

Research Article

EXAMINING THE RELATIONSHIP BETWEEN DISCLOSURE LEVEL OF CORPORATE SOCIAL RESPONSIBILITY AND THE COMPANY'S OPERATING PERFORMANCE LISTED IN TEHRAN STOCK EXCHANGE BY USING THE ECONOMIC APPROACH

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ABSTRACT

The purpose of this study was to examine the relationship between disclosure level of corporate social responsibility and operational performance of the companies listed in Tehran Stock Exchange, by using the economic approach. In this study, the spatial domain consists of all companies listed in Tehran Stock Exchange and temporal domain consists of those listed in Tehran Stock Exchange in 5-year period from 2008 to 2012. Economic value added and market value added are considered as dependent variables and the disclosure of corporate social responsibility, as an independent variable. This study was a quasi-experimental research design, using a post-event approach (through past data), and a descriptive-correlated survey. To illustrate the explanatory power of the explaining variables, to assess variables' significant and to assess total adequacy of the model, it was used the coefficient of adjusted determination, t-statistic and the F-statistic, respectively. Also, statistical analysis was performed by software 7 EXCEL EVIEWS. The results showed that there is a significant relationship between the level of disclosure of environmental, social, economic and social responsibility and the market value added of companies listed in Tehran Stock Exchange.

Keywords: *Corporate Social Responsibility, Economic Value Added, Market Value Added*

INTRODUCTION

Being desired and insisted a firm on commitment to social responsibility in all dimensions, it has a significant effect on the financial performance, in fact, the trend toward social responsibility, it encourages firms to try in improving the environment, use less energy and lower materials, waste management etc. (Sandhou and Kapoor, 2009). As a result, the firms can maximize long-term efficiency through reducing their negative impacts on society, optionally. So, today the idea is increasingly emerging among the firms that their long-term success can be realized, via managing the long-term the companies socially (Sami *et al.*, 2012). Therefore, implementation of corporate social responsibility will lead to improved long-term success of the company and eventually to economic growth and increased competitiveness power of the company and its improved financial performance (Sanchez *et al.*, 2013). Negative relationship between corporate social responsibility and operational performance is consistent with the ideas of Milton Friedman and neoclassical economists (Allen *et al.*, 2013). They suggest that corporate social responsibility can make them incur costs that will ultimately lead to lower profits and wealth of shareholders. Management opportunism hypothesis is discussed as a basis for a negative relationship between corporate social responsibility and operational performance. This hypothesis states that when a strong operational performance, managers reduce costs associated with social responsibility; this is because they can increase short-term profitability and thus their individual rewards associated with short-term profit increase (Peter *et al.*, 2013). On the contrary, when a poor operational performance, the managers focus their efforts on to increase costs on social programs are obvious. Neutral connection (no relation) between the two variables is demonstrated through some research. These studies suggest that since the general situation of the company and the community is very complex, as a result, there is no a direct relationship between corporate social responsibility and operational performance (Sismoore and Kuhran, 2008; T-sout, 2011). In general, what we're looking for in this study is to examine the

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relationship between disclosure level of corporate social responsibility and operational performance of the companies listed in Tehran Stock Exchange by using the economic approach.

Literature

Wangi (2013) investigated the relationship between environmental performance and financial performance of companies and also between corporate governance and corporate financial performance of companies in Kenya. The results showed that the CSR reporting about the stock companies has different effects on the financial performance measures and the results suggest that the reporting causes to enhance the company's image as a responsible corporate citizen. Fogemy (2012) investigated effect of CSR on the operational performance in Nigeria as a developing economy. The results showed there is a positive significant between the operating performance measures and CSR; to measure CSR the index of voluntary disclosure items were used in the annual reports of the sample companies was used.

Ehsan and Colin (2013) investigated the nature of the relationship between corporate social responsibility and operational performance in Pakistan. The findings suggest that Pakistani companies account for social welfare and improvement of living standards and better facilities for education and health care of employees and protection of the environment in the new millennium changes and it is believed that this leads their employees to trust towards the companies. Mishra (2013) investigated the effect of corporate social responsibility on the financial and nonfinancial performance of companies in India. The results indicated that the responsible business practices to the primary stakeholders can be profitable for companies of India and bring greater benefits to them. Our measure of financial performance is returns on assets and nonfinancial performance measures including market share, health and safety of employees, investment on R&D and the customer satisfaction. Tweents and Visink (2014) investigated the relationship between corporate social responsibility and operational performance based on two theories: instrumental stakeholders and based on limited resources. The results showed that CSR leads to better operational performance of the companies with higher social performance; instead, it resulting from CSR activities will also lead to better operational performance. The results showed that higher social performance of the companies causes increased rate of return on sales (ROS) and return on assets and (ROA).

MATERIALS AND METHODS

Methodology

The Research Hypothesis

- There is a significant relationship between discloser level of social responsibility from environment dimension and market value added fo the companies listed in Tehran Stock Exchange.
- There is a significant relationship between discloser level of social responsibility from economic dimension and market value added fo the companies listed in Tehran Stock Exchange.
- There is a significant relationship between discloser level of social responsibility from social dimension and market value added fo the companies listed in Tehran Stock Exchange.

Operational Variables' Definition

Market Value Added

This variable is calculated as follows:

The average book value of equity - the average market value of equity during the year: Increased market value

The book value of equity at beginning of the period/ market value added= market value standardized of average book value of equity is the sum of equity at the beginning and end of the period divided by two (Hejazi and Hussein, 2009).

Level / Degree of Disclosure of Dimensions (Environmental, Economic and Social) of Corporate Social Responsibility

In this study, to analyze content in determining the level of corporate social responsibility, the disclosure check list was used of zero (0) and one (1) (binary). In fact, in this study, the scoring procedure for measuring corporate social responsibility was on the basis of Ernst & Ernst (1978) and Abbott and Mansn

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(1979); if an item of corporate social responsibility disclosure is taken, it is given 1 and otherwise 0. Hence, the number of items disclosed to total items becoming disclosed of corporate social responsibility reporting, based on data contained in the annual reports of companies, represents the percentage of disclosure level of corporate social responsibility or CSR score to determine its level of each company:
 CSR Score= the number of disclosed items/ the number of total disclosed items

Table 1-1: Operational definition of the research control variables

Size	Normal log of total assets
Financial leverage	Total debts divided by total assets
Age	Based on the number of years being listed in Stock Organization
Industry	Based on ranking from Stock Organization

Regression Model

$$MVA_{it} = B_0 + B_1 (CSR_{it}) + B_2 (\text{industry}) + B_3 (\text{age}) + B_4 (\text{Size}) + B_5 (\text{Leverage}) + \epsilon$$

CSR_{it}: disclosure level of social responsibility

MVA: Market value added

Industry: type of industry

age: firm age

Size: firm size

Leverage: financial leverage

The Research Statistical Population and Sample

It consists of all companies listed in Tehran Stock Exchange for the years between 2008 and 2012. To determine the disclosure level of corporate social responsibility and testing the empirical hypothesis models from the statistical population of companies listed in Tehran Stock Exchange, a sample based on the following criteria will be selected:

Table 1-2: Constrains exerted on the companies

Row	Explaining constrains	The number
1	The number of total companies before exerting the constrains	391
2	Not being listed in Stock before 2008	23
3	Not ending the fiscal year in march	19
4	The companies have changed their fiscal year	10
5	Not belonging in banks, insurance company and investor companies etc.	18
6	Information on the variables under study not available over all years the test done	20
Sum of total remained companies		301

The statistical sample in this study, given the size of the population, (301 companies from 391 companies listed in Tehran Stock Exchange) includes 65 companies, to estimate this size of samples given the scale type of the variables of the hypotheses, the following equation (simple random sampling method) was used:

$$n = \frac{301(1.96 - \frac{0.05}{2})^2 0.01^2}{(301 + 1)0.05^2 + (1.96 - \frac{0.05}{2})^2 0.01^2} = 65$$

Data Analysis Method

In the study, F-Linear test will be used in selecting the common-effects and fixed-effects; if a fixed-effects model, then Hausman test will be used in selecting either fixed-effects model or random effects. Also, it will be examined minor auto-correlation of the disturbing model, variance heterogeneity and

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fixed-effects test. Finally, in order to illustrate the explaining variables’ explanatory power, to examine their significance and to examine total adequacy of the model, it will be used adjusted determination coefficient (Adjusted R²), t-statistic and F-statistic. The statistical analysis was performed by Software EVIEWS 7 and EXECL.

RESULTS AND DISCUSSION

Results

Examining Variance Heterogeneity

Table 1-3: Results of variance heterogeneity test using modified statistic of Waled

Explanation	Value of chi-square statistic	Significance level
Modified statistic of Waled	-8014.36	0.5184

* 5% of error level

According to table 1-3, due to significance level of chi-square statistic is not significant at 5% level, so the hypothesis on variance heterogeneity could be rejected and in contrast, variance homogeneity confirmed.

Determining the Model Estimation Method- Testing Significance of the Fixed-Effects Method

Table 1-4: Results of F-statistic test

F-statistic test			
Explanation	Statistic value	Freedom degree	Probability
Cross-section F	1.966044	64	0.000*
Cross-section Chi-square	137.265302	64	0.004*
Hausman test			
Cross-section F	7.745202	15	0.007*

* 5% of error level

According to table 1-4, the results of two tests conducted (F, Hausman), the probability obtained in both tests was less than 5% and so it should be used fixed-effects method in regression model.

The Research Hypothesis Testing

Table 1-5: Regression test of the first hypothesis

Variable name	Estimating coefficient	Estimate deviation	t-statistics	Significance-level
Fixed	0.559	0.195	2.866	0.069
Environment	2.608	0.369	7.067	0.000*
dimension of CSR				
Firm size	4.336	0.458	9.467	0.000*
Financial leverage	-0.748	0.215	-3.479	0.024*
Firm age	0.926	0.214	4.327	0.018*
Type of industry	1.002	0.299	3.351	0.031*

* 5% error level

Table 1-6: Explanation capability and total model significance

R ²	ANOVA		
Determination coefficient	Adjusted determination coefficient	Watson-Durbin	Significance level
		F-statistic	
0.578	0.559	58.216	0.000**

** 1% error level

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According to table 1-6, the efficacy coefficient of social responsibility disclosure level of environment dimension on the market value added is 2.608, indicating that coefficient of social responsibility disclosure level of environment dimension has a direct and positive effect on the market value added. On the side, considering t-statistic to the variable of social responsibility disclosure level of environment dimension on the market value added (0.000), due to being less than 5% error level, it can be rejected H_0 at 95% level and be said that there is a significant relationship between social responsibility disclosure level of environment dimension and market value added of the companies listed in Tehran Stock Exchange. So the regression model can be written as follows:

$$MVA_{it} = 0.559 + 0.195 (CSR_{D}) + 1.002 (\text{industry}) + 0.926 (\text{age}) + 4.336 (\text{Size}) - 0.748 (\text{Leverage}) + e_i$$

The Second Hypothesis Testing

Table 1-7: Regression test of the second hypothesis

Variable name	Estimating coefficient	Estimate deviation	t-statistics	Significance-level
Fixed	0.587	0.147	3.993	0.042*
economy dimension of CSR	1.365	0.294	4.642	0.032*
Firm size	3.475	0.305	11.393	0.000*
Financial leverage	-0.682	0.213	-3.201	0.049*
Firm age	0.775	0.178	4.353	0.036*
Type of industry	0.447	0.103	4.339	0.033*

* 5% error level

Table 1-8: Explanation capability and total model significance

R ² Determination coefficient	Adjusted determination coefficient	Watson-Durbin	ANOVA	
			F-statistic	Significance level
0.336	0.325	1.942	52.114	0.000**

** 1% error level

According to table 1-7, the efficacy coefficient of social responsibility disclosure level of economy dimension on the market value added is 1.365, indicating that coefficient of social responsibility disclosure level of economy dimension has a direct and positive effect on the market value added. On the side, considering t-statistic to the variable of social responsibility disclosure level of economy dimension on the market value added (0.032), due to being less than 5% error level, it can be rejected H_0 at 95% level and be said that there is a significant relationship between social responsibility disclosure level of economy dimension and market value added of the companies listed in Tehran Stock Exchange. So the regression model can be written as follows:

$$MVA_{it} = 0.587 + 1.365 (CSR_{D}) + 0.447 (\text{industry}) + 0.775 (\text{age}) + 3.475 (\text{Size}) - 0.682 (\text{Leverage}) + e_i$$

Third Hypothesis Testing

Table 1-9: Regression test of the third hypothesis

Variable name	Estimating coefficient	Estimate deviation	t-statistics	Significance-level
Fixed	1.036	0.247	4.194	0.014*
social dimension of CSR	2.554	0.361	7.074	0.000*
Firm size	2.926	0.524	4.381	0.012*
Financial leverage	0.574	0.147	-3.904	0.026*
Firm age	0.889	0.196	4.535	0.009*
Type of industry	0.624	0.117	5.334	0.000*

* 5% error level

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Table 1-10: Explanation capability and total model significance

R²	Determination coefficient	Adjusted determination coefficient	Watson-Durbin	ANOVA	
				F-statistic	Significance level
0.542	0.536	2.341	39.748	0.000**	

** 1% error level

According to table 1-9, the efficacy coefficient of social responsibility disclosure level of social dimension on the market value added is 2.554, indicating that coefficient of social responsibility disclosure level of social dimension has a direct and positive effect on the market value added. On the side, considering t-statistic to the variable of social responsibility disclosure level of social dimension on the market value added (0.032), due to being less than 5% error level, it can be rejected H₀ at 95% level and be said that there is a significant relationship between social responsibility disclosure level of social dimension and market value added of the companies listed in Tehran Stock Exchange. So the regression model can be written as follows:

$$MVA_{it} = 1.036 + 2.554 (CSR_{it}) + 0.624 (industry) + 0.889 (age) + 2.926 (Size) - 0.574 (Leverage) + e_i$$

Conclusion and Recommendations

The results showed that there is as significant relationship between disclosure level of environmental, social and economy of social responsibility and value added market of the companies listed in Tehran Stock Exchange. These results are consistent with those by Mishra (2013) and Wangi (2013) and in contrast, not consistent with Teimour *et al.*, (2012) and Jabbarzadeh and Bayazid (2010). According to the results, we suggest the following recommendations:

- 1- The managers of the companies are recommended to regard disclosure level of CSR, because of affecting the company's operating performance level consequently, the investors will be willing to invest in these companies.
- 2- The investors and shareholders are recommended if they wish to invest in companies with higher levels of operational performance consider surely the disclosure level of corporate social responsibility dimensions.
- 3- The organizations and institutions responsible for developing Accounting Standards are recommended that assist to increased operational performance and by developing standards based on making disclosure of social responsibility dimensions required within the companies and to investors in making their decisions.

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