Iranian Journal of Business and Economics
Volume5,Issue4,2018
http://www.scijour.com/ijbe
SCIJOUR

A Study on the Relationship between Surplus Cash Resources and Organization's Financial Resources with Social Responsibility of Companies Listed on Tehran Stock Exchange

Mehdi Valizadeh[1], Mahmoud Baghban Torgadri[2,*], Seyed Mohammad Javadi[3]

[1] MA in accounting, faculty of Management and Accounting , Varamin – Pishva Branch, Islamic Azad university, Varamin, Tehran, Iran
[2] Department of Accounting , College of Management and Accounting , Varamin – Pishva Branch, Islamic Azad university, Varamin, Tehran, Iran
[3] Department of Accounting, Tehran Faculty of Petroleum, Petroleum University of Technology

ABSTRACT

The purpose of the research is to investigate the relationship of surplus cash resources and organization's financial resources to corporate social responsibility. All of these three variables are important concepts in financial management and are vital to the life of companies as well. To conduct this study, a sample of 152 firms listed on the Tehran Stock Exchange during the years between 2008 and 2016 was selected and the collected data from their financial statements were then analyzed using the EViews econometric software. The research hypothesis was then tested. The results of the research showed that larger size and profitability cycle have had positive impacts on the social responsibility activities of the companies studied.

KEYWORDS

Surplus cash resources, financial resources, corporate social responsibility, Tehran Stock Exchange

INTRODUCTION

Today, there are a host of questions about the activities and performances of companies and organizations. Typically, the more developed and globalized and popular in world markets companies become, the more concerned they will be as they come across many problems including acquisition of global credibility, profit, power, and optimal production and productivity. There are many factors that explain why some nations are thriving better than other nations. Over the past decades, the increasing trend of industrial progress on one hand, and constraint on natural and environmental resources, on the other, have called on the attention of human society concerning environmental protection. Similarly, the growing demand for stakeholders from companies for acceptance of social responsibilities have encouraged them to get involved in environmental and social responsibilities. Thanks to globalization, companies in developing countries are willing to move toward world markers. Accordingly, to be admitted in world markets, they need to prove that they are fulfilling their environmental and social responsibilities (Jouri and Alikhani, 2013).

STATEMENT OF RESEARCH PROBLEM

Researches show that various types of corporate and industrial characteristics affect company participation in corporate social responsibilities (CSR). The financial situation of a company is a determinant of participation in CSR. Profit-making companies have necessary financial methods and surplus cash resources in order to participate in CSR. On the contrary, companies with less financial resources focus on activities that directly affect their earnings in proportion to involvement in the initiatives of CSR. Surplus cash resources show that a company has financial resources enough to benefit from the investment in CSR programs without violating the demands of economic actors. In this research, we extended the role of company life cycle as directly affecting the initiatives of CSR. However, previous studies dealt with the role of company life cycle in dividend payments, capital structure and capital cost, risk-taking and tax avoidance, with little attention to the role of company life cycle in determining CSR initiatives. Indeed, life cycle may have an impact on the investment in CSR.

*Corresponding Author: Mahmoud Baghban Torgadri
E-mail r:
Telephone Number r: Fax. Number r:

The expansion of various institutions and organizations, as well as the increasing competition between them, have led organizations to simply look at their own profits and interests in order to survive, and, in doing so, exclude no action of whatsoever. Corporate responsibility suggests coherence and consolidation between activities and values of an organization as interests of all stakeholders including shareholders, customers, employees, investors and the general public are reflected in organization's policies and performance. That is to say, organization needs to see itself as part of society and is responsible for society, attempting to improve the public welfare independently from company's direct interests.

RESEARCH BACKGROUND

- **Domestic background:**

Salehi et al. (2013), in a research titled "Relationship between social responsibility and financial performance of companies listed on the Tehran Stock Exchange" through a questionnaire with 53 items, studied social responsibility for customers, employees, the environment and institutions in society (educational institutions, cultural institutions, sport institutions, healthcare institutions of hospitals, charity institutions, rehabilitation centers, etc.,). The data of 59 companies during 2006-2010 were used. The results indicated that financial performance is associated with corporate social responsibility for customers and existing institutions in society, but financial performance is not significantly related to corporate social responsibility for employees and the environment.

