The Effect of the 2008 Financial Crisis on Corporate Social Responsibilities: Evidence from Multinational Companies

Evans Tee1* Lawrence Boadi Asare2 Richard Takyi Opoku3 Obeng-Darko Tabitha4
1. Department of Business Administration, Regentropfen College of Applied Sciences, Kansoe, Ghana
2. Department of Banking and Finance, University of Professional Studies, Accra, Ghana
3. Department of Banking and Finance, Islamic University College, Accra, Ghana
4. Department of Commercial Banking, UniCredit, Accra, Ghana

Abstract
The purpose of this study was to examine the effects of financial crisis on the number and extent of CSR projects. The assumption is that, during a financial crisis, organizations act more conservatively and defensively and as such fail to balance the expectations of related parties. This study made use of secondary data in analysing the effect of the 2008 financial crises on the corporate social responsibility as well as analysing relationship between corporate social responsibility and financial performance of some 30 firms randomly sampled from the FTSE 100 in the United Kingdom. The secondary data for the study were retrieved from the Bloomberg database. Paired sample T-test, Pearson Correlation and regression analysis were used to find out whether there is significant difference between corporate social responsibility score in 2007 and 2008. The study revealed a positives significant relationship between CSR in 2007 and 2008. Though there was a positive highly significant rise in the CSR during the 2008 financial crises, there was no enough evidence to attribute the rise to the effects of the financial crises. Also, the impact of the CSR on the firms’ profitability during the 2008 financial crises was negative but insignificant. The study adds to the literature by contributing to the discussions on CSR and the ways they are affected by financial crisis.

Keywords: financial crisis, corporate social responsibility, financial performance.

1 Introduction
In the aftermath of the Financial Crisis, corporate social responsibility has not only become a veritable strategy of balancing the interests of the stakeholders in any business organisation, it has also become a key factor in assessing the vibrancy and credibility of most business organisations. Aware of how excessive profiteering can destroy the fabric of world economy, business organisation are increasingly expected to show interest in the society in which they exist and function the focal point of their operations.

Financial crisis and corporate social responsibility (CSR) combined have seen the light of academic discussion in recent years and are very important concepts to be assessed together within the context of the recent financial meltdown. There have been several studies in this sphere in attempt to specifically find credible explanations in respect of how corporate social responsibility actions have been gravely affected by the 2008 financial crisis.

Organisations are social living being created by human beings to enrich human interactions. Therefore, it is impossible to consider organisations outside the interests of the society in which they exist and function. Corporate Social Responsibility (CSR) requires that organisation integrate ethical consideration, societal interests and environmental effects of their business in their operations. Corrupt practices, irresponsible and reckless pursuance of profit by financial institutions in the United States of America gave birth to the 2008 Financial Crisis that brought down the world economy. The recent financial downturn has made owners of organisations to rethink and refocus their business strategic plans on socio-economic and environmental responsible activities to the good of the society and the economy. The benefit of the corporate social responsibility has seen a greater attention from the academia and corporate bodies after the crises because it is now seemed as the major way for companies to gain back confidence from the society.

The 2008 recession saw organisations to pursue several different strategies in order to survive and maintain their existence. Several projects are believed to be influenced and corporate social responsibility (CSR) as a strategy was no different in the midst of the recent financial meltdown. Several studies in this area have focused greatly on the link between corporate social responsibility and corporate financial performance (McWilliams & Siegel, 2001; Tsoutsoura 2004). Others have also specialised on the link with consumer behavior (Ali et al., 2010) and the organisations effects on environment and society (Marcus & Fremeth, 2009). This work focuses on the perceptions of the corporate social responsibilities and the trends of the CSR activities during the times of the financial crises and to determine if the 2008 financial crisis had any negative influence on the corporate social responsibility strategies of the world big corporations.

The organisations’ role of harmonizing the relating benefits or anticipations of the stakeholders is very important for the society and the business world. The necessity of corporate social responsibility has received several debates in the past years among the academia and the corporate researchers. In addition, during the
After the aftermath of the recent 2008 global financial downturn, a large number of research studies have been conducted on predominantly the root cause of the financial meltdown together with its development. The issue of concern in times of the financial difficulties is whether these corporations are able to stick to the CSR practices. The CSR activities as business strategy are used to deepen the connections between the organisations and their employee, suppliers, customers, the state and the investors. Wu (2011) sees this as the action that strengthens the organisation and deepens its loyalty brand.

The aftermath of the 2008 financial crisis has seen a lot of talks and one concept that has been revived and received a lot of interest is the concept of social and economic responsibility. Porter (2009) explains that the conception of corporate responsibility are the actions the organisations undertake now to meet the future difficulties and that the need for these responsible actions rest mainly on the broad shoulders of the organisations and their daily business activities. Companies are able to foresee changes within the CSR activities if they understand and execute the socio-economic responsibility policy by implementing it into their core of businesses (Hohnen, 2007). These companies are therefore able to pick the signals on the ground and are always in the pole position to anticipate the changes and rightly respond to any economic and legal frameworks and or the environment and social changes (Thorne, 2009).

