Journal of Scientific Research and Development 2 (3): 89-92, 2015
Available online at www.jsrad.org
ISSN 1115-7569

Investigating the relation between risk management and environmental disclosure level of social responsibility of the listed companies in Tehran stock exchange

Farzaneh Valizadeh [1], Ghodratollah Barzegar [2,*]

[1]Department of Financial Management, Ayatollah Amoli Branch, Islamic Azad University, Amol, Iran
[2]Department of Accounting, University of Mazandaran, Babolsar, Iran

Abstract: The aim of the current study is to investigate the relation between risk management and disclosure level of social responsibility of the listed companies in Tehran stock exchange. All listed companies in Tehran stock exchange were selected as statistical population of the study during 2009 to 2013 which 93 firms were picked up as statistical sample based on systematic omission. To analysis the content for determining the level of firms' social responsibility based on disclosure checklist and firms' social responsibility models, Barzegar (2013) used zero and one method. Furthermore, he applied environmental uncertainty index to measure risk management variable based on Xherdan Lawres et al, (2009). EVIEWS software has been used in this research. The results indicated that there is a significant relation between risk management and disclosure level of corporate social responsibility of the listed companies in Tehran stock exchange.

Key words: Risk management; Corporate social responsibility; Disclosure

1. Introduction

Corporate social responsibility is a nature which not only companies should be accountable for their shareholders, but also be responsible for other shareholders such as creditors, retailers and most important one i.e. their customers (Bazin, 2009). CSR insists that each firm not only should follow regulations, but also should create a motivation for itself to implement social responsibility. On the other hand, social responsibility originates from the West but its deep root is in China and it's heavily root accepted by firms and regulators (Zhang, 2012). As well, Wood (1991) noted that CSR provides rules and principles for firm in relation with social responsibility. Sing and Narwal (2012) defined social responsibility in a way that managers' job would face with challenges due to rapid changes and complexities in business environment and shareholders would convince managers to be active in creating desirability in their firm which it is possible regarding firms' social responsibility. Enterprise Risk Management (ERM) is a dynamic approach toward integrated risk assessment in which organizations use them to lower risk levels (Bosman and Zoviden, 1998). After ERM is created, it enables a firm to continuously assess the risks and recognize necessary internal and external resources and stages to overcome or decrease risks (Fonstan, 2003). The main presumption of risk management is that each business unit is established to create value for its stakeholders. Risk management would able a manager to effectively run his business unit, even though there are many risks and related opportunities, hence it would enhance the capacity for creating value of a firm. During recent years, risk management has increased in financial firms; majorly due to current regulations encourage banks to enhance their risk and control management systems (Alzola, 2003). Based on the above literature, the main question is that whether risk management can impacts on disclosure level of firms' social responsibility?

2. Research background

Ahmadpour and Farmanbordar (2014) examines the relation between corporate social responsibility and earnings per share forecast error in the listed companies in Tehran stock exchange during 2011 to 2012. The obtained results indicated that there is adverse and significant relation between disclosure levels of CSR with absolute value of EPS forecast error.

Jamnez and Delkato Garcia (2012) have examined the relation between risk management and firm performance in Spanish companies during 2000 to 2005 and concluded that there is a positive association between both factors in Spanish firms.

Bekti et al, (2012) investigated the relation among corporate social responsibility and shareholders' value and reached to a conclusion that corporate social responsibility is one of the main factors of a firm's strategy in reducing conflicts between shareholders.

Zhang et al, (2013) investigated the association among corporate social responsibility and risk

* Corresponding Author.

management and found that CSR significantly impacts on risk management.

Zhang et al, (2014) examined the relation between risk management and corporate social responsibility in Chinese food companies and concluded that these firms have poor risk management and social responsibility in this situation and the public cannot correctly distinguish them from each other. They have also found that there is a relation among risk management and corporate social responsibility.