Pourali and Hejami (2013) dealt with the effect of environmental performance on company's financial performance and explored the role of the mediating variable, i.e. social responsibility. The results indicated that today environmental performance and social responsibility are important factors in the evaluation of company's success, and attention to processes and products consistent with environmental and social conditions is considered a very important competitive advantage as against similar companies that simply apply conventional accounting, thereby increasing their market value. Therefore, environmental performance and the realization of social responsibility can lessen potential risks for companies, and this involves the attraction of more investors and hence increases the company's financial performance. Similarly, studies indicated that environmental performance is not directly linked to company's financial performance but it builds up company's financial performance by explaining the role of the disclosure of social responsibility.

Banimahd et al (2009) conducted a study titled "Investigating the relationship between environmental performance and financial performance". The purpose of the present research is to investigate the link between environmental performance and financial performance, as well as presenting a model during 2001-2008. The indicator of environmental performance in this research is ISO14000 certificate and financial performance indicators which include Tobin's ratio, profitability ratio and ratio of operational cash flow to total assets. The result of the research suggests that environmental performance index is not significantly linked to financial performance index, but firm size, ratio of promotion expenses to total sale, ratio of export sale to total sale, ratio of financial leverage, and ratio of sale to total sales are significantly related to financial performance. Similarly, the type of industry has an effect on the link between environmental performance and financial performance.

- **Foreign background:**

Sang (2016) studied the effect of environmental management on the improvement of financial performance in companies listed on the Chinese stock exchange during 2007-2011. The results indicated that environmental management significantly and positively affect financial performance in the coming year. Similarly, environmental management can remarkably improve future profitability. However, the results showed that environmental management cannot improve financial performance in the current year.

Salewski &Zulch(2014) investigated the relationship between corporate social responsibility disclosure and earnings quality. The result of the research indicated that the increasing trend of companies regarding the data of corporate social responsibility disclosure does not necessarily end up with an increase in earnings quality, as there is a negative relationship between the level of corporate social responsibility disclosure and earnings quality. Similarly, the results of their study indicated that corporate social responsibility, the degree of conservatism and the quality of accruals are negatively related and are positively related to earnings management.

Al-Tuwaijri et al (2004) conducted an experimental study on the effect of environmental performance and social responsibility disclosure on corporate financial performance. Using multivariate regression statistic methods, the data were analyzed and the results demonstrated that environmental performance positively and significantly affects social responsibility disclosure, as social responsibility disclosure as a mediating variable positively affects corporate financial performance.

RESEARCH METHODOLOGY

The present research is an applied research by purpose and a descriptive research by method. Among descriptive studies, it is a correlational research, because it explored the link between dependent and independent variables. Additionally, considering the lack of a control over all irrelevant variables and the use of historical data for hypothesis test, we can consider it a quasi-experimental- ex post facto research, in that a fact happened without direct intervention of the researcher.

RESEARCH HYPOTHESIS

Hypothesis 1: Greater size, greater profitability, and surplus cash resources moderate the positive relationship between company life cycle and CSR activities.

Iranian Journal of Business and Economics
Volume5,Issue4,2018
http://www.scijour.com/ijbe
SCIJOUR

SCOPE OF RESEARCH

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

Thematic scope: To investigate the relation among surplus cash resources, organization's financial resources and social responsibility of companies listed on the Tehran Stock Exchange

Geographic scope: The geographic scope of the research is Tehran Stock Exchange.

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. 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:**

Interaction between life cycle, control variables, firm size, profitability, and surplus cash resources (slack).

$$CSR = \gamma_0 + \gamma_1 LCS + \gamma_2 LCS * SIZE + \gamma_3 LCS * PM + \gamma_4 LCS * SLACK + \gamma_5 SIZE + \gamma_6 PM + \gamma_7 SLACK + \gamma_8 LEV + \gamma_9 MTB + \gamma_{10} R\&D + \gamma_{11} AGE + \in$$

- **Independent variable:**

The identification of life cycle processes based on Dickenson (2011) entails different life cycle stages. We categorize all sample companies in different life cycle stages according to the following cash turnover model:

-- If CFO<0, CFI<0 and CFF>0, then the company is in the emerging stage.

-- If CFO>0, CFI<0 and CFF>0, then the company is in the growth stage.

-- If CFO>0, CFI<0 and CFF<0, then the company is in the maturity stage.