Prior to the incidence of the financial crises, there had been some studies relating the corporate social responsibility and financial performance (McWilliams & Siegel, 2000). But after the recent financial meltdown globally and the falls of major organisations, the focus on corporate social responsibility has seen a major significant growth. Cheney et al. (1990) argued that during the period of financial difficulties and crisis, the organisation becomes more conservative in its strategic plans by adopting defensive strategies. The organisation therefore failed to play the role in balancing the expectations of the stakeholders.

1.1 Aims and Objectives
The aim of this research is to analyse the effect of the financial crisis on corporate social responsibilities on 30 multinational companies on FTSE 100. This aim will be achieved by addressing three main objectives which are:

- To identify the trends of CSR by companies before and after the 2008 financial crisis.
- To critically analyse the relationship between CSR and corporate financial performance during the 2008 financial crises.
- To critically examine the impacts of the global financial crisis on the commitment of these multinationals to social projects, making a comparison before the 2008 crisis and after.

2 Literature Review
2.1 Corporate Social Responsibility
Scanning through the literature on corporate social responsibility (CSR) reveals various different definitions by different authors. One of such definitions by The World Bank is that, CSR is “the commitment of business to contribute to sustainable economic development working with employees, their families, the local community, and society to improve their quality of life, in ways that are both good for business and good for development” (Carroll & Shabana, 2010). Before then, it was also defined by Kotler and Lee (2005) as a commitment to improve societal welfare through discretionary business practices and contributions of corporate resources.

The most widely cited definition of corporate social responsibility in the literature is that, corporate social responsibility is a construct that encompasses the economic, legal, ethical and discretionary expectations that society has of organizations at a given point in time (Caroll, 1979). The definitions above indicate that different author have different view on what CSR mean. Corporate social responsibility can also be viewed as a strategic decision of the firm to voluntary act upon the social factors that have the potential of affecting its corporate aims and objectives.

The corporate socially responsible organisation is always aware of the consequences of its actions and inactions to all the stakeholders because it always has a broader view of looking at a problem. The decision to adopt and undertake CSR activities also seen as an ethical issue. This is because, the concept of corporate social responsibility has originated out of the worldwide acceptance that has become useful tool in the modern world of business to be aware of the welfares and human rights of others (Kolawole et al., 2009). Organisational moral issues including labour practices, product obligation, individual human rights policy, and the firm’s connection with the community always have a link to the organisational social capital.

Therefore, Argandona (2009) believes that corporate social responsibility is about the dos and don’ts of the organization, thus, the expectations from the organisation and its duties and obligations. Conversely, the organization also has legal responsibilities which are also incorporated in the corporate social responsibility programmes together with its ethical responsibilities (Argandona, 2009). Conclusively, Kolawole et al. (2009) defined corporate social responsibility as, “the need for organizations to show concern for the interest of their stockholders, their employees, their immediate host community, environment, and in fact, the entire humanity in
positive CSR information may lead to investors seeking more of the shares resulting in the increase in the overall value of the firm, while a negative signal may cause the offload of existing shares resulting in the price of the firm falling (Al-Malkawi et al., 2010). The work of Cornier and Ledoux (2011) investigating how social and environmental disclosures affect information asymmetry on the stock market concluded that social and environmental disclosures reduce stock market asymmetries.

Voluntary disclosure plays a vital role in the efficient running of capital markets (Beaver, 1989).

A sustained corporate social responsibility in time of financial crises or even a reduction may present indications that may suggest that the managers of the firm may not be positive about the future prospects of the firm. As a consequence of asymmetric information which suggests that the managers of firms are more aware of the standings of the firm than the stakeholders, the stakeholders always look up to actions and inactions of the managers to receive any signal that might indicate the directions of the firm in time of the crises. For instance, a positive CSR information may lead to investors seeking more of the shares resulting in the increase in the overall value of the firm, while a negative signal may cause the offload of existing shares resulting in the price of the stock falling (Al-Malkawi et al., 2010). The work of Cornier and Ledoux (2011) investigating how social and environmental disclosures affect information asymmetry on the stock market concluded that social and environmental disclosures reduce stock market asymmetries.

Jensen and Meckling (1976) state that another theory relating to the signalling theory is the agency theory. With the agency theory the basic notion to be established here is that the voluntary CSR activities and its deliberate reporting may be used as a tool to reduce conflicts of interest which may arise if the ownership and management of the company are not together. One of the things that accompanied the recent financial crises was the lack of positive and credible communication established between the management of the firms and the stakeholders. This means that when the management provide efficient information in terms corporate social responsibility, the effect will be strengthening the trust among the managers and the stakeholders. In the times of financial hardships, the survival of the firms rests on shoulders of the shared trust existing between all the stakeholders. This may therefore increase the efficiency and ability of the company to adapt to difficult and volatile changes in the system (Knack & Keefer, 1997).