3. Research methodology

3.1. Research's hypothesis

- There is a significant relationship between risk management and disclosure level of corporate social responsibility.

3.2. Research population and statistical sample

93 companies were selected based on systematic omission method during 2009 to 2013. The firms should have the following condition:

1-They should not have changed their activities during 2009 to 2013.
2-Their fiscal year should end in 19/3/... and they shouldn't change their fiscal year during the research.
3- They should not be part of investment companies, financial intermediary such as insurance or bank.
4-They should have been listed in stock exchange before 2009.
5-Their information should be available in stock exchange.

According to the above condition, 93 firms were selected as the research's samples and were examined.

3.3. Regression model

$$CSR\_EN_{it} = \varphi_0 + \varphi_1 RISK\ MANAGEMENT_{it} + \varphi_2 SIZE_{it} + \varphi_3 AGE_{it} + \varphi_4 ROA_{it} + \varphi_5 LEVERAGE_{it} + \varepsilon_{it}$$

CSR_EN_{it}: In this research, to analysis the content for determining the level of firms' social responsibility based on disclosure checklist and firms' social responsibility models, Barzegar (2013) used zero and one method.

$RISK\ MANAGEMENT_{it}$: To measure this criterion, environmental uncertainty index is used to measure risk management variable based on Xherdan Lawres et al, (2009).

$SIZE_{it}$: Natural logarithm of book value of all assets

AGE_{it}: Number of years listed in Tehran stock exchange.

ROA_{it}: Net income to total assets ratio

$LEVERAGE_{it}$: Total debt to total assets ratio

3.4. Data analysis method

In this research, EVIEWS software is used to analyze data. Firstly, regression pretests such as Dicky-Fuller, heteroscedasticity test and fixed effects test are performed, then combined regression test (OLS or Ordinary Least Square) are done to reject/confirm the research's hypotheses.

4. Results

4.1. Examination of heteroskedasticity

To examine heteroskedasticity, Arch error terms test (LM) is performed. The obtained results are as Table 1.

Regarding Table 1, due to the significance level of f-statistics is not significant in 5% error level, homogeneity of variance is confirmed and heteroskedasticity of error terms are rejected.

Table 1: The results of Arch heteroskedasticity test (LM)

Description	Statistics amount	Probability
F-statistic	0.926521	0.241
Obs*R-squared	1.141489	0.241

4.2. Significance test of fixed effects method

Table 2: F-Limer and Hausman test

F-Limer test			
Description	Statistics amount	Freedom degree	Probability
Cross-section F	2.036225	92	*0.008
Cross-section Chi-square	158.625849	92	*0.000
Hausman test			
Description	Statistics amount	Freedom degree	Probability
Cross-section F	7.401692	36	*0.012

* 5% error level

Regarding the results of both Table (F and Hausman), the obtained probability were less than 5% in each tests, so fixed effects method should be used in the related regression model.

4.3. Research hypothesis test

Regarding the Table 3, since Durbin-Watson statistic test value is determined among 1.5 to 2.5, lack of correlation between errors is not rejected and regression can be used. Regarding level of F-test (59.326) is significant in les than 0.01 error level, it can be concluded that combined regression model which is composed of independent, control and dependent variables is a suitable model and independent and control variables can describe CSR changes.

Table 3: Regression and model significance test

Variable	Estimated coefficients	Estimation of deviation	t-statistics	Significance level
Fixed	1.114	0.264	4.219	*0.024
Risk management	0.426	0.112	3.805	*0.035
Firm size	2.115	0.374	5.655	*0.002
Firm age	2.265	0.497	5.281	*0.009
ROA	0.491	0.134	3.664	*0.031
Financial leverage	-0.895	0.209	-4.282	*0.025
Cash holdings	1.235	0.562	2.917	0.192
Durbin-Watson	2.225			
F-statistics	59.326			
Significance level	**0.000			
Adjusted coefficient of determination	0.542			

* 5% error level, ** 1% error level

Adjusted coefficient of determination is 0.542; indicating 54.2% of all changes in dependent variables are depending on independent and control variables of this model. As well, impact coefficient. If tax avoidance is increased in a firm, the auditor tenure would be longer. Regarding significance level of t-statistics in 5% error level, the relation is significant. Therefore, there is a significant relation between tax avoidance and auditor tenure in the listed companies in Tehran stock exchange. The independent and dependent variables of the research can predict 65.3% of changes, and significance level of F-statistic indicates that the research's model is significant in 1% error level. The research's empirical model is defined as:

$$\mathrm{CSR\_EN}_{it} = 1.114 + 0.426\ \mathrm{RISK\ MANAGEMENT}_{it} + 2.115\ \mathrm{SIZE}_{it} + 2.265\ \mathrm{AGE}_{it} + 0.491\ \mathrm{ROA}_{it} - 0.895\ \mathrm{LEVERAGE}_{it} + \varepsilon_{it}$$

5. Conclusions and recommendations

The results of this research indicated that there is a significant relation between risk management and disclosure level of corporate social responsibility in Tehran stock exchange. Hence, Zhang et al, (2014) found that these firms have poor risk management and social responsibility in this situation and the public cannot correctly distinguish them from each other. They have also found that there is a relation among risk management and corporate social responsibility. Jamnez & Delkato Garcia (2012) have examined the relation between risk management and firm performance in Spanish companies during 2000 to 2005 and concluded that there is a positive association between both factors in Spanish firms. According to the obtained results, it is suggested to the firms to approach toward recognizing and assessing firms' risk in order to improve cultural aspect of firms through risk management.

References

Bas, M., Yuksel, M., Cavusoglu, T., 2007. Difficulties and barriers for implementing of HACCP and food safety systems in food businesses in Turkey. Food Cont. 18,124e130.

Becchett,L,Ciciretti,R,Hasan,I,Kobeissi,N, (2012), corporate social responsibility and shareholders' value,Journal of business research,V65,1628-1635.

Chen, T., Chang, N., 2012. The effect of CSR on enterprise risk management. In: American Accounting Association Annual Meeting and Conference on Teaching & Learning in Accounting. August 4e8, 2012. Washington DC.

Jia, C., Jukes, D., 2013. The national food safety control system of China e a systematic review. Food Cont. 32, 236e245.

Jimenez,A,Delgado- Garcia,J, (2012), Proactive management of political risk and corporate performance : The case of Spanish multinational enterprise,Internetional business review,V21,1029-1040.

Karaman, A.D., Cobanoglu, F., Tunalioglu, R., Ova, G., 2012. Barriers and benefits of the implementation of food safety management systems among the Turkish dairy industry: a case study. Food Cont. 25, 732e739.

Lam, H., Remais, J., Fung, M., Xu, L., Sun, S.S., 2013. Food supply and food safety issues in China. Lancet 381, 2044e2053.

Qiao, G., Guo, T., Klein, K.K., 2012. Melamine and other food safety and health scares in China: comparing households with and without young children. Food Cont.26, 378e386.

Wilcock, A., Ball, B., Fajumo, A., 2011. Effective implementation of food safety initiatives: managers', food safety coordinators' and production workers' perspectives. Food Cont. 22 (1), 27e33.

Zhang,D,Gao,Y,Morse,S, (2013) .corporate social responsibility and food risk management in china : a management perspective.Food cont.(in press)

Zhang,D,Jiang,Q,Ma,X,Li,B, (2014) ,Risk management and corporate social responsibility ; a case of Chinese food companies,Journal of cleaner production,V66,520-527

Eisingerich, A.B., Ghardwaj, G., March 2011. Corporate social responsibility: does social responsibility help protect a company's reputation? MIT Sloan Manage. Rev. 52, 18, 18.

Buckley, C., 21 May 2013. Rice Tainted With Cadmium is Discovered in Southern China. New York Time: Asian Pacific.