-- If CFO<0, CFI>0 and CFF≤0 or CFF≥0, the company is in the recession stage.

CFO: cash flow of operational activities

CFI: cash flow of investment activities

CFF: cash flow of financing activities

- **Control variable:**

Tab.1.control variable

symbol	variable	calculating
SIZE	Firm size	Natural logarithm of asset
PM	profitability	Ratio of operating income to total income
SLACK	Resource slack	Cash-to-total asset ratio
LEV	leverage	Debt-to-asset ratio
MTB	Market ratio	book-to-market ratio
R&D	Research and development	Involves any creative work in a systematic manner in order to increase the accumulation of knowledge including human, cultural, and social knowledge and the use of the accumulated knowledge is in favor of new application, which is equivalent to total expenses of employee training and development of products and machinery. If companies disclose these expenses in their financial statements, they are assigned "1", otherwise "0". (Eric et al., 2013)
AGE	Firm age	The number of years that the company is active in the stock exchange

DESCRIPTIVE STATISTIC OF RESEARCH VARIABLES

Descriptive statistic includes a set of methods used for collecting, summarizing, categorizing, and describing numerical facts. In table 2, 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.2.descriptive statistic of research variables

	Social responsibility	Firm size	profitability	Resource slack	leverage	Market ratio	Research & development	Firm age	Life cycle
mean	2.254723	6.023160	0.873607	0.149008	0.648282	7198556	211758.8	19.02047	4406380
median	2.115385	5.956416	0.746418	0.115854	0.628845	17922.84	19706.00	17	608982.0
maximum	4.500000	8.363116	19.90815	1.330177	6.059275	1.10*109	29720935	44	3.74*109
minimum	1.423077	4.356504	0.000000	0.000000	0.000000	0.000000	65	1	0.000000
Standard deviation	0.537250	0.666181	1.004905	0.127366	0.346400	54837038	1237915	10.52914	2.1426841
skewness	1.234164	0.766395	12.05914	2.404738	6.736722	13.51646	15.50759	0.350388	10.16689
kurtosis	4.607629	3.960593	203.2061	15.84753	94.96354	219.6277	310.0904	2.044256	130.252
Jarck-Bra test	494.5953	183.1058	0.227550	10530.80	483414.3	.02656953	.5330953	80.05948	946577.2
probability	0.00000	0.102146	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

As can be seen in Table 1, in order to examine the normality of the variables, we look at skewness and kurtosis. If skewness is between -3 and 3, kurtosis is between -5 and 5, they are normal, otherwise non-normal. The logarithm of the data is calculated for normality. In this research, the variable firm size is normal and is derived from the rest of variables for normality of logarithm.

Tab.3.descriptive statistic of research variables after normalization

	Social responsibilit	Firm size	profitability	Resource slack	leverage	Market ratio	Research & development	Firm age	Life cycle
mean	2.254723	6.023160	-0.365306	-2.303160	-0.532201	10.06873	10.02842	4.32158	13.42018
median	2.115385	5.956416	-0.290922	-2.151797	-0.463277	9.825780	9.888678	4.34380	13.32018
maximum	4.500000	8.363116	2.991129	0.285312	1.801590	20.82102	17.20736	4.46590	19.74052
minimum	1.423077	4.356504	-5.068877	-8.248445	-5.779649	-0.656565	4.174387	3.82864	3.157000
Standard deviation	0.537250	0.666181	0.695948	1.059463	0.466531	3.108721	1.836018	0.12787	1.659676
skewness	1.234164	0.766394	-1.207657	-1.359889	-1.507382	0.680612	0.419765	-2.1646	0.165095
kurtosis	4.607629	3.960593	4.154508	3.344254	4.030103	3.934778	3.992964	2.62904	3.922149
Jarck-Bra test	494.5953	183.1058	403.8411	103.4965	115.1506	150.7659	94.61374	20.4368	492.5745
probability	0.058746	0.102146	0.062548	0.114521	0.112103	0.098745	0.130225	0.2364	0.05459

Considering the kurtosis and skewness mentioned in the descriptive table, we used normal data, because the skewness is between +3 and -3, and kurtosis is between -5 and +5. Thus, the data are normal. However, given the values of Jarck-Bra probability, which all greater than 0.05, the normality of the data is confirmed (Hir, 2006).

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.