Another theory worthy of consideration with linkage to the corporate social, economic and environmental activities and reporting in times of economic crises is the clientele theory. The simple argument in the clientele effect is that stakeholders (e.g., customers and investors) are enticed to a certain kinds of stakes in the firm as a result of the policies of the company. Policies such as corporate social responsibility and its sustainable initiatives and reporting during hard times may ensure that a certain group of the stakeholders who are satisfied with the social, economic and environmental policies are attracted to the company. Hence a change in the policy by the company may result in some old clientele departing and some new ones coming in. For instance if a firm decides not undertake corporate social responsibility issues because of the financial difficulties due to the fact that the firm is highly pressed financially, it may result in stakeholders such as customers and even investors leaving the firm and this may result in price appreciation or reduction depending on the net effect of the clientele (Al-Malkawi et al., 2010).

2.2 Theoretical framework

The adoption of corporate social responsibility and a sustainable communication of such initiatives is made on a voluntary basis. This means that the corporation may adopt a positive posture by initiating and reporting of the firm’s concern for environmental and social issues in times of financial crisis which can be implied as a differentiation business strategy which in effect can show a signal in the times of the economic difficulties. The decision to voluntarily involving in social and environmental activities and the motivations to disclose such information on CSR or the deliberate decision to announce such reports on this kind of information can easily be viewed in the framework of the signalling theory (Connelly et al., 2011).

Signalling theory is the idea that stakeholders are able to understand information about a firm’s future plans based on signals received as a result of sustainable corporate social responsibility announcements. An increase in corporate social responsibility projects and its announcements might signal that managers of the company are confident about the prospects of the firm. Therefore, the signalling theory is grounded on the presence of evidence of CSR initiatives and the information asymmetries between all the stakeholders of the company (Toms, 2002). The voluntary involvement in social, economic and environmental issues and the motivation to disclose such information play a vital role in shaping the corporate image of the firm. This buttresses the point that voluntary disclosure plays a vital role in the efficient running of capital markets (Beaver, 1989).

2.3 CSR and Financial Crises

There is slow but gradual development of research interest in corporate social responsibility and the recent 2008 financial crises. Researchers have tried to link the CSR and the financial crises together by developing models to quantify such relationship. Yelikalan and Kose (2012) is one notable study that attempted to explain the effect of the financial crises on corporate social responsibility developed a model drawing inspiration from the Carroll's (1991) corporate social responsibility pyramid. The rationale behind this model is that the responses of the corporate social responsibility activities to the financial crises change depending on the places and beneficiaries of such projects in different dimensions of the corporate social responsibility pyramid.

The model proposes two possible scenarios which are that “The Crisis poses a threat to the responsibility
dimensions located at the base of the CSR pyramid” and “The crisis poses an opportunity for the responsibility dimensions located at the top of the CSR pyramid.” The Carroll’s pyramid draws its source from the Maslow’s (1943) hierarchy of human needs. The assumption is that, lower needs for individual human beings can be linked to that of the company needs. From this assumption, if the financial crises results into threat to the businesses, the natural instinct would be to focus the firm managing actions for its business survival. If otherwise, the company will sustain its SCR commitments or even increase it. The results from the 2008 global economic and financial crises was among others such as; financing difficulties, cost reductions, decline in production levels and job cuts. In this case if a business experienced these outcome from the crises, this first proposition therefor implies that the business took drastic measures to avoid collapse against the threats posed by the crisis.

The effect of the financial crises was not the same for every company, it differed from firm to firm, sector to sector and even economy to economy. The job cuts from the 2008 financial crises could result to a more social problem and firms (mostly multi nationals) may respond to this by maintaining the number of employees and even sometimes to address this social issue by employee more to ease the social problem as a means of corporate social responsibility. In this situation, the second proposition from the Yelkikalan and Kose’s (2012) model is desired by the firms by seeing the results of the financial crises as an opportunity to involve in social issues. In this case, the corporate social activities of the firm may be positively affected by the financial crises and may be used to fundamentally transform the values of the firm to attain a competitive advantage. This proposition supports the notion that there is a positive correlation between corporate social responsibility and company performance (Iwacewicz-Orlowska, 2010). This therefore suggests that companies (larger ones of course) will always allow for better risk management and hence would continually undertake their social responsibilities regardless of the economic challenges to boost performance.

Study by Giannarakis and Throtokas (2011) reported that corporate social responsibility activities increased in the years 2007 and 2008 and the reason given was that the business had to maintain its brand image and also protect its gained reputation. Yelkikalan and Kose (2012) also argued that the CSR activities increased because of the numerous involvement of organisations in the corporate social responsibility ratings in recent years. Thus, firms had to protect their reputations and maintained their brand images. Prior to this arguments Selvi, Wagner and Turel (2010) posit that there is a positive and significant correlation between different variables, which never changed in both before and after the 2008 financial crises. The results from the financial crises may present both threats and opportunities to the companies and the companies’ ability to adapt to this challenges and make good use of it terms of corporate social responsibility may influence the performance of the firm.

A research by Njoroge (2009) studied the relationship that existed between the 2008 financial crises and the multinational companies. The study also looked at the effect of the companies in social projects and labour standards in Kenya. This research used the telephone interview survey as a mean of gathering data and applied the analysis of covariance for the data analysis. Njoroge (2009) concluded that in the outcome from the financial crises resulted in a severe effect on labour standards and posed a negative effect on the funding and implementing corporate social responsibility programmes.

Giannarakis and Throtokas (2011) aimed at evaluating the effect of financial crisis and corporate social responsibility performance. Giannarakis and Throtokas (2011) conducted an empirical analysis based on the firms that implement the Global Report Initiatives (GRI) guidelines. The used a total of 112 companies that were included in the GRI report list in 2007 (pre-financial crisis), 2008, 2009 and 2010. Giannarakis and Throtokas (2011) applied the Wilcoxon signed rank sum test to ascertain whether an economic downturn affected the corporate social responsibility performance. The study therefore reported that the results indicated an increase in corporate social responsibility performance before and during the financial crisis with the exception of the period 2009-2010. Giannarakis and Throtokas (2011) concluded that the firm had to increase their performance to regain their lost trust in businesses.

Yelkikalan and Kose (2012) in this study evaluated the effects of the financial crises on corporate social responsibility activities in respect to the developments following the 2008 global financial meltdown. Yelkikalan and Kose (2012) also proposed a model to create a link between the 2008 financial crises and corporate social responsibility. The model was based on the theoretical background on the perception of the crisis as either a threat or an opportunity to corporate social responsibility activities. Yelkikalan and Kose (2012) revealed that the model could be used to understand the behaviour of the companies that perceived the financial crises as threat to their economic activities and take the necessary safety measures, while in the same vein, continue their corporate social activities.

Giannarakis (2014) conducted a study aiming at identifying the financial characteristics on the extent of corporate social responsibility disclosure mainly concentrating on companies from the United States of America. Giannarakis (2014) took a sample of 366 companies from the Fortune 500 list for the year 2011. By using disclosure scores computed by Bloomberg as a proxy to measuring corporate social responsibility, Giannarakis (2014) considered environmental, social and governance disclosure scores. This research also adopts and makes use of the corporate social responsibility index scores computed by Bloomberg for the companies listed on the
FTSE 100. Giannarakis (2014) further used a multiple regression analysis to identify the factors that affect the extent of corporate social responsibility disclosure.

3. Methodology

3.1 Research Design
Research approach describes and justifies the methodology for data collection. This study used a quantitative exploratory descriptive design to identify, analyze and determine the linkage between the 2008 financial crises and CSR commitments. The research used quantitative data collection in the form of simple random sampling. This provided the opportunity to use scales of measurement already developed in terms of CSR and corporate profitability. The study made use of published materials such as the financial statements of the FTSE 100 firms which covered a period of eight years (2006-2013). This study relied on secondary data in obtaining the information due to the fact that the activities of the listed firms are better monitored and therefore have a basic standard that minimize inconsistencies and makes information on them widely available and reliable.

3.2 Sampling and Sampling Technique
Although researchers might have different opinions on how sample size should be formed, the steps used for this process is always reported to allow the readers and audience to make their own judgments on accepting the researcher’s assumptions and procedures according to Bartlett, Kotrlit and Higgins (2001). For an explorative study such as this, the rule thumb is ten percent (10%) of the study population (Mugenda & Mugenda, 1999). This assumed to be a representative enough to generalize characteristics of the phenomenon being studied. The size of the sample and the way in which it is selected will definitely have implication for the confidence you can have in your data and the extent to which you can generalize (Saunders et al., 2003). The sample size is therefore very important when it comes to any study. The population for the study consists of the top companies in the United Kingdom. The sampling frame for the study was drawn from 2015 FTSE 100.

A sample of 30 companies was randomly selected from the 2015 FTSE 100 list. In order for the researcher to obtain very accurate result for the study, the simple random sampling without replacement method was used to select the sample from the population. This methods of random sampling technique allowed the researchers to establish a criterion devoid of repetition for selecting the firms. This method was used instead of the census approach because of the time constraints and the difficulty in involve in assessing the list of all the companies involved for the study.

3.3 Data and Study Variables
The recent global financial meltdown was reported to have been started to show effects at the end of the year 2007 through to the year 2008. The financial crises was said to have deepened however in in the year 2008 after the announcement of the collapse of large companies in September 2008. Hence the year 2008 is chosen to represent the year of the crises as well as the cut-off point of the incidence. The data for this study was purely quantitative. The profitability data was sourced from the FTSE 100 data according to telegraphy while the corporate social responsibility index was sourced from the Bloomberg data base.

A. CSR Index
The data used is from the reporting practices and other organizational processes around ESG issues sourced from Bloomberg. The data from Bloomberg is considered to be most widely used providing data on the stock market, financial, and other corporate data. The ESG data used for this study originate from the firms fillings including the sustainability or CSR reports, annual reports, company websites. It also involves a Bloomberg survey that requests corporate data directly from the companies. The Bloomberg data is calculated for ESG Disclosure scores and involves three sub-scores (E, S and G) which quantifies a company’s transparency in reporting ESG information. Environmental data, emissions, water, waste, energy and operational policies around environmental impact; Social data, primarily to employees, products and impact on communities and Governance data, board structure and function, firm’s political involvement, and executive compensation are all considered in the calculation of the ESG scores. The ESG scores are based on 100 out of 219 raw data points collected by Bloomberg.

