REGRESSION BTW INDUSTRY, CSR, MBV, ROCE AND SIZE (See Appendix)

Variable	Manufacturing-Primary	Manufacturing-Services	Services-Primary
CSR	B = 1.381; Sig: 0.000	B = 1.026; Sig: 0.000	B = 0.299; Sig: 0.000
MBV	B = -35.70; Sig: 0.000	B = -25.97; Sig: 0.000	B = -0.720; Sig: 0.000
ROCE	B = 0.084; Sig: 0.322	B = 0.072; Sig: 0.123	B = 0.030; Sig: 0.243
SIZE	B = 0.000; Sig: 0.636	B = 0.000; Sig: 0.563	B = 0.000; Sig: 0.183

From the table, it shows that CSR have relationship with industry given that only two types of firms exist. In such situation, MBV will bring about negative relationship in the model connecting MBV and industry. Size is the only variables irrespective of whether two or three industries are available; it is not significant in the determination of CSR.

6. Discussion on findings

The findings of this study were buttressed with previous findings. On the financial performance, the result of the relationship between corporate social responsibility and return on capital employed is in line with the finding of Uadiale and Fagbemi (2012) in their study of CSR and financial performance in developing country of Nigeria. Uadiale and Fagbemi (2012) revealed that there is a strong and positive significant relationship between corporate social responsibility and return on assets (ROA) as well as return on equity (ROE). The finding of the study is in line with the study of Mishra and Suar (2010) that there is a significant relationship between CSR and financial performance. Their study was sound enough that they revealed that listed firms have better increased in financial performance as they are more corporate socially responsible while non-listed firms have low performance due to their bad commitment of CSR. The implication of this result is that it shows that it is mandatory for listed firms to account and present their corporate social activities at the end of the financial year as compared to non-listed. This practice has over the years improved their financial performance. The finding is also in line with the study of Iqbal, Ahmad, Hamad, Bashir and Sattar (2014) in their study of corporate social responsibility and firms' performance in Pakistan. They found a positive relationship between corporate social responsibility and firms' financial performance. However, financial performance was measured in the study using net profit margin and EPS. Net profit margin and EPS are variants of profitability ratio as return of capital employed (ROCE) thus; Iqbal et al. (2014) contribute to the findings of financial performance through corporate social responsibility practices. Siddiq (2014) also found the same result as this study by establishing a relationship between corporate social responsibility and return on assets however; this relationship seemed to be insignificant. This can be noted that despite

using a financial performance variable, not all-financial performance can have significant relationship with corporate social responsibility. While this study established a strong positive relationship CSR and ROCE, Abdulrahman (2013) also found a significant positive relationship between CSR and PAT however with a weak one. This further

To buttress the finding of the study that there is no significant relationship between CSR and size, Trang and Yekini (2014) in their study of corporate social responsibility in Vietnamese listed firms, revealed that corporate social responsibility has no relationship with firm size. Contrarily, Ofori, Nyuur and S-Darko (2014) established that the financial performances of firms in Ghana that are involved in corporate social responsibility are dependents on size, growth, debt ratio and origin.

7. Summary And Conclusion

A detailed analysis of 500 UK companies was performed with regard to determinants of corporate social responsibility. We have measured corporate social responsibility using CSR Index. Company performance was measured using market to book value (MBV), Size (represented using total assets), and return on capital employed (ROCE). Based on the quantitative analysis carried out on the relevant data of the sample companies, the following findings were revealed:

1. 46.8% of the 500 observations in UK were manufacturing firms. This means that of the different categories of firms, manufacturing firms represent on average the firms that carry out corporate social responsibility.
2. All the variables of measurement are normally distributed
3. There is *a strong and significant positive relationship* between market to book value and corporate social responsibility (R = 0.710; Sig. = 0.000).
4. There is *no significant relationship* between SIZE, Industry and corporate social responsibility. This means the value of a company's total assets does not determine the engagement of such firm in the practices of CSR.
5. There is **a significant positive relationship** between return on capital employed (ROCE) and corporate social responsibility (R = 0.586; Sig. = 0.000). However, the degree of their relationship is not as strong as MBV
6. As a corporate performance, both MBV and ROCE are influenced by corporate social responsibility in UK while CSR does not affect SIZE and nature of industry.

It is therefore recommended that for an increased ROCE and MBV, UK firms should intensify more efforts in carrying out their corporate social responsibilities which can serve as a source of competitive advantage.

Bibliography

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References

- Abdulrahman, S. (2013). The influence of corporate social responsibility on profit after tax of some selected deposit money banks in Nigeria. *Educational Research*, 4(10), 722-732. DOI: <http://dx.doi.org/10.14303/er.2013.213>
- Brown, L. D., & Caylor, M. L. (2009). Corporate governance and firm operating performance. *Rev Quant Finan Acc*, Vol. 32, 129-144. DOI 10.1007/s11156-007-0082-3.
- Chek, I. T., Mohamad, Z. Z., Yunus, J., & Norwani, N. M. (2013). Corporate social responsibility (CSR) disclosure in consumer products and plantation industry in Malaysia. *American International Journal of Contemporary Research*, 3(5), 118-125.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Gherghina, Ș. C., Vintilă, G., & Dobrescu, D. (2015). An empirical research on the relationship between corporate social responsibility ratings and US listed companies' value. *Journal of Economics Studies and Research*, Vol. 2015, 1-12. DOI: 10.5171/2015.260450
- Iqbal, N., Ahmad, N., Hamad, N., Bashir, S., & Sattar, W. (2014). Corporate social responsibility and its possible impact on firm's financial performance in banking sector of Pakistan. *Arabian Journal of Business and Management Review (Oman Chapter)*, 3(12), 150.
- Jamali, D. (2008). A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*, 82(1), 213-231.
- Jo, H., & Harjoto, M. A. (2011). Corporate Governance and Firm Value: The Impact of Corporate Social Responsibility. *Journal of Business Ethics*, 103(3), 351-383.
- Kumar, S., & Tiwari, R. (2011). Corporate social responsibility: Insights into contemporary research. *The IUP Journal of Corporate Governance*, X(1), 22-44.
- Mishra, S., & Suar, D. (2010). Does corporate social responsibility influence firm performance of Indian companies? *Journal of Business Ethics*, 95(4), 571-601.
- Mumtaz, M., & Pirzada, S. S. (2014). Impact of corporate social responsibility on corporate financial performance. *Research on Humanities and Social Sciences*, 4(14), 7-15.
- Ofori, D. F., Nyuur, R. B., & S-Darko, M. D. (2014). Corporate social responsibility and financial performance: fact or fiction? A look at Ghanaian banks: original research. *Acta Commercii*, 14(1), 1-11.
- Siddiq, S. S. (2014). Impact of CSR on Organizational Performance. *European Journal of Business and Management*, 6(27), 40-45

- Trang, H. N. T., & Yekini, L. S. (2014). Investigating the link between CSR and financial performance: Evidence from Vietnamese listed companies. *British Journal of Arts and Social Sciences*, 17(I), 85-101.
- Uadiale, O. M., & Fagbemi, T. O. (2012). Corporate social responsibility and financial performance in developing economies: the Nigerian experience. *Journal of Economics and Sustainable Development*, 3(4), 44-54.
- Udayasankar, K. (2008). Corporate social responsibility and firm size. *Journal of Business Ethics*, 83(2), 167-175.

APPENDIX

LOGIT REGRESSION BETWEEN CRS AND INDUSTRY (SERVICES AND PRIMARY)

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	311.973 ^a	.161	.217

a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a MBV	-7.201	1.268	32.246	1	.000	.001
CSR	.299	.055	29.602	1	.000	1.349
SIZE	.000	.000	1.771	1	.183	1.000
ROCE	.030	.026	1.360	1	.243	1.031
Constant	-2.209	1.019	4.696	1	.030	.110

a. Variable(s) entered on step 1: MBV, CSR, SIZE, ROCE.

LOGIT REGRESSION BTW CRS AND INDUSTRY (MANUFACTURING & PRIMARY)

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	35.284 ^a	.680	.956

a. Estimation terminated at iteration number 10 because parameter estimates changed by less than .001.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a MBV	-35.704	7.192	24.643	1	.000	.000
CSR	1.381	.293	22.173	1	.000	3.980
SIZE	.000	.000	.223	1	.636	1.000
ROCE	.084	.085	.983	1	.322	1.087
Constant	-1.407	3.383	.173	1	.677	.245

a. Variable(s) entered on step 1: MBV, CSR, SIZE, ROCE.

LOGIT REGRESSION BTW CRS AND INDUSTRY (MANUFACTURING & SERVICES)

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	108.160 ^a	.659	.889

a. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001.

Variables in the Equation

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 ^a MBV	-25.979	3.292	62.269	1	.000	.000
CSR	1.026	.136	57.081	1	.000	2.790
SIZE	.000	.000	.335	1	.563	1.000
ROCE	.072	.046	2.381	1	.123	1.074
Constant	-1.183	1.677	.498	1	.480	.306

a. Variable(s) entered on step 1: MBV, CSR, SIZE, ROCE.