CORRELATION COEFFICIENT TEST OF RESEARCH VARIABLE

The degree of dependence of two variables on each other is called correlation. In general, correlation coefficients vary between -1 and 1, and the relation between two variables can be either positive or negative. Correlation coefficient is a symmetric relationship; the closer to 1 a correlation coefficient is, the more the degree of dependence between

two variables will be, the dependence does not refer to a cause and effect relationship. Correlation coefficient has nothing to do with which one is cause and which one is effect. By performing correlation test, we study the initial relationship between variables. Considering the results, we can say there is a link between variables, and we can more precisely deal with the relationships.

Tab.4. Correlation coefficient test

	Social responsibility	Firm size	profitability	Resource slack	leverage	Market ratio	Research & development	Firm age	Life cycle
Social responsibility	1								
Firm size	0.039	1							
profitability	-0.003	-0.184	1						
Resource slack	0.028	0.019	0.287	1					
leverage	-0.072	0.028	0.059	-0.312	1				
Market ratio	0.03	0.85	-0.203	0.022	-0.109	1			
Research and development	0.05	0.779	0.028	0.126	-0.128	0.719	1		
Firm size	-0.002	0.058	-0.001	0.020	-0.081	0.082	-0.009	1	
Life cycle	0.98	0.034	-0.0001	0.026	-0.068	0.757	0.046	-0.005	1

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. Pooled 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 5. 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 4, 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.5. 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	

RESULTS OF RESEARCH HYPOTHESIS TEST

Tab.6. Result of hypothesis test

probability	t-test	Standard deviation	coefficient	Variable	Variable
0.0000	-6.360415	0.953752	-6.066256	intercept	C
0.0224	2.285921	0.045205	0.103336	Life cycle	LLCS
0.3337	-0.967129	1.143705	-1.106110	constraint cycle	LLSL
0.0000	27.02321	0.038731	1.46647	Greater size	LLSI
0.0356	-2.104396	0.206663	-0.434900	Firm size	SIZE
0.0014	-3.202826	0.046403	-0.148619	profitability	LPMM
0.3397	0.955108	1.143279	1.091954	Resource slack	LSLACK

0.3903	-0.859351	0.006526	-0.005608	Market ratio	LMTB
0.8902	0.138064	0.027711	0.003826	leverage	LLEV
0.0764	1.773829	1.141604	2.025011	Firm age	LAGE
0.0980	1.655732	0.009548	0.015809	Research and development	LRD
0.0000	5.693482	0.018315	0.104276	Profitability cycle	LLPM
				0.957442	Coefficient of determination
1.541641	Durbin Watson			0.957044	Adjusted coefficient of determination
				2407.207	F statistic
				0.000000	F statistical probability

As can be 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 6, the value of the coefficient of determination was equal to 0.95.

Hypothesis 1: greater size, more profitability and more surplus cash resource modifies the positive relationship between company's life cycle and CSR activities.

- t statistic value and P-value relative to life cycle are 2.28 and 0.0224.
- t statistic value and P-value relative to constraint cycle are -0.96 and 0.3337.
- t statistic value and P-value relative to greater size are 27.02 and 0.000.
- t statistic value and P-value relative to profitability cycle are 5.69 and 0.000.

In the end, we have greater size, greater profitability and more surplus cash resource that modify the positive relationship between company life cycle and CSR activities.

CONCLUSION

Corporate social responsibility has become a challenging issues for the companies over the last ten years. It is now an integral part of companies' strategy as it helps them gain reputation in such a highly competitive environment and their share grow in the market. As it is explained earlier in this paper, corporate social responsibility is linked to several managerial and financial factors and resources which affect the ultimate performance of the organization. The results of the research indicate that greater size and company's profitability cycle make a positive difference to the activities of corporate social responsibility. In other words, bigger companies get more involved with the corporate social responsibility activities.

- **Research suggestions :**

Given the results of the research hypothesis test, the researchers are recommended to investigate the relationship between the coefficients of profit reaction as a determinant on profitability of social responsibility activities.

According to the results of the research hypothesis test, the researchers are suggested to use the influential variable corporate governance concerning the activities of social responsibility.

With the results of the research hypothesis test, the researchers are advised to study financing and social responsibility activities.

REFERENCES

[1] ***Alwani, S. M., Ghasemi, A. (1998).*** *Social responsibility and management, