

An Empirical Study: the effect of Social Responsibility of Company on Market Risk

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Abstract

This current research has done with purpose of investigating the Relationship between Social Responsibility of Company on Market Risk in Corporations of Accepted in Tehran Stock Exchange. 96 companies of accepted in Tehran stock exchange have been analysed during 2011 to 2017 in order to perform research. Analysis witness based on tableau or panel data and indicated there is significant and negative relationship between social responsibility of Company and market risk and also, in companies with high risk, disclosure of social responsibility reduced risk.

Keywords: Social Responsibility, Market Risk, Reduced Risk, Company Responsibility

Introduction

Social responsibility of companies and its disclosures is necessary factor which results to continuation of companies, because all companies communicate with society, thus, society survives companies in long term. Society enjoys activities and behaviour of companies. Extension of companies responsibility is realized that company's responsibility was exceeded from what was seen in past that means preparation money for shareholders. The companies shall be responded against beneficiaries (shareholders, customers, staff, goods offers, law makers, environment and society). Thus, the companies shall responsible against economic problems as well social problems. Therefore, as for importance of responsibility of companies and its pertinent disclosures, financial reports shall be provided carefully (Bahar Moghaddam et al., 2017).

Nowadays, academic community was interested in social responsibility of companies more. Significant portion of witness pointed to research on business and questions like kind of responsibility CSR and manner of decision on company. Thus, this is fact social responsibility of companies was increased in accounting researches significantly. In this research has done to investigate the Relationship between Social Responsibility on Market Risk.

Research Problem

Wave of financial scandal and collapse of companies and great institutes like Enron, Arthur Anderson and World Com shows witnesses from illegal commercial strategies and non-responsibility from social point of view. Also, globalization increased power of companies and companies confront with increment of pressure from society to have vast insight about their aims and activities in social and environmental dimensions (Hasa Yeganeh and Brazegar, 2016). Organization shall be part from society and responsible against society and try to restore social welfare as independently (Forughi, et al. 2016). As well different theories in relation to social responsibility, there are many theories about economic, social and bioenvironmental information. The start point of the theories is lacking symmetry of information between different beneficiaries which act in terms of personal benefits (Cormier, et al., 2005). High transparency of information is reduced between companies and investors and risk (Serafeim et al., 2015). If a company cannot obtain yield as capital (Osmani, 2012), in other side, social activities of companies reduce its merit and from this point of view, reduce company risk and its costs. Thus, discussion relationship between social responsibility and company risk help managers to understand effect of investment in social responsibility for financial costs and as result, have important outcomes for strategic planners. In fact, rate of yield can be as channel in which capital markets encourage companies to more responsibility (Mishra et al., 2017). Discussion of the relationship in Iranian capital market can help investors to take economic decisions. One of the problems in estimating social responsibility is non-qualitative and quantitative and use of qualitative model can offer transparent and suitable information compared with accounting information to researchers. In this research has done to investigate the Relationship between Social Responsibility of Company on Market Risk in Corporations of Accepted in Tehran Stock Exchange. In other word, the aim of research in to answer the question that can disclosure of social information be effective on reduction of market risk or not?

Research Objectives

Main Objective:

To determine the relationship between social responsibility of companies and market risk

Research Minor Objectives:

- 1-To determine the Relationship between Social Responsibility of Company on high Risk
- 2-To To identify the Relationship between Social Responsibility of Company on low Risk

Research Hypotheses:

Main Hypothesis:

There is the significant Relationship between Social Responsibility of Company on Market Risk

Minor Hypotheses

There is the significant Relationship between Social Responsibility of Company on high Risk

There is the significant Relationship between Social Responsibility of Company on low Risk

Research Background

Nguyen (2017) in research named company responsibility concluded that CSR has the highest risk for shareholders. The most important dimensions including variety and staff relationships. This result showed short term concentration is due to financial motivation and can companies sacrifice against risk and increase long term commitments. The most important result indicated that strength of CSR is with slight risk. Variety and staff relationships are the most important dimensions of CSR. This relationship compares claims of staff and shareholders. This company exposes low risk by suitable behaviour.

