CORPORATE SOCIAL RESPONSIBILITY AND FIRM VALUE: AN EMPIRICAL STUDY OF AN EMERGING ECONOMY

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Abstract

A lot of researches have been done recently on Corporate Social Responsibility ("CSR"). A lot of studies have been conducted to test how CSR affects firm value and financial performance. Results vary from one study to another. Some proved that the relationship is to be positive, or negative and others proved it to be neutral. The purpose of this research is to evaluate the effect of CSR on firm value and financial performance in Egypt through the application on 33 companies that were listed in the EGX30 in the year 2001, with a timeline of 8 years from 2007 till 2014. Data used in this study is secondary data obtained from the financial statements and annual reports of the Egyptian companies and official online websites. We proved that CSR has an insignificant negative effect on firm value and a significant positive effect on firm' financial performance in Egypt measured by Return on Assets (ROA) and Return on equity (ROE). This research paper is divided into five sections. Section one is the introduction followed by section two the literature review of CSR and its impact on firm value and financial performance. Section three covers the research methodology; section four presents data analysis and finally section five report findings and conclusions of the study.

Keywords: Corporate Social Responsibility, Firm Value, Financial Performance, Emerging Economy

1. INTRODUCTION

In the 1980s businesses started improving their relationships with their stakeholders. In the 1990s the concept of CSR became generally accepted as international organizations heavily supported CSR, and it has become connected with strategy literature. In the 2000s CSR has become an important strategic issue. Over the years the focus of CSR changed and progressed from targeting on philanthropy and being ethically responsible to improving the performance of the organisation. De Veled, et.al (2005, P.129) defined the investment in corporate social responsibility as "the technique by which the interest of the investors and the awareness of ethical, social, and environment issues are both realized while controlling the organizational activities.

The corporate social responsibility investment focuses on three strategies. The first strategy is the process of screening the funds of the firms. The negative screens represent the companies that have unethical industries or companies that exist in countries that do not respect human rights. While the positive screens represent companies that cares about social responsible investments. The second strategy represented by the investor network on climate risk ("INCR") as an example of it. This network gathers all the investor's investments that may face risk if the climate is changed. The third strategy is the community investment which cares about investments that will reinforce and create better future for the community.

The company's image and reputation improves greatly if it engages in CSR and this makes it more attractive for any interested workers, customers and investors. In addition to the benefit of having the firm on the safe side by refraining from doing any decisions that will lead to unethical behaviour and increase its reputation risk. Nuryaman (2013) and Susanto (2009) asserted that CSR keeps the company safe from being implicated of doing unethical work and the employees will be honoured to work for such companies and will be more encouraged in their work.

There is no single definition of CSR; it is generally known that CSR is about how companies care for their stakeholders. A general working definition of CSR is “the responsibility of an organisation for the impacts of its decisions and activities on society and the environment through transparent and ethical behaviour that is consistent with sustainable development and the welfare of society takes into account the expectations of stakeholders. It is in compliance with applicable law and consistent with international norms of behaviour and is integrated throughout the organisation.

Orlitzky, et.al, (2003, P.403) defined the CSR as "the arranegment of the main beliefs of CSR, social awareness, procedures, startegies and plans that are related to the orgaization." Therefore, assessing the corporate social responsibility and its impact on companies' performance is of great importance to investors regarding their investment decisions.

The activities of corporate social responsibility
has extended to many aspects such as using technologies in the manufacturing process that are friendly to the environment, following new manufacturing techniques that help in decreasing pollution, recycling and using the old products. Moreover, the environmental performance disclosure is considered important part of the corporate social responsibility. Those environmental disclosure are considered material for the investors who are interested in environmental performance and it may affect their decision.

Corporate social responsibility has attracted the attention of many researchers and practitioners to continue discussing the idea of corporate social responsibility through numerous theories with different perspective (McWilliams, Siegel, & Wrights, 2006).

One of these theories is the agency theory. According to Milton Friedman (1970) perspective the agency theory considers the organizations that apply corporate social responsibility activities as they are misusing the resources of the organization. Those organizational resources should be whether invested in projects that are expected to add value to the organization or divided on the shareholders.

Another theory is the stakeholder theory. According to Freeman, (1984) the management of the organization should give some attention to the stakeholder needs such as employees, suppliers, customers and those who use the firm’s goods or services. The firm could satisfy its stakeholder’s needs by applying corporate social responsibility activities and this will be beneficial to the organization. If the managers do not pay attention to the needs of stakeholders the stakeholders may withdraw their support from the organization. For example, customers may stop purchasing the goods or services of the company and the investors may deviate from buying the stocks of the company and as a result of that the organizational financial performance will be affected.

The slack resource theory states that the company should have good financial position in order to be able to engage in social performance activities. This means that the company must first enhance its financial performance then increased its participation in the social performance activities. Moreover, under the good management theory the company must be concerned with its social performance activities in order to build good reputation in the minds of its stakeholders. Then when the stakeholders perceive the company well they will be attracted more to the company and this will improve the company’s financial performance (Waddock and Graves, 1997).

Each country can choose and follow a certain definition, the used definition in Egypt is “the commitment of business to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their lives in ways that are good for business and for development. Although both definitions concentrate on different points, both agree on sustainable development of business and society by improving the stakeholders’ well being.

Impacts of CSR are not only on the relationship with stakeholders and reputation of the company, it can impact the firm value as well. Firm value is the process of exploring the economic value of a firm. Firm value is used to know the fair market value of a business. It aids investors in their decision making. There have been a lot of researches on CSR that have been carried out across the globe. One area of research has been on how CSR affects firm value; the results for these studies show either a positive, negative or neutral relationship between them. However, there have been no studies done on this particular area of research in emerging economy like Egypt; this study focus is on filling this gap.

