

INVESTIGATING THE RELATIONSHIP BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE OF CONSTRUCTION, ARCHITECTS AND INDUSTRIAL COMPANIES IN THE MUNICIPALITIES OF MAZANDARAN PROVINCE

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Abstract. The purpose of this research was to investigate the relationship between corporate social responsibility and financial performance of construction, architecture and industrial companies in the municipalities of Mazandaran province. This research is descriptive-correlative method and is of applied research type. The statistical population of the study consisted of all construction, architectural and industrial companies in the municipalities of Mazandaran province during 2013 to 2017, in which 50 companies were studied. The data of the research were extracted from the financial statements of the companies and analyzed using regression models using combination data. The research findings showed that there is a positive and significant relationship between corporate social capital and asset returns and earnings per share of companies, and there is not a significant relationship between corporate social capitals with equity returns.

Keywords: *Social Responsibility, Financial Performance, Returns on Assets, Return on Equity, Earnings per Share.*

1. Introduction

The expansion of various industrial and commercial institutions and companies, and the sharp increase in competition between them, has led organizations and companies to consider their own organizational interests only to survive, and do nothing to accomplish these goals. Managers' lack of attention to social responsibility prevents their effective service to society and the development and credibility of the organization. In fact, corporate social responsibility is a transcendent approach to business that takes into account the social impact of an organization on both the domestic and foreign community, and its main objective is to bring all sectors together to work together to bring economic benefits to the environment on the one hand and, on the other, to succeed in the growth and sustainability of the business (Omidvar, 2007). Corporate social responsibility is a new subject in literature and accounting research and is considered by investors, analysts, managers and researchers in various respects. Today, shareholders want to invest in companies that are doing the right thing socially. Grant (2008) claims that corporate social responsibility is not only a matter of corporate responsibility, but today it is necessary for many companies. Proponents of disclosure of social responsibility information claim that companies are disclosing this information to increase shareholder wealth. Corporate social responsibility has been a major controversy in the United States over the decades. The article by Milton Friedman (1970), entitled Social Responsibility for Business, is only an increase in profits, it explicitly illustrates this view, and in response to those who claimed that business was committed to the welfare of society in large measure. Of course, Friedman's supporters generally do not deny involvement in social activities, but they say that the purpose and outcome of actions should be profit making for the organization. For example, it is quite right that a company should contribute to the improvement of the local situation if this leads to a return to profitability (Jalili & Qeysari, 2014).

Paying attention to individuals and groups of interest will increase the company's profitability in the long run, as it stimulates human resources, improves social goodwill and empowers people and reduces fines. David believes that the day-to-day beliefs of organizations are becoming more and more evident in that promoting ethical principles and strengthening spiritual culture will bring about strategic advantages (David, 2003). Over the past two decades, corporate social responsibility has been considerably highlighted by economic units. Corporate social responsibility focuses on important issues such as ethics, environment, security, education, human rights. Although corporate social responsibility is costing the firm, it ultimately leads to improved sales and profits and improves corporate performance in the long run due to company improvements, long-term cost savings and increased demand (Poddi & Vergalli, 2009). In Western countries, today, counseling companies are taking steps to enforce corporate social responsibility and allow the public to know how to handle those things. Many multinational companies have also hired a senior manager to develop and coordinate corporate social responsibility (Dusuki, 2008). Since corporate social responsibility is a corporate strategy and has cost-effectiveness implications, it may affect the firm's financial performance. In addition, the social responsibility of the organization reduces social risks and may, in the long run, have advantages or disadvantages for companies that effectively and actively use corporate social responsibility (and Steven & Darmowan, 2011).

Companies look at social responsibility in terms of moving towards sustainable development, they actually see social responsibility as a business strategy that increases their credibility in competitive markets, and also increases their market share. This is why today, in the world of competition, corporate social responsibility has become a dominant paradigm in corporate governance. The social responsibility criterion and the protests against the power of large companies have been very active in recent years, especially in industrialized countries, in a way that has made important debates about the role of big business in democracy and sustainable development. The performance of large firms has a great impact on society and should be monitored and publicly controlled (Elizaei and Fakhari, 2015). Therefore, considering that in Iran research on social responsibility and financial performance of the company has not been carried out, therefore, research in this field seems necessary.

2. History of Research

- Amir Hosseini and Ghobadi (2016) studied social responsibility, financial performance, and institutional ownership. At first, the relationship between corporate social responsibility and financial performance was investigated, and then the relationship between corporate social responsibility and institutional ownership with the effect of the mediating variable of financial performance was investigated. The results indicate the effect of financial intermediary variable on the relationship between social responsibility and institutional ownership.

- Elizaei and Fakhari (2015), in a research on the impact of corporate social responsibility on corporate financial performance. During this research, we concluded that there is a positive and significant relationship between corporate social responsibility and corporate financial performance.

- Arab Salehi et al. (2013) investigated the relationship between social responsibility and the financial performance of companies admitted to the Tehran Stock Exchange. The results of the research show that financial performance is related to the corporate social responsibility of customers and institutions in the society. But financial performance does not have a meaningful relationship with the corporate social responsibility of employees and the environment. This research will help managers develop effective corporate social responsibility policies that are needed to achieve their better financial performance in the long run. It also provides insights for companies on the role of social responsibility in acquiring future benefits.

- Fodio Oba (2012) found that there was a positive correlation between corporate social responsibility and corporate financial performance by reviewing 38 financial services companies listed on the Nigerian Stock Exchange for the period 2004-2008. The results of the research showed that corporate social responsibility has a significant impact on the market value of companies and improves the market value of companies.

- After examining the performance of Malaysian Islamic banks, Arshad and Othman (2012) found that there is a positive correlation between corporate social responsibility and financial performance of companies. They also found that corporate social responsibility was positively associated with ROA and ROE.

- In a study by Brayan and others (2007) in Australia, there is no significant relationship between corporate social responsibility and financial performance, but the corporate social responsibility variable is considered to be a two-valued variable. If an organization provides a report on its social performance, the value of one and otherwise is set to zero. Also, for measuring financial performance, accounting metrics such as return on assets, return on sales, and return on equity have been used. The two variables of organization size with the total sales and total assets and the risk of the organization, with the ratio of long-term debt ratios to total assets, are control variables.

According to the stated issues, the main issue of the present research is that:

"Does social responsibility of companies effect on financial performance of construction, architecture and industrial companies in the municipality of Mazandaran province?"

2.1 Research Hypotheses

The main hypothesis

Social responsibility has a significant effect on financial performance of companies.

Sub-hypotheses

- 1- Social responsibility has a significant effect on the return on assets of companies.
- 2- Social responsibility has a significant effect on the return on equity of companies.
- 3- Social responsibility has a significant effect on the profits of each company share.

3. Research Method

The methodology of this study is correlation between nature and content, which uses data extracted from the financial statements of construction, architecture and industrial companies in the municipalities of Mazandaran province to analyze the relationship between research variables. The research is considered as an applied and descriptive method.

Society and statistical sample

The statistical population of this research is all construction, architecture and industrial companies in the municipalities of Mazandaran province that have been operating during 2013 to 2017. To determine the appropriate sample size of this society, 50 companies were studied.

Method of data collection

In this research, a library method has been used to collect data and information. Also, theoretical foundations of the research have been collected from Persian and Latin specialized books and journals.

Variables

The variables of the research include dependent, independent and controlling variables.

Dependent variables

$CFP_{i,t}$ = Represents the financial performance of company i in year t, which is computed from return on assets (ROA), return on equity (ROE) and earnings per share (EPS).

Independent variable

$CSP_{i,t}$ = The social responsibility of the company is measured by the standards that the American institution known as the KLD, which ranked organizations on an annual basis, based on social and environmental criteria. Social responsibility in this research has four dimensions, each dimension has its own strengths and weaknesses. By distinguishing the strengths from the relevant weaknesses, the score of that dimension is obtained. Ultimately, with the sum of all the above dimensions, a general score for social responsibility will be achieved. It should be noted that if there is any weakness or strength point, then the number 1 and, in the absence of them, will be zero.

Control variables

$Risk_{i,t}$ = Represents the risk of company i in year t, which is calculated from the total debt ratio to total company assets.

$FirmSize_{i,t}$ = Reagents for i in year t, which derives from the natural logarithm of the total assets of the company.

Research model

In this research, according to Chetty et al. (2015), to test the hypotheses, the following regression model is used:

$$CFP_{i,t} = \beta_0 + \beta_1CSP_{i,t} + \beta_2FirmSize_{i,t} + \beta_3Risk_{i,t} + \epsilon$$

4. Findings

In this section, the research findings are reported. The findings should be in line with the table, chart, form and presentation of figures and figures in Persian, as well as description and analysis of the data. A summary of the status of the descriptive statistics relating to the variables of the model is presented in Table 1.

Table 1: Descriptive statistics of research variables

Variable	Symbol	Average	Middle	Max	Min	Standard deviation	Skidding	Elongation
Earnings per share	EPS	0.005	0.002	0.263	-0.058	0.014	0.580	2.687
Return on equity	ROE	0.612	0.385	16.630	0	1.572	0.380	3.055
Return on assets	ROA	0.393	0.220	5.130	-0.640	0.625	0.050	2.581
Corporate Social Responsibility	CSR	0.450	0.500	1	0	0.195	0.172	2.556
Firm size	SIZE	14.163	13.890	19.110	10.500	1.538	0.855	3.726
Company risk	RISK	0.600	0.595	2.077	0.072	0.240	0.332	3.252

According to the indicators presented in Table 1, the average profit per share is 0.005 and the return on equity and corporate returns are 0.612 and 0.393, respectively. The corporate social responsibility of the company is on average 0.450, the average size of their company is 14.163, and the company's risk is finally calculated to be 0.600. Also, in the case of skidding and elongation indices, it should also be noted that the proximity of the data to the zero number and the proximity of the elongation values to 3 indicates the normal distribution of the experimental data. According to the estimation of these indices for the research variables, it is seen that the values of skidding are small and the elongation values are close to 3, and it can be inferred that the data of the research were normal.

5. Test Results and Discussion

Before estimating the regression model, the diagnostic tests were performed to determine the significance of the cross-sectional effects of the model. Table 2 shows the findings for these tests.

Table 2: Results of diagnostic tests in the diagnosis of cross-sectional effects of the model

Model	Test	Statistic	Df	Prob
Return on assets	Chow Test	1.515747	(551, 45)	0.0423
	Hausman Test	6.021452	3	0.1106
Return on equity	Chow Test	51.97560	(551, 46)	0.0000
	Hausman Test	7.854254	3	0.0491
Earnings per share	Chow Test	9.631824	(551, 45)	0.0000
	Hausman Test	5.033887	3	0.1693

Considering the significance level of the Chow test to determine the significance of cross-sectional effects in the regression model of the research, which is less than the type-1 error of 0.05, the zero hypothesis of this test is based on the lack of significance of cross-sectional effects in the research model for the above models and it can be accepted that the regression model of this section should be estimated using panel data method. Also, the significance level of the Hausman test for determining the fixed or random effects of the cross-sectional effects on the returns of assets and profits of each share is also greater than the type-1 error of 0.05, which demonstrates the confirmation of the zero hypothesis in this test, based on the randomness of cross-sectional effects in the research model and for the equity return model, less than the type-1 error of 0.05, which indicates that the zero assumption in this test is based on the randomness of the cross-sectional effects in the research model. Therefore, regression models (return on assets and earnings per share) of research are estimated using panel data with random effects. The method of panel data with constant effects is also estimated for the equity return model. In this section, the model for model estimation is firstly determined and then the model of the research is estimated and the results are interpreted. As a result of fitting the model, the results of the research hypotheses are presented.

Test results of the first hypothesis

Considering the significance level obtained for measuring the effect of social responsibility on the earnings of each company share and its comparison with the type-1 error of 0.05, it can be seen that social responsibility has a direct and significant effect on the profits of each company's share. Hence, social responsibility will increase the profits of each company's share, and the first hypothesis of the research will be approved at the error level of 0.05.

Table 3: Estimates of the EPS regression model

Independent variable	Beta	std.	t-stat	prob.	VIF
C	0.040700	0.002466	16.50523	0.0000	-
CSR	0.001938	0.000509	3.809761	0.0002	1.001700
SIZE	-0.002530	0.000169	-15.01305	0.0000	1.002179
RISK	0.001956	0.000619	3.157764	0.0017	1.000489
Adjusted R-squared	0.861268				
F-statistic	31.48088				
Prob(F-statistic)	0.000000				

The results of the goodness-fit tests of the first model

Based on the indicators of goodness, the fit of the model shows that the level of significance of the F-statistic of variance analysis is less than that of the type-1 error of 0.05 and indicates the significance of the regression model. Also, the correction coefficient of the model also shows that 86.12% of the changes in the profit of each share of the company are explained by independent variables of this model.

Test results of the second hypothesis

Considering the significance level obtained for measuring the effect of social responsibility on the return on the assets of the companies and comparing it with the first type-1 error of 0.05, it can be seen that social responsibility has a direct and significant effect on the return on the assets of the companies. Therefore, social responsibility will increase the return on the assets of the companies, and the second hypothesis of the research will be approved at a level of 0.05.

Table 4: Results of the estimation of the regression model of the ROA research model

Independent variable	Beta	std.	t-stat	prob.	VIF
C	1.037519	0.299072	3.469133	0.0006	-
CSR	0.108365	0.030214	3.586525	0.0004	1.001700
SIZE	0.002465	0.020957	0.117626	0.9064	1.002179
RISK	-1.211516	0.064255	-18.85484	0.0000	1.000489
Adjusted R-squared	0.879127				
F-statistic	36.71012				
Prob(F-statistic)	0.000000				

The results of the goodness-fit tests of the second model

Based on the indicators of goodness, the fit of the model shows that the level of significance of the F-statistic of variance analysis is less than that of the type-1 error of 0.05 and indicates the significance of the regression model. Also, the correction coefficient of the model also shows that 87.91 percent of the changes in the return on assets of the companies are explained by independent variables of this model.

Table 5: Results of the estimation of the regression model of the ROE model research

Independent variable	Beta	std.	t-stat	prob.	VIF
C	1.130011	0.116322	9.714499	0.0000	-
CSR	0.050168	0.028964	1.732098	0.0839	1.001700
SIZE	-0.031735	0.010369	-3.060452	0.0023	1.002179
RISK	-0.151542	0.094431	-1.604791	0.1092	1.000489
Adjusted R-squared	0.829374				
F-statistic	24.86566				
Prob(F-statistic)	0.000000				

Test results of the third hypothesis

Considering the significance level obtained for measuring the effect of social responsibility on the return on equity of the companies and comparing it with the first type-1 error of 0.05, it can be seen that social responsibility has no significant effect on the return on equity of the companies. Hence, social responsibility will not reduce or increase the return on equity of the companies, and the research hypothesis is rejected at the error level of 0.05.

The results of the goodness-fit tests of the third model

Based on the indicators of goodness, the fit of the model shows that the level of significance of the F-statistic of variance analysis is less than that of the type-1 error of 0.05 and indicates the significance of the regression model. Also, the correction coefficient of the model also shows that 82.93 percent of the changes in equity returns are explained by the independent variables of this model. The VIF index values, which are calculated for the measurement of the heterogeneity between the independent variables of the study, are less than the critical value of 10, which indicates that there is no strong coherence among the independent variables of the research, and therefore, we can conclude that the accuracy of the coefficients of the independent variables in the research model is not influenced by the internal relations of the independent variables.

Table 6: Test results of initial regression hypothesis

Model	Test	statistic	Df	prob.
Return on assets	Durbin-Watson	1.861755	-	-
	Breusch-Pagan	0.295670	(3,596)	0.9431

Return on equity	Durbin-Watson	1.735603	-	-
	Breusch-Pagan	0.857147	(3,596)	0.4631
Earnings per share	Durbin-Watson	1.835518	-	-
	Breusch-Pagan	1.396073	(3,596)	0.2430

The results of the estimation of the Durbin-Watson statistics in order to confirm the independence of the components of the error show the estimation of these statistics with values of 2.029. Since this value is close to the experimental value of 2, we can assume the independence of the components of the error. The Breusch-Pagan test was also performed to confirm the consistency of the variance of the model error components. The significance level of this test is equal to 0.9560, which confirms the consistency of the variance of the model component errors. Therefore, it can be assumed that the initial assumptions of regression are established and the model results can be cited in determining the effects.

The research findings showed that there is a significant relationship between corporate social responsibility and financial performance of companies. Therefore, the first and third hypotheses of the research were approved. The present research is carried out by researchers such as Vahidi Elizaee and Fakhari (2015), Arab Salehi et al. (2013), Spisser (1978), Vodak and Graves (1997), Bryan and others (2007), Stradivanet and Ginter (1977), Akpinar et al. (2008).

Suggestions

Whatever the research, though comprehensively, is, due to certain material and material constraints, both temporally and temporally, cannot cover all aspects of the subject and deal with it in different ways. This research has not been an exception to this, so for some research in line with this topic as well as its development, the following suggestions will be presented for further research and future researchers:

- ❖ Considering that corporate social responsibility is related to the financial performance of companies, it is suggested that companies focus on strengthening corporate social responsibility dimensions.
- ❖ This research can be considered as a suitable model for future research. For example, in future research, the company's financial performance interface can be viewed with other dimensions of social responsibility. Other criteria of financial performance can also be used to measure its relationship with social responsibility.
- ❖ It is suggested that researchers, by examining internal and external research, examine the impact of corporate social responsibility on the financial performance of companies admitted to the Tehran Stock Exchange in a specific industry, in this way, the impact of the industry type on the amount of investment by companies will be identified according to the desired criteria.

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