Saverio and et al., (2015) in research named reporting social responsibility and interest management discussed effect of reporting social responsibility on real interest management in terms of accruals and concluded that inclination to social responsibility reporting can reduce real management.

Jiang and et al., (2015) announced that company can reduce interest management by CSR methods and provide high quality financial reports also, the results showed that influence on governance structure of company by its intermediary effects.

Salewski and Zülch (2016) in their research named development disclosure of social responsibility of company doesn't increase social responsibility and negate interest quality.

Also, they announced that there is positive relationship between social responsibility with conservative and quality of accruals with interest management.

Servaes and Tamayo (2013) announced that social responsibility has positive relationship in companies where aware of customers is high and it is low for companies with low awareness.

Jim and Scot (2016) in research discussed relationship of auditor speciality in industry. The results indicated that social responsibility is high in companies where perform by advertisement and there is positive relationship between companies where perform propaganda and the relationship is negative and weak for others. Also, results indicated that effect of awareness on social responsibility is negative in companies which have low famous.

Sjoltenz and Chayeng Kang (2017) in article named company responsibility and interest management from Asia economy and protect investor in 139 companies in 10 Asian countries and the hypothesis was that there is converse relationship between social responsibility and interest management. The results the companies with good social responsibility are interested in reduction of interest management and there is negative relationship between social responsibility and it reduced interest management by Asian companies and depends on legal system.

Arshad and Razak (2011) in research named disclosure social responsibility of companies and interactive effect of governance structure on company, discussed disclosure of social responsibility and financial performance of Malaysian companies. In this research, 242 Malaysian companies were collected during 2006 to 2015. The results showed that disclosure social responsibility influenced on success and result to financial performance significantly also, governance structure can restore activities of social responsibility.

Hajjiha and Sarafraz (2017) in study named discuss relationship between social responsibility of companies and cost of salary of owners in companies of accepted in Tehran stock exchange concluded that social responsibility has converse and significant relationship with cost of owners. Thus, managers reduce rate of yield by disclosure social performance and offer low financial cost for company. In other word, information for company responsibility has information content.

Jalili and Gheysari (2016) discussed relationship of social responsibility and quality interest by four models and the results explained that in optional accruals and non-production model, there is insignificant relationship between social responsibility and interest management. But in another model, there is significant relationship between social responsibility and interest quality.

Nourizadeh (2016) in research named relationship between social responsibility and quality reporting concluded that there is negative relationship between social responsibility and conservative.

Khajavi and et al (2011) discussed relationship between interest management and social responsibility and announced that there is negative relationship between social responsibility and interest management.

Zabih Manesh (2012) discussed relationship between intellectual capital and its parts including capital efficiency (efficiency of human capital and structure capital) and disclosure social responsibility. The results showed that intellectual capital has not significant relationship with disclosure of social responsibility. One of the parts that mean capital efficiency influences on social responsibility of companies. Whereas, two parts like intellectual capital and structure capital did not influence on social

responsibility. The results proved that deduction of social responsibility is not on step in which companies can perform social responsibility voluntarily.

Conceptual Model

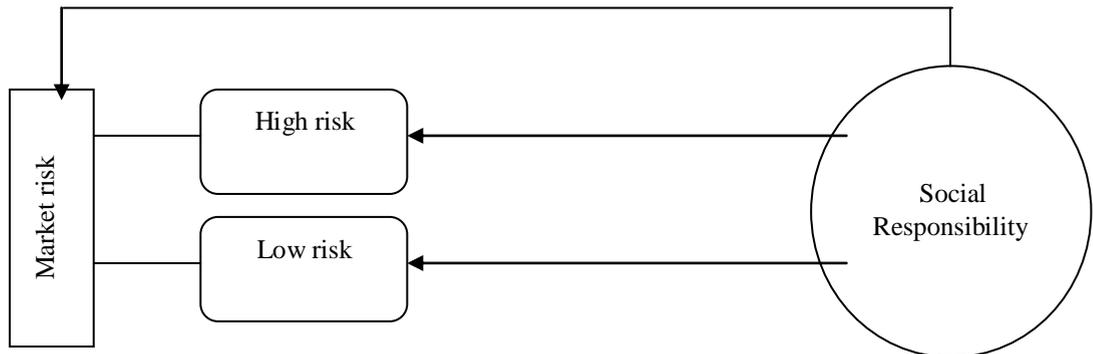


Figure 1. Research Model (Nguyen, 2015)