2. LITERATURE REVIEW

2.1 The importance of CSR practices

Deegan and Rankin (1997, PP. 564-565) discussed the importance of environmental information disclosure to users of annual reports of 20 companies that were prosecuted by environmental protection authorities (EPA) and another 20 non prosecuted companies which are similar in size and industry. They found that the prosecuted companies which were famous for having negative environmental information enhanced the disclosure of favourable information in their annual reports. They presented more positive environmental information in their annual reports after they are being prosecuted by the environmental protection authorities. In contrast to that, the non prosecuted companies have less provided positive environmental disclosure of environmental information may affect the decision making of the annual report users as many of the users of the annual reports consider environmental performance in their decision making.

Gleb and Strawser (2001) examined the relationship between accounting disclosure and two variables; cost of capital and corporate social responsibility. The researchers use the rankings provided by annual association for Investment Management and Research Corporate Information Committee Reports (“AIMR”) reports to measure the level of disclosures of the firms and use the rates provided by the Council of Economic Priorities (“CEP”) to determine the degree of social responsibility. They found that when the performance of the firm increases, the level of information disclosure increases (is the CSR included in the disclosure). Consequently, this will attract more investors to the company and the demand for their securities increase leading to decrease in the company’s cost of capital.

Haniffa and Cooke (2005) did a study which investigated the effect of culture and governance on corporate social reporting. They have two main aims the first aim is to assess the development of corporate social disclosure across years since 1996 to 2002. Therefore, Haniffa and Cooke reviewed the annual reports for 139 companies in Kuala labour stock exchange and they found that in 1996 there were high environmental disclosures in the annual reports because the companies were enjoying high economic growth at that time. However, in 2002 the disclosure of environmental information was reduced because at that time the companies were trying to recover from financial crises. The second aim is to determine the efficiency of the company size, profitability, industry type, listing status, and culture as variables to determine the corporate
social disclosure quality in annual report. They found that companies listed in the developed countries stock market are obliged to follow the rules and to increase their social activities disclosure in contrast to those companies listed in the developing countries stock markets which do not care about social activities disclosure due to the absence of rules. Furthermore, they clarified that the industry type affects the type of information disclosed. Manufacturing companies tend to disclose more information about employees while companies producing chemical products prefer to disclose environmental information.

2.2 Corporate Social Responsibility and Firm Value

There have been many studies conducted on CSR and its impact on firm value; but there was inconsistency in the findings as most proved that there is a positive relationship, while the rest proved either a neutral or negative relation.

Nelling & Webb (2009) showed a positive relation when using the least squares regression method and a neutral relation when the fixed effects regression was applied. The dependent variables used are return on assets and common stock returns, and the control variables are the weighted social responsibility score from the KLD socrates database, the log of total sales, the log of total assets and financial leverage which is the long-term debt divided by total assets. For the methodology the relationship was tested twice, one time using the least squares regression model, and the other using the fixed effects regression model; and a sample of 2800 firms was used.

Mishra and Suar (2010) showed a positive relationship between CSR and firm value for each stakeholder as the authors tested the relationship towards each of the employees, customers, investors, community, natural environment, and suppliers separately. The variables used are sales, aggregate CSR, CSR employee, CSR customer, CSR investor, CSR community, CSR environment, CSR supplier, Industry-adjusted ROA and NFP; and the control variables are listing in stock exchanges, type of ownership, and firm size. For the methodology regression analysis was used; and a sample of 150 Indian manufacturing companies that were chosen according to the criteria of having a minimum capital of 250 million Indian Rupees, at least one hundred employees and at least five years of manufacturing operation. 101 companies of the sample used were listed in the Bombay Stock Exchange and National Stock Exchange, and the rest were not listed in any stock exchange.

Kavanagh and Slaughter’s (2012) study found a significant positive relationship between level of CSR and firm value. The dependent variables used are the return on equity, return on assets and revenues. The independent variables are employee disclosure, community disclosure, consumer disclosure and environmental disclosure. The control variables used are the size of the firm which was measured by total of assets, the age of the firm which was measured by years since inception, and Industry type which is a binary variable. For the methodology the regression analysis was used, and a sample of 40 firms was collected out of a population of 135 Libyan companies in different industries.

Arsoy, Arabici, and Ciftcioglu (2012) showed a positive relationship between firm value and corporate social responsibility. The variables used are return on assets, return in equity, return on sales, debt/asset ratio, total sales, total assets, number of employees, equity and profit. For the methodology the principal component analysis which is a multivariate statistical analysis was used for exploratory analysis and developing models was used, the 28 listed companies in the Istanbul Stock Exchange Corporate Governance Index is used as the sample. The result of this study also showed that a company with high social responsibility index value does not mean that the firm valuation of said company is high.

Cheung, Jiang, Mak and Tan (2013) showed a positive relation between CSR and firm value. The variables used are Market to book value ratio, Corporate social performance index designed based on the third OECD Corporate Governance principles, Natural log of total assets in the fiscal year end, debt to equity ratio, return on equity, ratio of non-executive director in board of director and percentage of the largest shareholders holding the firm’s share. For the methodology, the regression analysis was used, and a sample of the largest listed firms from four main indices in the Hong Kong Exchange was taken.

Nuryaman’s study (2013) showed that disclosure of CSR activities has a positive impact on firm value. The dependent variables used are return on asset, net profit margin, stock prices; and the independent variables are the corporate social responsibility which is measured using global reporting initiative indicators, growth and firm size, the last two being control variables also. For the methodology the multiple linear regression analysis was used; and the sample used is 100 industrial manufacturing companies listed on the Indonesia Stock Exchange in 2010.

Munasinghe & Kumara (2013) showed a positive relationship between CSR and firm value. The dependent variables used are return on total assets, return on equity, debt/ equity ratio and CSR Score; and the independent variables are community initiatives, workplace initiatives, environment initiatives and market place initiatives. For the methodology the multiple linear regression analysis was used; and the sample used is 14 plantation companies listed in the Colombo Stock Exchange; for a 10 year duration.

There are some quantitative researches on this relationship that provided an outcome of either positive or neutral relationship.

2.2.1 The Negative View

It is based on Friedman’s study which states that the main aim of the company is maximizing shareholders’ wealth. According to Beauchamp and Bowie (1997, p.50) Friedman (1962, 1970) has two arguments against Corporate Social Responsibility. The first argument is that the shareholders are the owners of the company thus the profits belong to them, and the managers do not have any right to donate from the profits to charities as their main obligation is maximizing stockholders’ wealth. In addition to that, it is the responsibility of the government not the management to provide for the
need and any other public cause by taxes; however if the shareholders wish to donate to charities it should be by their own will from their own income. The second argument is that “shareholders are entitled to their profits as a result of a contract among the corporate stakeholder” (Beauchamp & Bowie, 1997, pp. 50-51) since each stakeholder has a part in the production of a firm’s product or service, therefore the managers and employees are paid in salaries and wages, the government and community are paid in the form of taxes, and the suppliers agree with firm on a certain price for to sell their goods for; making it fair that the profits left belong to the shareholders, since they are the ones risking their money in the form of capital. In other words, Friedman meant that CSR increases the costs and expenses of the firms due to increased devotion to the cause leading to a decrease in profit and consequently decrease firm value; since the purpose of the firms is shareholder wealth maximization (Arsoy et al, 2012; Cheung, et al, 2013; Nuryaman, 2013). Friedman also stated that only CSR towards the use of resources improves the profitability of the businesses and wealth of stockholders. Friedman advises that management policies should be in the best interest of the stockholders; this advice agrees with the stockholder theory which states that if CSR is directed towards all the stakeholders then the benefits to the shareholders will decrease.

2.2.2 The Positive View

This view is not only based on the resource based theory but on Freeman’s (1984) stakeholder theory as well. The resource based theory states that CSR improves firm value (Arsoy et al, 2012). The stakeholder theory states that CSR should be concerning all the stakeholders -not only stockholders- of the company (Nuryaman, 2013). Nuryaman argues that CSR reduces costs on the long run and any expenses that have to be made if the company violated any government laws or regulations that state that they should conduct CSR therefore this leads to increase the firm value. Moreover CSR improves the reputation of the businesses, as it shows the stakeholders that the company cares for them so in return they improve the reputation of the company. Furthermore, Cheung et al (2013) said that CSR increases the efficiency of the workers and the business, and decreases the agency problem and conflict of interests between stakeholders.

2.2.3 The Neutral View

This view claims that there are a lot of factors -one of them being research and development investment- that the researchers should use to provide the correct outcome of the relationship (Nuryaman, 2013). In Mc Williams & Siegel’s study (2000) the findings showed that CSR has a neutral impact on firm value. The key variables used are firm value, R&D to sales ratio. For the methodology the regression analysis was used; and a sample of 524 businesses and from Kinder, Lydenberg, Domini data and Compustat.

These different views and inconsistency in the findings prove that this relationship is still arguable even with the quantitative researches that have been made, and the topic is still open for further investigation.

2.3 Corporate Social Responsibility and Financial Performance

In recent years, many researchers as (Hua Shen, 2009), (Jamali, 2008), (Villiers, Van Staden, 2011) and (Olowokudejo and Aduloju, 2011) highlighted the importance of corporate social and its implications on the organizational performance.

Thomas and Simler (1994) used a sample of 97 corporations and manufacturing firms which have high records in corporate social responsibility in America. Each year fortune index evaluate the reputation of the corporations according to specific dimensions. After that, it gives each corporation a score according to its performance from zero which means poor, to ten which means excellent. Then, the scores are added together to make a rank for each corporation. The final results indicated that as firm’s reputation is improved its financial performance is enhanced too. This means that there is a direct proportional relationship between corporate reputation and its financial performance.

Peter and Stanwick (1998) conducted a study to test the correlation between corporate social responsibility and three variables; financial performance, firm size and environmental performance. The research argues that as the level of social responsibility increase the productivity of the employees and their morale increase as well although this may affect their financial position. In this study the researchers referred to the environmental performance as the level of pollution emissions released by the firms. The researchers found that as the size of the firm increase the firm is more motivated to provide social activities for its stockholder. Accordingly, when the firms’ social performance increases they decrease the activities that may cause environmental pollution.

Marc orlitzky (2001) argues that the modern stakeholders theory, transaction cost economics view, resource based view and the agency theory are considered to be theoretical examinations that explain the direct relationship between corporate social performance and firm financial performance. A new theoretical view has been added in this study to examine the correlation between the firm size, corporate social performance and financial performance. This new theoretical view is the three variables path diagram which will examine the relation through three paths. The first path is the relation between firm size and corporate social responsibility. The second path is the relationship between firm size and firm financial performance. The third path is the relation between corporate social performance and financial performance. The researcher used the statistical aggregation technique in his model. The researcher found that only the third path relation appears to have positive results. However the other two paths showed neutral results.

Ruff, et al (2001) examined the relationship between corporate social responsibility and financial performance according to the stakeholder theory. The researchers assert that the stakeholder theory require managers to fulfill shareholders requirements by maximizing their wealth in addition
managers should consider the society and the stakeholders in their decision making. In other words, if managers do not consider stakeholders and society demands in the decision making process stakeholders will preserve this corporation negatively and this will affect the shareholders wealth negatively. The researchers argue that in order to accomplish the stakeholder theory the firms should follow transaction cost economics view and resource based view. The researchers did a questionnaire in order to measure the dimensions and the importance of social performance. This questionnaire was filed by 194 social investor then they did a regression model for the years 1991 to 1995 using ROE, company size, industry type and the change in corporate social performance. They found that consumers and shareholders are attracted more to the firms which consider society and this attraction will result in improved financial performance (Muralidhar, Brown, Janney and Paul, 2001).

On the other hand, some studies that were done on CSR performance came with different conclusions. Diltz, (1995), analysed the profits and return of 28 organizations, that considers social responsibility. Another study was done by Sauer (1997) that examined the performance of the Domini 400 social index. The Domini 400 social index (DSI 400) is an index that brings together all the socially responsible companies. It is used as a measure for the level of social responsibility in the companies. The results of the two studies indicated that there is no difference between investments that consider social responsibility and that do not consider social responsibility performance.

Orlitzky, et.al (2003) assesses the relationship between corporate social responsibility and corporate financial performance. The researchers divide corporate financial performance into three parts: market based, accounting based and perceptual based measures. They divide corporate social into four measurement strategies: social performance disclosure, (reputation ratings), (social audits, social performance processes and outcomes), and (corporate social performance principles) and values. The corporate social performance disclosures are measured through analysing the firm’s annual reports and the shareholders writing in order to determine the firm’s level of social performance. In addition the values and principles of the company are assessed through a survey of corporate social orientations. Orlitzky stated several outcomes. The first outcome, there is a direct positive relationship between corporate social responsibility and corporate financial performance. The second outcome, there is a relation between corporate social responsibility and the reputation of the organization. As a result social responsibility builds positive image between stakeholders, customers and financial intermediaries which facilitate their access to capital. Furthermore, they found that coordinating and setting the priorities for various stakeholders’ interest rise corporate performance which in turn strengthen the firm’s competitive advantage. Firms with elevated social performance tend to have increased corporate social responsibility disclosures to attract stakeholders’ attention.

Ara, et. al (2009) examined the association between corporate social responsibility and the firm’s financial performance in the developing markets. The researchers realized that there are two measures which are mainly used by the previous practitioners in order to assess the financial performance. The first one is the accounting based financial performance measures. This measurement method does not take into account differences in the accounting procedures applied inside each organization. However, the second one is the stock market based measure. This method may be more accurate because it measures the future earning of the firm. On the other hand, Area, et.al observed three measurement techniques of CSR that are used by other researchers. The first technique is assessing the organizations policies. The second is analysing the annual reports and other important documents such as disclosure books. The third technique is evaluating the organizational plans for controlling pollution. Aras, et.al reached a conclusion that there are no clear dimensions of corporate social responsibility and no agreed measurement could describe the relation between corporate social responsibility and the firm’s financial performance. However, the modern stakeholder theory and agency theory state that there is a positive relation between CSR and financial performance but actually in emerging markets stakeholders prefer not to consider CSR in order to gain more return. Aras, et.al selected companies listed in Istanbul stock exchange to determine the correlation between CSR, financial performance and firm size in the emerging markets. They selected 40 companies and compared their annual reports for three years. They used the regression analysis to test the relation between CSR as dependent variable and return on assets (ROA), return on equity (ROE) and return on Sales (ROS) as independent variables as measures of financial performance. The results indicated no relation between financial performance and CSR. However, there is a positive relation between the size of the firm and CSR.

Hassan Fauzi (2009) examined the relationship issue between CSR and financial performance inside the American companies. He selected 120 companies that are listed in New York stock exchange from 2004 to 2006. The companies are chosen based on certain criteria which are the industry type and the completion of annual reports. The researcher concluded that there is no relation between CSR and financial performance inside American companies.

Olowokudejo and Aduloju (2011) did a study about corporate social responsibility and organizational effectiveness and its effect on the organizational performance in Nigeria insurance companies. The target sample in this research is the employees and the stakeholders of the insurance companies. The researchers use a structure questionnaire to collect information for their research. One section of the questionnaire is concerned about sex, age, ethical background, educational qualifications, are of operations and the locations of the organization. Another section in the questionnaire is concerned about the organization involvement in social activities and the degree of participation of each employee in these activities. Another section is concerned about public growth, sales growth, financial strength and operating efficiency. The researchers found that there is a
significant positive link between organizational effectiveness, corporate social responsibility and the performance of insurance companies in Nigeria. The researchers argue that CSR contributes to the development of the management of the organizations through refining the technical and professional performance of the leaders and executives of the organizations. It also helps managers to allocate the resources of the company efficiently. In addition to that CSR is positively related to maximizing the company sales, reinforcing its image and refining its employee morale. In other words, organizations could capitalize on their gains as they enhance the implementation of social responsibility within the organization.

In summary, some studies found a positive relation between the disclosures of social responsible activities and financial performance. As the companies invest more money in social responsible activities and disclose more positive environmental information, the investors will be attracted more to the company and the demand on their stocks will increase. On the other hand, some other studies found no relation between corporate social responsibility and the financial performance of the company.

3. THE OBJECTIVE OF THE STUDY

The objective of this research is to study the impact of corporate social responsibility on firm value and financial performance of the Egyptian companies listed in the EGX30 of the Egyptian Stock exchange in the year 2007 till 2014. In this research, the financial performance will be presented by return on assets (ROA) and return on Equity (ROE). In addition to that, the research aims to highlight the importance of corporate social responsibility for both companies and society and to provide recommendations to increase the adoption of it by Egyptian companies. The research aims at answering the following questions:
- What are the main CSR components' and their performance?
- What is the impact of CSR on Firm' financial performance?
- What is the impact of CSR on Firm' value?

4. RESEARCH METHODOLOGY

4.1 Research Design

The companies represented in EGX30 were chosen since they represent the largest companies in the country and are most likely to have been involved in one form or another in CSR, even if it unofficially. The researcher will use the multiple regression analysis, which is “a modeling technique used for analyzing the relationship between a continuous dependent variable and more than one independent variable” (Ragsdale, 2011, p. 400). The independent variable CSR is measured by a CSR index. The method for creating the questions is based on the OECD Corporate Governance Principle; it is a list of nine questions to assess the relationship between each firm and their stakeholders. The score ranges from 0 to 10 for each question, then the average of the scores are calculated for each year for each company, and the higher the score the better the relationship. The nine questions are shown in the following exhibit:

1. Does the company explicitly mention the safety and welfare policy/benefits of its employees?
2. Does the company provide a provident fund for its employees?
3. Does the company explicitly mention professional development training programs for its employees?
4. Does the company explicitly mention the role of customers?
5. Does the company explicitly mention environmental issues in its public communications?
6. Does the company explicitly mention the role of suppliers/business partners?
7. Does the company explicitly mention its obligations to shareholders?
8. Does the company explicitly mention its broader obligations to society and/or the community?
9. Does the company explicitly mention its obligations to creditors? (Cheung, Jiang, Mak, & Tan, 2013).

To test the relationship we use the multiple regression analysis technique; with the dependent variable being the market-to-book value, return on assets (ROA), return on equity (ROE) and the independent variables include the CSR scoring, the debt/equity ratio, size of the firm which is measured by the natural log of assets and type of the industry whether it is manufacturing or services. In addition to that two variables are added the first one is the interaction between the company size and the CSR and the second one is the interaction between the financial leverage and CSR.

4.2 Data

Data are selected according to the CSR index. The companies that are recorded in the CSR index are determined. Then, the CSR indexes for the study period are compared with each other and after that, the companies that are repeated in the index through the study period are selected to be the sample. The researcher found that from 30 companies that are listed in the CSR index only 21 companies are repeated through each year, and other companies are added or removed and so the sample used for this study is 33 of listed companies in the EGX30 in the Egyptian Stock Exchange; the time frame for the data that will be used is from the year 2007 till the year 2014 as available per the below table. The data collected will be secondary data; the secondary sources will be financial statements and annual reports, information available on the companies’ websites and analyst reports, and the stock market websites Mubasher and Investing.
4.3 Statistical Model

A multiple linear regression analysis will be used according to the following equation to evaluate:

First Model: the impact of Corporate Social responsibility on Firm's financial performance;

\[ \text{Firm's Financial Performance}_{i,t} = \beta_0 + \beta_1 \text{(CSR score)}_{i,t} + \beta_2 \text{(Size Of Firm)}_{i,t} + \beta_3 \text{(Debt Equity Ratio)}_{i,t} + \beta_4 \text{(Industry type)}_{i,t} + \beta_5 \text{(interaction effect between CSR and Company size)}_{i,t} + \epsilon_{i,t} \]

Second Model: the impact of Corporate Social responsibility on Firm's valuation;

\[ \text{Firm Value}_{i,t} = \beta_0 + \beta_1 \text{(CSR score)}_{i,t} + \beta_2 \text{(Size Of Firm)}_{i,t} + \beta_3 \text{(Debt Equity Ratio)}_{i,t} + \beta_4 \text{(Industry type)}_{i,t} + \beta_5 \text{(interaction effect between CSR and Company size)}_{i,t} + \epsilon_{i,t} \]

4.4 Measuring Variables

The market to book value ratio is calculated by dividing the current stock price as at 31st December of each year by the Book value of share (Reilly & Brown, 2012, p. 332). Financial performance is calculated by using the return on assets (ROA) ratio specifies the magnitude of profitability for the company comparative with its total assets. It is
calculated using net income after tax divided by total assets of the firm. Return on equity is calculated by dividing the net income by the total equity, it measures how much income is generated based on the amount of equity invested in the company (Reilly & Brown, 2012, p. 277).

The CSR represents the corporate social performance of the company. In order to measure the corporate social performance (CSP) the CSR index must be calculated. The Mahoney and Roberts (2007) approach for constructing the CSR index could be explained as follows: first the researcher analyses the corporate annual reports of 33 companies that are listed in EGX30. This analysis includes searching for companies that has high disclosure about environmental and social performance and community issues. Second the researcher gives for each company about the level of environmental and social performance and community issues disclosure in the annual report. The scores will be from 1 to 10 where 1 is the lowest score and 10 are the highest score. Third, the 33 listed companies are ranked in a descending order according to the given score. Then the researcher will select the rank the 33 companies according to its score. After that, a liquidity ratios test should be done for each company of the 33 selected companies in order to make sure that the 33 stocks are investable. Fourth, the CSR index for each company of the 33 companies will be calculated through dividing the index market value by the index divisor. The index market value is composed of the number of shares for the company multiplied by the price of the share. In his research the researcher used the CSR index which is already calculated and available for use and also calculated the index for the missing years by using the same approach.

Size of the company is considered as one of the independent variables. The total assets that the firm owns determine how the company is big and this could be one of the determinants of the CSR and is calculated by using natural log of assets is calculated using the LN formula.

Debt equity ratio is the level of financial leverage of the company is considered as one of the independent variables. The financial leverage ratio assesses the amount of the financial debt or borrowed funds used to acquire new assets or used in expansion in the manufacturing process it will be calculated by dividing the total debt by shareholders equity (Penman, 2013, p. 373).

The industry type is considered as one of the independent variables. It will be determined through dividing the companies into manufacturing and services companies. The manufacturing companies are such as food companies, mining, textiles, steel and heavy manufacturing companies. The services companies are such as hotels. The manufacturing companies will score number one and the service companies will score zero.

The interaction between CSR and the company size is considered to be fifth independent variable. It is calculated by multiplying the first and the second variables which are the CSR and the total assets.

While the interaction between CSR and the financial leverage will be considered as the sixth independent variables is calculated by multiplying the two variables which are the CSR and the financial leverage.

Table 2. Variables Definition

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable description</th>
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</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>Market to Book Value Ratio</td>
<td>Current Stock Price / Book Value</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>Net income after Tax / Total Assets</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>Net income after Tax / Total Equity</td>
</tr>
<tr>
<td><strong>Independent Variable CSR</strong></td>
<td></td>
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<tr>
<td>Corporate Social Responsibility Index</td>
<td>CSR Score created based on OECD Corporate Governance Principles. The method for creating the questions is based on the OECD CG’ Principle; it is a list of nine questions to assess the relationship between each firm and their stakeholders. The score ranges from 0 to 10 for each question.</td>
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<tr>
<td><strong>Five Control Variables</strong></td>
<td></td>
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<tr>
<td>The Size of the firm</td>
<td>Natural logarithm of Average Total Assets</td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>Total Liabilities / Total Equity</td>
</tr>
<tr>
<td>Industry Type</td>
<td>1 for manufacturing and 0 for non manufacturing (services companies)</td>
</tr>
<tr>
<td>Interaction between CSR and Company Size</td>
<td>CSR multiply by Company size</td>
</tr>
<tr>
<td>Interaction between CSR and financial leverage</td>
<td>CSR multiply by financial leverage</td>
</tr>
</tbody>
</table>

