

Relationship between Company Life Cycle and Social Responsibility of Companies Listed on Tehran Stock Exchange

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ABSTRACT

The purpose of the study is to explore the relationship between company life cycle and social responsibility of companies listed on the Tehran Stock Exchange. The concept of corporate social responsibility in the last decade has become a prevalent and dominant paradigm of company administration. Big and world class companies find responsibility for the society and social environment as a part of their companies' strategy. This concept is an issue that is currently very intriguing to companies in the developed countries. The results of the research indicated that company life cycle is positively related to the participation in social responsibility activities. The life cycle constraint showed no effect on social responsibility activities.

KEYWORDS

Company life cycle, corporate social responsibility, Tehran Stock Exchange

INTRODUCTION

Today, social responsibility is a coping strategy for addressing social, environmental and sustainable development concerns. It is also referred to as compliance with social regulations and fulfillment of expectation that society have from an individual. Social responsibility is held to be a constant commitment to a moral behavior coupled with the improvement of the quality of life in people and their families as well as the improvement of society in larger scale (Iman and Jalaiyanbakhshandeh, 2010). In this research, we investigate the relationship between company life cycle and social responsibility. Company life cycle is a concept that has been introduced in various company-related areas in recent decades, and accordingly it has been used in the studies of the humanities including microeconomics,

management, accounting and finance. The main content of the studies consists in different stages of company life cycle and individual qualities of each stage, so two main axes are concerned in the literature of company life cycle; model of company life cycle stages and explaining characteristics of each stage.

THEORETICAL FOUNDATIONS

Social responsibility: considering the criteria that the American institution, known as KLD, used to measure organizations each year in social and environmental terms, the social responsibility in this research has four dimensions; economic, social, environmental and corporate governance. The economic dimension includes company's financial contributions to shareholders and creditors. The social dimension includes company's financial contributions to the government, employees and suppliers. The environmental dimension is based on two variables, the number of authorized declarations and the amount of fines in relation to environmental hazards and the dimensions of corporate governance, i.e. the size of the board and institutional ownership. Each dimension has strengths and weaknesses of their own kind. By deducting the strengths from the weaknesses, the score of that dimension is obtained. In the end, with an aggregate of the above dimensions, we obtained an overall score for social responsibility. It should be noted that in the event of any related weakness or strength, the number 1 is assigned, otherwise the number 0. The necessary data of the variables are disclosed in the report of the board, and in the present research, in order to introduce each dimension considering the nature of disclosure in Iran, the indicators social responsibility as well as ISO9001 certificate of quality management system, ISO14001 of environmental management, and OHSAS18001 occupational health and safety standard were used.

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Types of social responsibility: social responsibility can be divided into four types of responsibilities as follows (Nasr Esfahani and Faghani, 2012):

1. Responsibility toward employees
2. Responsibility toward customers
3. Responsibility toward the environment
4. Responsibility toward local associations

Firm size: larger companies hold a certain share of the sale market and due to their power they can assume a determining role in terms of price, and the size of product supply in the market under the defective market competition, or other researchers believe that companies with more sale rate (large companies) make more profit compared to companies with less sale (small-sized companies) (TaHERi, 2006).

Company life cycle: it is a concept that has been introduced in various company-related areas in recent decades (Pan, 2010). In the literature of company growth and development, there are two approaches namely mechanical and organic to company growth and development (Kharazmin 1992; Alavi, 2001). While company is seen as a machine lacking growth and development in the mechanical approach, it is viewed as a living entity endowed with growth and development in the organic approach. Based on the organic approach, Garner (1965) hold that company has its own unique life cycle. Moreover, all living beings including plants and human beings all follow a life cycle or life curve. Such beings are born, grow and age and eventually die. The living systems follow particular behavior models in order to combat the problems of their period and the problems of transition from one period to another. The theory of company life cycle holds that companies and economic enterprises are born, grow and die just like all living beings and follow a life cycle or curve (Adizes, 1989).

As with living beings, the growth and aging of business units are demonstrated by their ability to control and flexibility. When they are young (growing stage), organizations are very agile, and at the same time uncontrollable. As organizations grow older, relationships change; control grows and flexibility decreases. In the end, with aging (decline period), the ability to control will diminish. When a business unit has the ability to control and be agile, this means that it has the advantages of being youth and older at the same time. This situation is known as the stage of maturity.

Phases of company life cycle: researchers outlined four phases of company life cycle as follows;

1. Birth or emergence stage
2. Growth stage
3. Maturity stage
4. Decline or slack stage

RESEARCH BACKGROUND

Shirzapour et al. (2016) studied the effect of environmental management system on firm value. The research was conducted in companies listed on the Tehran Stock Exchange during 2008-2013. To perform analysis, Eviews and panel data model were used. The results

indicated that there is a positive and direct relationship between ISO certificate and firm value.

Namakonzi et al. (2014) investigated environmental management accounting and environmental management in manufacturing industries in Uganda. The results of the study indicated that the completion of the companies is triggered by explanation, division, identification, classification, measurement and control of environmental protection costs. Similarly, this has its root in the lack of access to the techniques of environmental management, unawareness, and inadequate training, and low rules.

Bennett and Mabbett (2009) wrote an article titled "reduce your costs with environmental management accounting". The article was written in liaison with different ideas of accounting and environmental associations including official accounting committee, management accounting association, environmental agency, environmental management accounting network regarding the effect of environmental management accounting on the cost of products and its reduction.

RESEARCH METHODOLOGY

The present research is an applied study by purpose and a descriptive research by method, and a correlational-type research in the category of descriptive studies. Moreover, given the lack of the access to control for all irrelevant variables and the use of historical information for hypothesis test, the research is a quasi-experimental-ex post facto research by data collection. In such designs, data are obtained from an environment that exists naturally or from a fact occurred without direct intervention by researcher.

RESEARCH HYPOTHESIS

Hypothesis 1: company life cycle is positively linked to participation in CSR activities.

THE SCOPE OF THE RESEARCH

The scope of the research includes three different dimensions as follows;

A) Thematic scope:

To investigate the relation between company life cycle and social responsibility of companies listed on the Tehran Stock Exchange

B) Geographic scope:

The geographic scope of the research is Tehran Stock Exchange.

C) Time scope:

The time scope of the research is from 2008 to 2016.

STATISTICAL POPULATION AND SAMPLE

The statistical population of the research consisted of all companies listed on the Tehran Stock Exchange during 2008-2016. The sample of the research is the companies listed on the stock exchange, which are chosen by screening and with regard to the following constraints:

1. The sample experiences no change in the fiscal year, i.e. the fiscal year ends on March 20. If companies have a change in the fiscal year, the data will not be

processed during the specified time interval.

2. They should have been listed on the stock exchange by 2008, and been active in the stock exchange until the research period. If they fail to be listed on the stock exchange, we cannot use their data for analysis.
3. The data required by companies for being studied and calculated in the research should be accessible in this period.
4. They should not have a trading halt more than 3 months. If they have no activity, they cannot cover our variables.
5. Financial intermediary (investment, holding, leasing, and bank) companies were excluded from the sample, due to the difference in activities and financial statements.

In the end, following a systematic removal method, 152 firms were chosen as the final sample.

DATA GATHERING AND DATA ANALYSIS

In this research, for gathering data and required data, a library method and documentary review were used, in that theoretical foundations and research literature were derived from books and specialized journals, both in Persian and English. Next, the required data were extracted for testing the research hypotheses by reviewing financial statements and explanatory notes of selected companies, board report, compact discs, visual archives and statistics of Tehran Stock Exchange, and Codal website.

Having ensured the accuracy and precision of the data, they were entered into Excel2010 spreadsheet software for the calculation of each variable, and prepared for analysis. The final analysis of the data was performed by Eviews9 econometric software.

The model for the research hypothesis test Hassan’s 2017 model:

$$CSR = \gamma_0 + \gamma_1LCS + \gamma_2SIZE + \gamma_3PM + \gamma_4SLACK + \gamma_5LEV + \gamma_6MTB + \gamma_7R\&d + \gamma_8AGE + \epsilon$$

DESCRIPTIVE STATISTIC OF RESEARCH VARIABLES

Descriptive statistic includes a set of methods used for collecting, summarizing, categorizing, and describing numerical facts. In Table 1, some concepts of descriptive statistic of variables including mean, median, minimum observation, maximum observation, and standard deviation were presented. The main indicator is mean which represents an equilibrium point and center of distribution, and a good indicator for demonstrating data centrality.

Tab.1. descriptive statistic on research variables

	Social respon sibility	Firm size	Resour ce slack	Firm age	Life cycle
mean	2.2547 23	6.0231 60	0.1490 08	19.020 47	4406380
median	2.1153 85	5.9564 16	0.1158 54	17	608982. 0
maximum	4.5000 00	8.3631 16	1.3301 77	44	3.74*10 9

minimum	1.4230 77	4.3565 04	0.0000 00	1	0.00000 0
Standard deviation	0.5372 50	0.6661 81	0.1273 66	10.529 14	2.14268 41
skewness	1.2341 64	0.7663 95	2.4047 38	0.3503 88	10.1668 9
Kurtosis	4.6076 29	3.9605 93	15.847 53	2.0442 56	130.252
Jarck-Bra test	494.59 53	183.10 58	10530. 80	80.059 48	946577. 2
probabilit y	0.0000 0	0.1021 46	0.0000 00	0.0000 00	0.00000 0

The main indicator is mean which represents an equilibrium point and center of distribution, and a good indicator for demonstrating data centrality. For instance, the mean value of social responsibility is 2.25, demonstrating that most data are centralized around the point. Generally speaking, parameters of dispersion are criteria for determining the degree of dispersion from one another or the degree of their dispersion relative to the mean. The most important parameter of dispersion is standard deviation.

F-LIMER_ HAUSMAN TEST

Given that the data of the research are panel, it is necessary, before the estimation of models, to determine estimation method, pooled or panel method. In doing so, F-Limer test was used. For observations that the probability of their tests is greater than 5%, i.e. their test statistic is less than table statistic, pooled method is used. And for observations that the probability of their test is less than 5%, panel data is used for model estimation. Panel method itself can be used by random effect model and fixed effect model. To determine which model should be used, Hausman test was used. For observations that the probability of their test is less than 5%, fixed effect model was used, and for observations that the probability of their test is greater than 5%, random effect model was used for model estimation.

To determine which model is good for estimation of panel data, F-Limer test was used. The results of the test are presented in table 2.

As seen, the results of F Limer categorically confirm the null hypothesis about the sameness of intercept in all periods. Thus, pooled data estimation method is mixed together and estimated by ordinary least square regression, because the lack of a difference in the intercepts of a model during different periods does not lead to the falsehood of a model. This practice has desirable statistical features such as the best linear estimator without bias. As reflected in Table 2, the probability of F-Limer in all three models is less than 5%. Thus, for estimation of each model, panel data is used and given the fact that the probability of Hausman test in all three models is less than 5%, fixed effect model was used for the estimation of each model.

Tab.2. Results of F-Limer test and Hausman test

result	probability	statistic	Test	model
Panel method	0.0000	2.607651	F Limer	first

Fixed effect	0.0000	213.8422	Hausman
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RESULTS OF RESEARCH HYPOTHESIS TEST

Tab.3. Result of hypothesis test

probability	t-test	Standard deviation	coefficient	Variable	Variable
0.0000	-16.41973	0.355154	-5.831533	Intercept	C
0.0467	1.991103	0.066154	0.131719	Life cycle	LLCS
0.0000	37.35195	0.061895	2.311894	Firm size	SIZE
0.0000	33.01362	0.032078	1.059000	Profitability	LPMM
0.3024	-1.031796	0.017675	-0.018237	Resource slack	LSLACK
0.0011	-3.285334	0.047982	-0.157636	Leverage	LLEV
0.4643	0.732052	0.012422	0.009093	Market ratio	LMTB
0.5010	-0.673112	0.015732	-0.010590	Research and development	LRD
0.0000	21.58317	0.059241	1.278599	Firm age	LAGE
0.0000	5.982673	0.046239	0.276631	Halt	AR(1)
			0.922082		Coefficient of determination
1.705321	Durbin Watson		0.921395		Adjusted coefficient of determination
			1342.495		F statistic
			0.000000		F statistical probability

As it is seen in the table, F statistic is significant at 99% confidence level. Thus, the research model was generally significant and independent and control variables have the power of explaining the dependent variable. The coefficient of determination checks out the goodness of regression line being fitted in accordance with a set of data; the higher the coefficient, the more power the independent variables have in explaining the behavior of dependent variable. As shown in Table 3, the value of the coefficient of determination was equal to 0.92 regarding the results of first and second research model.

According to the data of Table 3, t statistic value and P-value relative to them are 1.99 and 0.0467, respectively and

their comparison with t distribution table can be seen, where the first hypothesis is confirmed. The coefficient of this variable was also positive and its value was equal to 0.131. Thus, the first hypothesis has a positive effect.

CONCLUSION

The concept of corporate social responsibility in the last decade has turned into a predominant paradigm regarding the administration of companies, and large and world class companies find responsibility for the society and social environment to be part of their corporate strategy. The concept is an issue very intriguing currently to all companies in developed countries. Companies find corporate social responsibility to be a kind of business strategy which help them gain reputation in a highly competitive environment and their share grow in the market. Social responsibility is a set of duties and commitment that an organization must observe in order to protect and help a society where they work. Social responsibility addresses the issue that the performance of an organization, in terms of its impact on society as well as on environment, is a crucial factor in the measurement of organization’s general performance and its ability to effectively continue their work. The results of the present research indicate that company life cycle is positively linked to participation in social responsibility activities, as life cycle constraints on social responsibility activities have no effect. As a result, companies with different age and size and depending on the stage of their life cycle, behave differently towards their social responsibilities. It seem the government and law makers should adopt suitable rules and regulations in such a way that companies pay more attention to their social responsibilities.

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