B. Profitability Index
The accounting indicators widely discussed and used in the literature to test the relationship between corporate social responsibility and corporate financial performance include the return on assets (ROA), return on equity (ROE), and earnings per share (EPS) among others. The return on assets (ROA) and return on equity indices are concentrated on the revenue side of the firm. These really shows the profitability of a company’s assets in terms of generating revenue relative to its total assets (Berk & DeMarzo, 2011). This study used the return on asset (ROA) and the return on equity as measures of firm profitability.

Research Hypotheses
Considering all the discussions and the need for corporate social responsibility, this thesis aims to examine the
effect of the 2008 financial crisis on the level of CSR projects of top corporations engaging in more CSR projects in recent years. Therefore, the following hypothesis is proposed.

H0: CSR projects decreases significantly in times of financial crisis.
H1: CSR projects remained or increased significantly in times of financial crisis.

3.4 Data Analysis

The first research objective was achieved by conducting a trend analysis. This was done through a graphical presentation of the corporate social responsibility from the year 2006 to 2013. In this way, we are able ascertain the movement of the CSR index and observe any changes with much focus on pre and post crises of the 2008 global financial crises.

The analysis of the impact of the crises on corporate social responsibility was done by testing the hypothesis that the CSR projects of the corporations decreases significantly in times of financial crisis. To measure the effect of financial crisis on CSR the FTSE 100 companies, we have used two CSR indices for all the company, one for the year 2007, and one for the year 2008, which was considered as the starting point of the global financial crisis. The idea here was that if the 2008 global financial crisis had no effect on CSR, the average difference between the CSR projects for the two years conducted would not be significant and the null hypothesis shall hold. The study therefore used the paired samples T-test to test the hypothesis of no difference between two CSR indices for pre and post financial crises.

The final objective for the study of assessing the impact of CSR on the financial performance in times of financial crises was done by examining a determinant of financial performance by estimating the following OLS regressions where independent variables include firm profitability. The main measures of profitability were ROA and ROE.

\[
ROA = B_0 + B_1CSR + \epsilon \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \text{equ 1}
\]
\[
ROE = B_0 + B_1CSR + \epsilon \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \text{equ 2}
\]

4. Analysis and Discussions

4.1 Data Presentation

To examining the level of corporate social responsibility disclosures of the sampled FTSE 100 firm, this study has used a disclosure index developed by Bloomberg in the year 2014. The disclosure scores are computed in percentages. The table below represents the average corporate social responsibility score for the sampled firms from the years 2005 to 2013.

Table 1: Level of Corporate Social Responsibility Disclosure

<table>
<thead>
<tr>
<th>Weir Group Plc</th>
<th>Aggreko</th>
<th>Intertek Group</th>
<th>Randgold Resources</th>
<th>Meggitt</th>
<th>G4S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smiths Group</td>
<td>Morrison Group Supermarkets</td>
<td>Severn Trent</td>
<td>Babcock International</td>
<td>Hammerson</td>
<td>Sage Group</td>
</tr>
<tr>
<td>Aberdeen Asset Management</td>
<td>Bunzl Asset Utilities</td>
<td>United Utilities</td>
<td>Johnson Matthey</td>
<td>Antofagasta</td>
<td>Capita</td>
</tr>
<tr>
<td>29.35568</td>
<td>25.05323</td>
<td>30.63614</td>
<td>41.26941</td>
<td>35.51891</td>
<td>32.91322</td>
</tr>
<tr>
<td>Marks Spencer Group</td>
<td>J Sainsbury plc</td>
<td>AstraZeneca</td>
<td>Burberry Group</td>
<td>Kingfisher plc</td>
<td>British Land Co</td>
</tr>
<tr>
<td>45.65106</td>
<td>26.4685</td>
<td>50.10213</td>
<td>26.76701</td>
<td>41.24648</td>
<td>30.72385</td>
</tr>
<tr>
<td>Rsa Accident Repairs Ltd</td>
<td>Unilever Plc</td>
<td>Mondi Plc</td>
<td>Vodafone Group</td>
<td>Associated British Foods</td>
<td>Aviva Group</td>
</tr>
<tr>
<td>38.41801</td>
<td>43.52579</td>
<td>36.35489</td>
<td>39.9471</td>
<td>32.26794</td>
<td>37.75345</td>
</tr>
</tbody>
</table>

Source: Author’s Construct

Table 1 presents a summary of the average corporate social responsibility disclosure data by the 30 sampled firms from the FTSE 100 companies. The table reveals that all the companies present a statement of their corporate social responsibility activities. However, the extensiveness of the activities actually varies between the firms. Based on the computed scores by Bloomberg, AstraZeneca and Marks Spencer Group emerged with the highest number of corporate social responsibility disclosure scores with values of 50.10% and 45.65% respectively. These two firms were followed by Unilever Plc and Johnson Matthey with 43.53% and 41.27% respectively. On the other hand, Sage Group, Babcock International and Weir Group Plc, recorded the least corporate social responsibility scores. Sage Group recorded an average of 20.15%, Babcock International, 21.07% and Weir Group Plc recorded 22.21%.
4.2 Preliminary Analysis

Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Statistics</th>
<th>ROA-08</th>
<th>ROE-08</th>
<th>Disclosure-07</th>
<th>Disclosure-08</th>
<th>Disclosure-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>7.38533</td>
<td>21.44167</td>
<td>32.39665</td>
<td>34.96682</td>
<td>36.66311</td>
</tr>
<tr>
<td>Standard Dev.</td>
<td>11.19635</td>
<td>28.23667</td>
<td>-0.76984</td>
<td>11.49521</td>
<td>12.58649</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.623454</td>
<td>0.681225</td>
<td>-0.76984</td>
<td>-0.93618</td>
<td>-1.26262</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.56803</td>
<td>-0.47519</td>
<td>0.325762</td>
<td>0.106496</td>
<td>0.035694</td>
</tr>
<tr>
<td>Minimum</td>
<td>-23.368</td>
<td>-55.38</td>
<td>15.2893</td>
<td>15.2893</td>
<td>17.7686</td>
</tr>
<tr>
<td>Maximum</td>
<td>32.804</td>
<td>69.125</td>
<td>54.1322</td>
<td>55.3719</td>
<td>58.7777</td>
</tr>
</tbody>
</table>

Source: Author's Construct

Generally, from the 30 observations as seen in table 2, Disclosure-08 and Disclosure-07 have minimum figure of 15.29% while Disclosure-09 has a minimum of 17.77%. This implies that, in 2008, the firm with least disclosure has a disclosure index of 15.29% while a maximum score of 55.37% was also observed. In 2008, the mean CSR score is about 34.97% with standard deviation of approximately 11.50%. This means that the disclosure can deviate from mean to both sides by 11.50%. Table 2 further revealed that on average, the firms included in the sample generates Return on Equity (ROE) of about 21.44% and a standard deviation of 28.24%. This means that the value of the ROE can deviate from mean to both sides by 28.24%. The recorded maximum and minimum values of the ROE are -55.38% and 69.13% respectively. However, an average Return on Asset (ROA) of 7.39% was generated, with a minimum and maximum scores of -23.37% and 32.80% respectively.

4.3 Historical CSR Disclosure

The figure above (figure 1) presents the historical trend of the CSR activities by the firms. It can be seen that CSR activities has been constantly growing positively 2005 to 2013. There was a swift growth in CSR activities from 2007 to 2008 and it has maintained such growth since. The results in this study is similar to that of the study by Giannarakis and Throtokas (2011) who reported that the corporate social responsibility activities increased in the years 2007 and 2008. According to Giannarakis and Throtokas (2011) the reason for such growth is that the businesses had to maintain their brand image and also protect their gained reputation in the society.

Similarly, Yelkikalan and Kose (2012) attributed the growth in CSR activities to the numerous involvement of the companies in the corporate social responsibility ratings in recent years. Thus, the firms had to protect their reputations and maintained their brand images. Also, Johansen and Nielsen (2012) attributed to the fact that, there has been an increased interest by companies to focus on socio-economic issues and adopting corporate social responsibility to manage their organizational legitimacy such as avoiding critical brand damage, keeping positive reputations and staying competitive in the market (Polonsky & Jevons, 2006).

4.3 Advance Data Analysis (Inferential Analyses)

In this section of the advance analysis, correlation analysis is used to measure the degree of association between the different study variables under consideration. The t-test statistics was also used to find out if a significant difference occurred in the corporate social responsibility activities of banks with CSR in 2007 (prior to financial meltdown) and CSR in 2008 (during the peak of the crises). The regression analysis was used to determine the impact of the corporate social responsibility variable on the profitability.
There has been an increased interest by companies to focus on socio-economic issues and adopting corporate social responsibility ratings in the recent years. They explained that, the firms had to protect their reputations and maintained their brand images. Also, Johansen and Nielsen (2012) attributed to the fact that, companies have increased their corporate social responsibility projects from the 2007 period to the 2008 financial crises to the numerous involvement of the companies in the corporate social responsibility ratings in the recent years. They explained that, the firms had to protect their reputations and maintained their brand images.

The data were statistically tested using the SPSS 20.0. The paired-samples t test results presented in table 4 shows that, across all 30 firms, CSR projects conducted appreciated 2.570% on average in 2008 (paired mean = -2.570). The mean of CSR projects conducted in 2007 is on average 32.397%, in 2008, 34.967%. At 0.929, the correlation between CSR projects conducted in 2007 and CSR projects in 2008 is highly statistically significant. The paired mean column in table 4 displays the average difference in CSR projects before and after financial crisis. The results from this study can be attributed to the fact that the results from the financial crises may have presented threats to the companies and the companies’ inability to adapt to these challenges and make good use of it terms of corporate social responsibility had influenced the performance of the firm negatively. Many of the firms in times of financial difficulties struggled to survive in business (Ali et al., 2010) which might have affect the general performance of the business negatively.

### 4.4 Effects of Financial Crisis on Corporate Social Responsibility

The results from this study is directly opposite to Selvi et al. (2010) who posit that there is a positive and significant correlation between different variables, which never changed in both before and after the 2008 financial crises. The results from this study can be attributed to the fact that the results from the financial crises may have presented threats to the companies and the companies’ inability to adapt to these challenges and make good use of it terms of corporate social responsibility had influenced the performance of the firm negatively. Many of the firms in times of financial difficulties struggled to survive in business (Ali et al., 2010) which might have affect the general performance of the business negatively.

<table>
<thead>
<tr>
<th>ROA-08</th>
<th>Pearson Correlation</th>
<th>ROE-8</th>
<th>Disclosure-08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>1</td>
<td>0.866**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>ROE-8</td>
<td>Pearson Correlation</td>
<td>0.866**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Disclosure-08</td>
<td>Pearson Correlation</td>
<td>-0.304</td>
<td>-0.265</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.103</td>
<td>0.156</td>
</tr>
</tbody>
</table>

Source: Author’s Construct

From the a priori stated in the previous discussions, a positive relationship is expected between the measures of corporate social responsibility and profitability variable (ROE and ROA). Table 3 presents the correlation coefficients for all the variables considered in this study. From the results, CSR disclosure score correlates with the two profitability negatively but not significant. This is very contrary to the general notion that CSR is directly related to the profitability of firms. The general proposition is that there is a positive correlation between corporate social responsibility and company performance (Iwacewicz-Orlowska, 2010).

The results from this study is directly opposite to Selvi et al. (2010) who posit that there is a positive and significant correlation between different variables, which never changed in both before and after the 2008 financial crises. The results from this study can be attributed to the fact that the results from the financial crises may have presented threats to the companies and the companies’ inability to adapt to these challenges and make good use of it terms of corporate social responsibility had influenced the performance of the firm negatively. Many of the firms in times of financial difficulties struggled to survive in business (Ali et al., 2010) which might have affect the general performance of the business negatively.

Table 4: Difference between CSR activities in 2007 and 2008

<table>
<thead>
<tr>
<th>Disclosure-07 &amp; Disclosure08</th>
<th>N</th>
<th>Correlation</th>
<th>Paired Mean</th>
<th>T-statistic</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disclosure-07 &amp; Disclosure08</td>
<td>30</td>
<td>0.929</td>
<td>-2.570</td>
<td>-3.316</td>
<td>29</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Source: Author’s Construct

This study goes contrary to studies such as Karaibrahimoglu (2010) who concluded that companies decreased their corporate social responsibility projects due to the financial crises. However the explanation for this contrary view to Karaibrahimoglu (2010) by study is the same as the reasons for the consistent rise in CSR activities historically. For instance, Yelikikalan and Kose (2012) attribute the significant positive rise in CSR activities from the 2007 period to the 2008 financial crises to the numerous involvement of the companies in the corporate social responsibility ratings in the recent years. They explained that, the firms had to protect their reputations and maintained their brand images. Also, Johansen and Nielsen (2012) attributed to the fact that, there has been an increased interest by companies to focus on socio-economic issues and adopting corporate
social responsibility to manage their organizational legitimacy such as avoiding critical brand damage, keeping positive reputations and staying competitive in the market (Polonsky & Jevons, 2006). Therefore though there was a positive highly significant rise in the CSR during the 2008 financial crises, there is no enough evidence to attribute the rise to the effects of the financial crises.

4.5 Effect of CSR on Profitability

In this section, we used the cross-sectional data regression analysis to investigate the impact of corporate social responsibility on the firms in the 2008 financial crises. The financial performance is proxied by return on equity and return on asset. In doing this, we used simple explanations as discussed in the chapter three to guide our analyses. Many of the firms in times of financial difficulties struggled to survive in business (Ali et al., 2010) which may affect the general performance of the business negatively. In the regression results (table 4) the models used in the study were not significant at 5% significance level. The study also makes use of the coefficient of determination ($R^2$) from the regression which indicates the variation ROA and ROE (profitability) that can be explained by the corporate social responsibility. A relatively low value of the $R^2$ means that other factors rather than CSR influence the profitability of the firms.

Table 5: Regression Results

<table>
<thead>
<tr>
<th>Statistics</th>
<th>ROA</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R Square</td>
<td>0.091788</td>
<td>0.07068</td>
</tr>
<tr>
<td>Significance F</td>
<td>0.10365</td>
<td>0.155611</td>
</tr>
<tr>
<td>P-value</td>
<td>0.10365</td>
<td>0.155611</td>
</tr>
<tr>
<td>Coefficients (CSR-2008)</td>
<td>-0.29509</td>
<td>-0.65305</td>
</tr>
</tbody>
</table>

Source: Author’s Construct

The analysis above explains the relationship between corporate social responsibility and firm’s profitability in UK using firm listed on the FTSE 100. The previous analysis revealed that the amount committed to social responsibility vary from one company to the other. The data further revealed that all the sample firms have had a consistent growth in their annual activities in social corporate responsibilities. However, the analysis from this study above in table 4.5 depicts that negative relationship (-0.29509 and -0.65305) exists between firm’s performance measure with return on asset and return on equity respectively, and the disclosure scores in social responsibility.

This implies that the slope of the estimate is in accordance with some a priori expectations, which shows that there is inverse relationship between the two variables (Profitability and CSR). This implies that the more the profit recorded by firms on the FTSE 100, the less they invest in corporate social responsibilities. This suggests that these organizations’ survival and ability to make profit in the long run might be vulnerable. The coefficient of determination from the regression results obtained gives 0.091788 (9.2%) for ROA and 0.07068 (7.1%) for ROE. These depict that the explanatory variable which is the corporate social responsibility account for about less than 10% changes or variations in the sampled firms’ financial performance.

However, this may not be true since regardless of the inverse relationship between CSR and profitability, the CSR activities of the companies have been remarkably on the rise, hence the threat may therefore be inexistent. This result conforms to evidence from Lopez, Garcia, and Rodriguez, (2007), who carried out their study based on the Dow Jones Sustainability Index. They found that the link between the performance indicator and CSR is negative. Therefore, this study also concludes that based on the sample used for this study, the CSR had no significant effect on the profitability of the firms. This is evident from the significance F which recorded figures greater than 0.05 significant value. Hence, though, there is an inverse relationship between CSR and profitability during the 2008 financial crises, this relationship was not significant.

5. Conclusions and Recommendations

Based on the findings above, this study makes the following conclusions according to the objectives set for this study. First of all, this study concludes that the CSR projects of the firms on the FTSE 100 appreciated significantly historically and especially in the time of the 2008 financial crises. The reason is also attributed to the fact that, there has been an increased interest by the firms to focus on socio-economic issues and adopting corporate social responsibility to manage their organizational legitimacy such as avoiding critical brand damage, keeping positive reputations and staying competitive in the market. Therefore, our results seem to indicate that companies perceive CSR reporting and assurance as a valuable investment in spite of its costs. Hence, even in the context of the current financial crisis, this study identifies a business in a stage of expansion in CSR activities.

The study revealed a positives significance between CSR in 2007 and 2008. Though there was a positive
highly significant rise in the CSR during the 2008 financial crises, there was no enough evidence to attribute the rise to the effects of the financial crises. Thus, after the T-test from this study and judging from the consistent growth in the CSR activities prior to and post 2008 financial crises, it becomes difficult to have attributed the rise in the CSR activities from 2007 to 2008 to the global financial crises. Hence there is no enough evidence to attribute the significant rise in the CSR activities in the year 2008 to the Global financial crises.

Finally, based on the study results coupled with other evidences from the literature which found that the link between the performance indicator and CSR is negative, this study therefore concludes that the CSR activities during the 2008 financial crises had no effect on the profitability of the firms. This is because, the firms consider CSR practices important and they continue these practices without interruption even in times of crisis. However, the study concludes that, though there is an inverse relationship between CSR and profitability during the 2008 financial crises, this relationship was not significant.

5.1 Recommendations
The study recommends the following after the research;

i. Since all the firms are consistently engaging in CSR activities regardless of the economic situation, companies are advised to hold the investment view of CSR to help them to differentiate their goods or services and re-establish the trust between them and their stakeholders.

ii. The current crisis should give the opportunity to the firms to redirect corporate social responsibility from a threat to an opportunity especially targeting activities to improve profitability.

iii. Also, in the light of the results, it is obvious that the FTSE 100 firms have adopted a long-term approach to manage the dimensions of CSR. The authorities are advised to constantly monitor the performance of the CSR activities and regularly publishing their CSR ratings to encourage the firms in undertaking CSR activities.

5.2 Limitations and Further Research
This study used raw scores reported for the financial years without considering the marginal changes in the variables. It is believed that marginal changes in the study variables would produce different results. Further studies are therefore necessary for this regard.

The data used for the current study was derived from 30 firms. A larger data set may result in a different model of the relationship between corporate social responsibility and profitability. Hence, this study could be reproduced expanding the sampled firm to increase the size of the data.

Another notable limitation in this work was that though the research was based in the UK, no or limited works from the UK was used in the methodology and discussions. This was because, there were limited or not known works from the UK to researchers. Future studies should make reference to study from the UK if available, else, more works from the UK are encouraged to strengthen the debate.

Finally, this study fails to evaluate the reasons why organizations continue to conduct CSR projects in times of financial crisis. Further research is recommended to evaluate the behaviour of the firms during the time of financial crisis in terms of CSR projects and possible explanations.

References
Connely, B. L., Ketchen, D. J., & Slater, S. F., 2011. Toward a ‘theoretical toolbox’ for sustainability research in