5. DATA ANALYSIS

The CSR scoring for the companies ranged from 4.44 which is the minimum and 80.67 which is the maximum. This show that there are some of the companies are highly engaged in CSR activities, while others either do not engage or are lightly engaging in CSR activities. The appendix will show each company’s CSR Score by year.
5.1 Descriptive Statistics

Table 3. Variables descriptive statistics

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>SD</th>
<th>Jarque-Bera</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market to Book Value</td>
<td>.0000</td>
<td>.7061</td>
<td>.15980</td>
<td>.1223</td>
<td>1.4702</td>
<td>2.062</td>
<td>.20423</td>
<td>312.381</td>
</tr>
<tr>
<td>Return on Assets</td>
<td>-0.32</td>
<td>0.315</td>
<td>0.7848</td>
<td>0.915</td>
<td>1.14</td>
<td>2.13</td>
<td>0.089</td>
<td>216.98</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>.0069</td>
<td>2.1617</td>
<td>.1705</td>
<td>0.0789</td>
<td>.658</td>
<td>69.207</td>
<td>.3400</td>
<td>76110.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Median</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR – Score</td>
<td>4.493</td>
<td>80.67</td>
<td>3.6532</td>
<td>16.777</td>
<td>-1.4465</td>
<td>8.395</td>
<td>.1289</td>
</tr>
<tr>
<td>Size of the firm</td>
<td>0.031</td>
<td>2.0217</td>
<td>0.3590</td>
<td>0.3471</td>
<td>-1.143</td>
<td>24.878</td>
<td>.1705</td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>0.280</td>
<td>1.330</td>
<td>0.5672</td>
<td>0.3451</td>
<td>3.092</td>
<td>1.718</td>
<td>.1840</td>
</tr>
<tr>
<td>Industry Type</td>
<td>0</td>
<td>1</td>
<td>0.33</td>
<td>0.38</td>
<td>1.00</td>
<td>1.342</td>
<td>0.475</td>
</tr>
<tr>
<td>Interaction of CSR and Size</td>
<td>4.88</td>
<td>7.61</td>
<td>1.25E+11</td>
<td>0.891</td>
<td>-2.30</td>
<td>1.341</td>
<td>1.62E</td>
</tr>
<tr>
<td>Interaction of CSR and Leverage</td>
<td>0.627</td>
<td>135.920</td>
<td>3.06656</td>
<td>4.56</td>
<td>3.56</td>
<td>26.78</td>
<td>33.319</td>
</tr>
</tbody>
</table>

Table 3 illustrates the descriptive statistics of the study variables. As seen from the tables above all the variables are asymmetrical. Especially skewness is positive for dept equity ratio and return on equity. While size of the firm and CSR score have a negative skewness.

Kurtosis value of all variables also indicates data is not normally distributed because values of kurtosis are deviated from 3. The measure of Jarque-Bera statistics and corresponding p-values are used to test for the normality assumption. Based on the Jarque-Bera statistics and p-value this assumption is rejected at 5% level of significance for variables.

There is high correlation between CSR scoring and the natural log of assets and the return on equity; however there is a high negative correlation between CSR score and the debt/equity ratio. Second the natural log of assets has a high correlation with the return on equity; on the other hand, it has an insignificant positive correlation with the debt/equity ratio. Third the debt/equity has a high correlation. Even though there are high correlation relationships between the variables, the level of collinearity is not that high to significantly affect the results.

Table 4. Correlation Matrix between variables

<table>
<thead>
<tr>
<th></th>
<th>Book/ MV</th>
<th>ROE</th>
<th>ROA</th>
<th>CSR Score</th>
<th>Debt Equity Ratio</th>
<th>Size of The firm</th>
<th>Industry Type</th>
<th>CSR &amp; Size</th>
<th>CSR &amp; Leverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book/ MV</td>
<td>1</td>
<td>0.428</td>
<td>0.205</td>
<td>-0.325**</td>
<td>0.003</td>
<td>0.129</td>
<td>-0.089^-</td>
<td>1</td>
<td>0.3451</td>
</tr>
<tr>
<td>ROE</td>
<td>0.428</td>
<td>1</td>
<td>-0.071</td>
<td>-0.033</td>
<td>0.338^-</td>
<td>0.221^-</td>
<td>-0.069^-</td>
<td>1</td>
<td>0.3451</td>
</tr>
<tr>
<td>ROA</td>
<td>0.205</td>
<td>-0.071</td>
<td>1</td>
<td>0.003^-</td>
<td>-0.089^-</td>
<td>0.129</td>
<td>0.121^-</td>
<td>1</td>
<td>0.3451</td>
</tr>
<tr>
<td>CSR Score</td>
<td>-0.325**</td>
<td>0.003</td>
<td>0.338^-</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Debt Equity Ratio</td>
<td>0.003</td>
<td>0.338^-</td>
<td>-0.033</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Size of the Firm</td>
<td>-0.325</td>
<td>0.221^-</td>
<td>0.221^-</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Industry Type</td>
<td>0.129</td>
<td>0.121^-</td>
<td>0.069^-</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CSR &amp; Size</td>
<td>0.042</td>
<td>0.338^-</td>
<td>0.221^-</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CSR &amp; Leverage</td>
<td>0.345</td>
<td>0.3451</td>
<td>0.3451</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis was made for a sample of 258 observations. The correlation is significant at p-value less than 0.05.
- Most of the independent variables have either a significant positive or negative relationship with the Bank financial performance except debt equity ratio and size of the firm.
- There is a negative significant relationship between book to market value and CSR score and Industry type.
- There is a positive significant relationship between book to market value and return on assets.
- There is a negative relationship between Book to market value and debt to equity ratio, size of the firm and CSR and Leverage.
- The relationship between Book to market value and return on equity is positive but not significant.
- There is a positive significant relationship between book to market value and return on assets.
- There is a positive significant relationship between return on equity and size of the firm and industry type.
- There is a positive relationship between return on equity and Return on assets and positive significant relationship between CSR score and market value.
Debt equity ratio, CSR and size and CSR and leverage but not significant.
- There is a positive relationship between ROE and ROA but not significant.
- Return on Equity has a significant negative relationship with financial performance.
- There is a positive significant relationship between return on assets and industry type with p-value 0.007.
- There is a positive relationship between return on assets and size of the firm but not significant.
- There is a negative relationship between return on assets and CSR score, debt equity ratio, CSR size and CSR leverage.
- There is a significant positive relationship between CSR score and total assets with p-value 0.000.
- There is a high negative correlation between CSR score and the debt/equity ratio and bank financial performance.
- There is a significant relationship between the total assets and financial leverage with p-value 0.001.
- There is a significant relationship between total assets and interaction between the two variables CSR and total assets with p-value 0.000.
- There is significant relationship between financial leverage and the interaction between the two variables CSR and total assets with p-value 0.010.
- There is a significant relationship between financial leverage and the interaction between the two variables CSR and financial leverage with p-value = 0.000.
- There is significant relationship between financial leverage and the interaction between the two variables CSR and total assets with p-value = 0.047.

Therefore, according to the correlation analysis results we can partially accept the first hypothesis as most of the independent variables are significantly correlated with the firm’s financial performance and valuation except debt equity ratio and size of the firm.

“There is a significant correlation between Firm’ financial performance and valuation as a dependent variable and the study’s independent variables”

5.2 Regression Analysis – Firm Value

A regression analysis was done to test the relationship between the Market to book value, as an approach to firm valuation and the CSR Scoring. First, the model significance is tested in the ANOVA table below:

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.215</td>
<td>0.046</td>
<td>0.041</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage
b. Dependent Variable: MTBV

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>80.876</td>
<td>6</td>
<td>20.219</td>
<td>12.568</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1173.314</td>
<td>252</td>
<td>7.875</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1254.190</td>
<td>258</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage
b. Dependent Variable: MTBV

The ANOVA table proved that the model is significant since it is below 0.05. The significance of each variable is then shown in the table below:

Table 6. The significance of each variable

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>11.417</td>
<td>4.899</td>
<td>.2331</td>
</tr>
<tr>
<td></td>
<td>CSR score</td>
<td>-.011</td>
<td>.009</td>
<td>-.103</td>
</tr>
<tr>
<td></td>
<td>Size of the firm</td>
<td>-.467</td>
<td>.246</td>
<td>-.154</td>
</tr>
<tr>
<td></td>
<td>Debt equity ratio</td>
<td>.195</td>
<td>.128</td>
<td>.130</td>
</tr>
<tr>
<td></td>
<td>Industry type</td>
<td>.791</td>
<td>1.069</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>CSR &amp; Size</td>
<td>.057</td>
<td>1.05</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>CSR &amp; Leverage</td>
<td>.546</td>
<td>1.0024</td>
<td>.085</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Market to Book Value
The table shows that the constant is highly significant, however all the other variables are insignificant as they are all more than 0.05. The beta coefficients of CSR and size of the firm are negative with values of -0.103 and -0.154 respectively, while the beta coefficients of debt equity ratio and industry type are positive with values of 0.128 and 0.064 respectively. This means that when CSR increases by one unit the market to book value decreases by 0.103, and when size of the firm increase by one unit the market to book value decreases by 0.154. On the other hand, when the debt equity ratio increase by one unit the market to book value will increase by 0.128, and when debt equity ratio increases by one unit the market to book value will increase by 0.064. This regression analysis shows that there is a negative relation between CSR and firm valuation since the beta coefficients of CSR is a negative value but this relation is not significant.

The model after substituting the letter b with its coefficient is as follows:

\[ Y = 0.011X_1 - 0.467X_2 + 0.195X_3 + 0.791X_4 + 0.657X_5 - 0.546X_6 \]

### 5.2 Regression Analysis – Firm’ Performance (Return on Assets)

#### Table 7. Regression Analysis – Firm’ Performance (Return on Assets)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.767</td>
<td>0.589</td>
<td>0.452</td>
<td>0.068325</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage

b. Dependent Variable: Return on Assets

#### Table 8. ANOVA analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>0.100</td>
<td>6</td>
<td>0.025</td>
<td>3.634</td>
<td>.013*</td>
</tr>
<tr>
<td>Residual</td>
<td>0.070</td>
<td>252</td>
<td>0.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0.170</td>
<td>258</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage

b. Dependent Variable: Return On Assets

The model is significant since it is below 0.05; the significance of each variable is shown below:

#### Table 9. Significance of the variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.084</td>
<td>0.012</td>
<td>-0.103</td>
<td>2.331</td>
</tr>
<tr>
<td>CSR score</td>
<td>0.006</td>
<td>0.003</td>
<td>-1.214</td>
<td>0.0407</td>
</tr>
<tr>
<td>Size of the firm</td>
<td>-7.297</td>
<td>0.000</td>
<td>-1.906</td>
<td>.061</td>
</tr>
<tr>
<td>Debt equity ratio</td>
<td>-0.007</td>
<td>0.003</td>
<td>-1.768</td>
<td>0.636</td>
</tr>
<tr>
<td>Industry type</td>
<td>0.047</td>
<td>0.017</td>
<td>-1.305</td>
<td>0.0407</td>
</tr>
<tr>
<td>CSR &amp; Size</td>
<td>-7.601</td>
<td>0.000</td>
<td>-0.439</td>
<td>0.289</td>
</tr>
<tr>
<td>CSR &amp; Leverage</td>
<td>0.004</td>
<td>0.003</td>
<td>1.172</td>
<td>0.424</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Assets

Results shows significant positive relation between ROA and CSR at p-value = 0.0407. This result is consistent with the results of research done by (Fauzi, 2009; Wddock and Graves, 1997) since he found significant realtionship between ROA and CSR. However, some other researchers find inconsistent results with this research. (Muhamad, Saleh, & Zulkifli) find in their study that there is insignificant realsihp between CSR and ROA. Company size shows insignificant realtionship between ROA and total assets at p-value = 0.061. previous study done by (Fauzi, 2009) provides consistent results about the insignificant relationship between ROA by application on american firms. On the other hands the study done by (Muhamad, Saleh, & Zulkifli) provide opposite results as it found a significant relationship between ROA and company size.

Financial leverage shows insignificant realtion between ROA and financial leverage at p-value = 0.636. the study done by (Muhamad, Saleh, & Zulkifli) shows insignificant relationship between ROA and Financial Leverage. Conversely, the study done by (Fauzi, 2009) shows that there is significant
realtionship between ROA and financial leverage. Fauzi results (2009) is consistent with the results of this study.

Industry type, shows significnat relationship between ROA and industry type at p-value = 0.007. However, the prior study done by (Fauzi, 2009) provides conflicting results with the results of this study. (Fauzi, 2009) find that there is insignifcant relation between ROA and industry type.

There is an insignifcant relation between ROA and the interaction between CSR and total assets at P-value = 0.289. these results were consistent with results done by (Fauzi, 2009).

There is insignifcant relationship between ROA and the interaction between CSR and financial leverage at p-value = 0.424.

The model after substituting the letter b with its coefficient is as follows:

The model: \( \hat{Y} = 0.084 + 0.006X_1 - 7.297X_2 - 0.007X_3 - 0.047X_4 + 0.004X_5 \)

5.3 Regression Analysis – Firm’ Performance (Return on Equity)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.796</td>
<td>0.633</td>
<td>0.601</td>
<td>14.918</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage
b. Dependent Variable: Return on Equity

table 11. ANOVA analysis

<table>
<thead>
<tr>
<th>ANOVAa</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>21911.876</td>
<td>6</td>
<td>2345.219</td>
<td>17.568</td>
<td>.000*</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>12678.513</td>
<td>252</td>
<td>210.875</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>34590.389</td>
<td>258</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), CSR score, Size of the firm debt equity ratio, industry type, CSR and Size, CSR and leverage
b. Dependent Variable: Return on Equity

The ANOVA table proved that the model is significant since it is below 0.05. The significance of each variable is then shown in the table below:

<table>
<thead>
<tr>
<th>Coefficientsb</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>2.417</td>
<td>4.899</td>
<td>4.331</td>
<td>.521</td>
</tr>
<tr>
<td></td>
<td>CSR score</td>
<td>0.501</td>
<td>.213</td>
<td>0.108</td>
<td>2.014</td>
</tr>
<tr>
<td></td>
<td>Size of the firm</td>
<td>-1.467</td>
<td>.746</td>
<td>-2.54</td>
<td>-2.898</td>
</tr>
<tr>
<td></td>
<td>Debt equity ratio</td>
<td>.195</td>
<td>.028</td>
<td>.330</td>
<td>2.529</td>
</tr>
<tr>
<td></td>
<td>Industry type</td>
<td>-5.791</td>
<td>.769</td>
<td>.664</td>
<td>7.740</td>
</tr>
<tr>
<td></td>
<td>CSR &amp; Size</td>
<td>0.357</td>
<td>0.091</td>
<td>0.380</td>
<td>4.714</td>
</tr>
<tr>
<td></td>
<td>CSR &amp; Leverage</td>
<td>0.347</td>
<td>0.0083</td>
<td>0.385</td>
<td>4.983</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Return on Equity

There is a positive significant realtionship between ROE and CSR, which was consistent with the researchers’ findings. Whaba (2008), Cellier and Cholet (2010) and Vitezic (2011). However, the research findings were inconsicent with Waddok and Graves (1997). Barnea and Rubin (2010) findings showed that there is a negative realtionship between CSR and industry type and debt level, which consequently have a negative impact on on financial performance that was consistent with theresearchers Khanifar et al. (2012), which stated that the empirical findings have had mixed results with differnt industry types.

We can conclude that investors are more likely to invest in firms that are aware and responsible to the needs of the surrounding sociities and environment. In addition to the firms striving to satisfy their investors in order to maximize their own wealth.

The model after substituting the letter b with its coefficient is as follows:

The model: \( \hat{Y} = 2.417 + 0.501X_1 - 1.467X_2 \)
0.195X_2 - 5.791X_4 + 0.357X_5 + 0.347X_6

6. CONCLUSION AND FUTURE STUDIES

This study answers the question that ‘How might Corporate Social Responsibility affect Firms’ Value and Financial Performance’. Accordingly we and examined the factors to which we believe were relevant, along with what previous studies have suggested.

We find that there is a positive significant relationship between CSR and financial performance.

We examined Firms’ financial performance from two aspects, the return on equity (ROE) and the return on assets (ROA). In terms of the ROE model, Investors are more likely to invest in firms to maximize their own wealth.

In terms of the ROA model; when firms follow the CSR approach they became more efficient in terms of asset management which increase the overall ROA of the firm. Investors are more likely to invest in companies that can manage its assets and resources well (Van de Velde et al.; 2005).

In terms of Firms’ value there is an insignificant negative relation between CSR Scoring and the market-to-book-value. In other words there is a negative relationship between CSR and firm value in Egypt. The CSR scoring shows that there are companies that care about social responsibility duty more than others, thus the companies fall within a range between 4.44 and 80.67 in scoring. We suggest that companies should increase their CSR activities and disclosure in order to attract more stakeholders.

We believe that future studies must increase the sample size to include more companies operate in different sectors, not only that but also to study the effect of an industry over the firms’ financial performance and value when following CSR. We also could study the broad effect of CSR over the firms’ performance, not just the return on assets and the return on equity through including other variables such as: dividends per share and Institutional Ownership.

REFERENCES

Appendix

Exhibit 3.1: CSR Scoring Questions:

1. Does the company explicitly mention the safety and welfare policy/benefits of its employees?
2. Does the company provide a provident fund for its employees?
3. Does the company explicitly mention professional development training programs for its employees?
4. Does the company explicitly mention the role of customers?
5. Does the company explicitly mention environmental issues in its public communications?
6. Does the company explicitly mention the role of suppliers/business partners?
7. Does the company explicitly mention its obligations to shareholders?
8. Does the company explicitly mention its broader obligations to society and/or the community?
9. Does the company explicitly mention its obligations to creditors? (Cheung, Jiang, Mak, & Tan, 2013)