Research Methodology

This research is correlative and its methodology is semi-experimental and on the accounting research which is done by real information, this research is applied from nature and aims, since it is regarded as suitable tool for accountants and potential shareholders. The current research in terms of purpose is applied research and in terms of method is descriptive – correlational research.

Statistical Population and Sample

Statistical Population in this study is all Corporations of Accepted in Tehran Stock Exchange. Because of vast statistical sample and its difficulties and some of inconsistency between members in relation with data required, the following conditions are selected and statistical sample was selected by systematic deletion method. The statistical society is all companies which were accepted from early 2011 in Stock Exchange to end of 2017 and have four specifications:

Because of nature and different classification of financial statements, investment companies don't discuss in this research compared with production, investment, insurance companies and banks.

Because of necessity of research variables and do perform hypothesis, information required are available.

To observe comparative, their financial period ended to March

During years of research, operational pause shall not be up 6 months.

By consideration of above conditions, 96 companies are selected by systematic deletion method.

Model of Hypotheses Testing

Main Hypothesis: There is significant Relationship between Social Responsibility of Company on Market Risk

$$Risk_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 Size_{i,t} + \beta_3 Levi_{i,t} + \beta_4 Mbvi_{i,t} + \epsilon_{it}$$

The First Minor Hypothesis: There is the significant Relationship between Social Responsibility of Company on high Risk

$$Higher Risk_{i,t} = \beta_0 + \beta_1 CSR_{i,t} + \beta_2 Size_{i,t} + \beta_3 Levi_{i,t} + \beta_4 Mbvi_{i,t} + \epsilon_{it}$$

The Second Minor Hypothesis: There is the significant Relationship between Social Responsibility of Company on low Risk

$$\text{Lower Risk}_{i,t} = \beta_0 + \beta_1 \text{CSR}_{i,t} + \beta_2 \text{Size}_{i,t} + \text{Lev}_{i,t} + \text{Mbvi}_{i,t} \quad \varepsilon_{it}$$

Test of Main Hypothesis

In order to estimate model, combined data model was used which is considered by combined data and it is as combined, fixed effect and random model and we can estimate model by consideration of hypothesis.

The model is as follows:

Main Hypothesis: There is significant Relationship between Social Responsibility of Company on Market Risk

$$\text{Risk}_{i,t} = \beta_0 + \beta_1 \text{CSR}_{i,t} + \beta_2 \text{Size}_{i,t} + \text{Lev}_{i,t} + \text{Mbvi}_{i,t} \quad \varepsilon_{it}$$

Step of Selection Model

In first step, Chow and Hausman test was discussed to recognize that model is as combined or fixed and random effect.

As said before, in Chow test, H0 means combined data which is used least square to estimate model and rejection of H0 hypothesis means fixed effects which used least Normal Square by virtual variables.

Table 1, results of Chow and Hausman test to select model

Kind of test	Statistics	Significant level	Result
Chow test	3/780	0/0000	Confirmation of fixed effects against combined data
Hausman test	1/1539	0/0076	Confirmation of fixed effects against random effect

Results obtained Chow test in table (1) show rejection of H0 and fixed effects for model. On the order hand to select between fixed model and random model, Hausman test has been used. According to Hausman test, H0 means fixed effects and rejection of random effects. According to results of table 1, H0 is rejected and final model is with fixed effects. It is worth to say that in estimating of fixed effects, cross sectional doesn't change during time.

Results of Estimation and Test of Main Hypothesis

The last step is assigned to model estimation which is reported from estimating fixed model.

Table 2, results of estimation model for main hypothesis

Test of combine data			Explanatory variable
P – value	T Statistics	Coefficient	
0/001	-3/181	-0/232	CSR
0/002	3/041	0/317	SIZE
0/096	-1/666	-0/300	LEV
0/939	-0/075	-0/0007	MB
4/423			F Statistics
0/0000			P-value
0/535			R2
0/414			R2 modified
2/43			Durbin-Watson Statistics

As indicated by table (2) explanatory variable of social responsibility has negative relationship and it is significant in level 5% which indicates that social relationship has negative effect on market risk. Then it can be said that main hypothesis in this study is included as follow:

“There is the significant Relationship between Social Responsibility of Company on Market Risk” is confirmed.

Also, control variables that mean company size is evaluated positive which is significant in level 5%. But variables of financial leverage are accepted in level 5%.

It is worth to say that as for estimations, F statistics indicate total significant of regression. In model discussed, R2-0/51 proved that 515 of changes depend on independent variables and as for Durbin-Watson test is 2/01, it can be said that there is not first self-correlation between patterns.

Test of First Minor Hypothesis

Manner of operation of regression is in high and low risk is that because of lacking panel data by cross sectional data method.

First minor-hypothesis states that:

There is the significant Relationship between Social Responsibility of Company on high Risk

$$\text{Higher Risk}_{i,t} = \beta_0 + \beta_1 \text{CSR}_{i,t} + \beta_2 \text{Size}_{i,t} + \beta_3 \text{Levi}_{i,t} + \beta_4 \text{Mbvi}_{i,t} + \varepsilon_{it}$$

Table 3, results of estimation model for first minor-hypothesis

Explanatory Variable	High Risk		
	Coefficient	T statistics	p-value
CSR	-0/387	-3/132	0/0018
SIZE	1/518	2/282	0/025

LEV	0/015	0/969	0/333
MB	0/0002	0/285	0/775
F statistics	25/09		
Significant level (Prob)	(0/000)		
Durbin-Watson Test	1/67		
Serial Self-Correlation Test (Breusch-Godfrey Test)	529/728		
Significant level	(0/000)		
Inconsistency Test (White H)	2/522		
Significant level (Prob)	(0/0005)		
Determination Coefficient (R2)	0/681		
Adjusted determination coefficient (AdjR2)	0/671		

As for results obtained first minor-hypothesis which are on table (3), in cross sectional data method, firstly, variance inconsistency and serial correlation method was discussed and proved that variance inconsistency method (white test) proved variance inconsistency and results of Lagrange coefficient (x2 test Breusch Godfrey) indicated that serial self-correlation is on regression model. Thus, in this step, model has used after removing variance inconsistency and serial self-correlation.

Durbin-Watson statistics are between 1/5 and 2/5 which show that correlation between parts of error is not. Significant level of F statistics (0/000) is lower than error level (5%) and total regression model is significant. Adjusted determination coefficient indicated that independent and control variables are determined dependent coefficient in level 68/1% of changes. According to be low of T statistics probability level for social responsibility coefficient from error level for acceptance (5%) there is negative and significant relationship between social responsibility and low risk has been used. Also, the research results indicate that control variables coefficient of model, it means that company size are evaluated as positive which it is significant in level 5% in terms of statistics. But variables of financial leverage and rate of market value to book value (P/B) is not significant in terms of statistics.

Test of Second Minor Hypothesis

Second minor-hypothesis states that:

There is the significant Relationship between Social Responsibility of Company on low Risk

$$\text{Lower Risk } i,t = \beta_0 + \beta_1 \text{ CSR } i,t + \beta_2 \text{ Size } i,t + \text{Lev}_t + \text{Mbvi}_t + \varepsilon_{it}$$

Table 4: results of estimation model for second minor-hypothesis

Explanatory Variable	Low Risk		
	Coefficient	T statistics	p-value
CSR	-0/178	-2/067	0/047
SIZE	0/341	2/516	0/013
LEV	0/024	0/357	0/721
MB	0/0001	0/050	0/959
F statistics	95/91		
Significant level (Prob)	(0/000)		
Durbin-Watson Test	1/87		
Serial Self-Correlation Test (Breusch-Godfrey Test)	2437/90		
Significant level	(0/000)		
Inconsistency Test (White H)	0/533		
Significant level (Prob)	(0/911)		
Determination Coefficient (R2)	0/462		
Adjusted determination coefficient (AdjR2)	0/455		

According to the results obtained the second minor-hypothesis which are on table (4), in cross sectional data method, firstly, variance inconsistency and Serial Self-Correlation model is discussed that it was proved that results of variance inconsistency test (white test) show that there is not variance inconsistency. Also results of Lagrange coefficient (x2 test Breusch Godfrey) show that there is serial self-correlation is on regression model. Thus, in this step, by estimating the model is used after removing serial self-correlation in regression model. Durbin-Watson statistics between 1/5 and 2/5 is located which show that there isn't correlation between parts of error of models. Significant level of F statistics (0/000) is lower than error level of acceptance (5%) and total model of regression is significant. Adjusted determination coefficient also indicate that independent and control variables are arrived on dependent variable then it determine 46.2% of dependent variable changes. According to be low of T statistics probability level for social responsibility coefficient from error level for acceptance (5%) there is negative and significant relationship between social responsibility and low risk has been used. Also, the research results indicate that control variables coefficient of model, it means that company size are evaluated as positive which it is significant in level 5% in terms of statistics. But variables of financial leverage and rate of market value to book value (P/B) is not significant in terms of statistics.

Results of Hypothesis Test

Main Hypothesis:

There is the significant Relationship between Social Responsibility of Company on Market Risk
Results of first minor-hypothesis show that there is significant relationship between social responsibility and market risk in confidence level 95% and this hypothesis is confirmed and as for it, the relationship is convers and it can be stated that by increment social responsibility, market risk is reduced.

First Minor Hypothesis:

There is the significant Relationship between Social Responsibility of Company on high Risk
Explanatory variable coefficient of social responsibility has negative relationship with high risk and this relation is significant in level 5% which shows negative and significant relationship between social responsibility and high risk that means by increase social responsibility, high risk is reduced.

Second Minor Hypothesis:

There is the significant Relationship between Social Responsibility of Company on low Risk
Results of second minor-hypothesis show that in 95 % confidence level there is significant relationship between social responsibility and low risk and this hypothesis is confirmed . According to this coefficient, the relationship is convers and it can be stated that by increment social responsibility, low risk of companies is reduced.

Discussion and Conclusion

Social responsibility concept was under influenced by social, political and commercial developments and under globalization and vast communication and changes on laws. Insight and model of management for modern organizations is to identify changes and remove information needs for different shareholders with continuation supervision and dynamic strategy. Accounting profession shall identify it good and adjusts it in terms of demand and completion of company reporting shall be with stable and social responsibility.

This research has been done to investigate the Relationship between Social Responsibility of Company on Market Risk in Corporations of Accepted in Tehran Stock Exchange

Results obtained main hypothesis confirm convers and significant effect for social responsibility on market risk in error 5%. Then, one be claimed that more social responsibility, risk will be reduced which conform to results of Gopen and et al (2015). Sharfman and Fernando (2015) showed that restoration of bioenvironmental risk confronts with low cost. Elgol and et al (2011) confirmed results with KLD data. In this regard, Atig and et al (2013) proved that good CSR has good validity. The studies investors are confident the companies have low risk with high Social Responsibility of Company.

Results of first minor-hypothesis show that there is significant relationship between social responsibility and risk. But as for determination of two hypotheses, the companies have high risk, reduce disclosure of social responsibility.

Thus, discussion relationship between Social Responsibility of Company and risk helps managers to understand investment of Social Responsibility of Company on financial costs and there are important outcomes. In fact, company risk can be as channel in which capital markets encourage companies to more social responsibility. Discussion the relationship can help investors to take economic decision in Iran market.

Although, inclination to social responsibility in Iran' market and its effect on decision variables is on infant but it is predicated that it is considered as one of the important scales for decision.

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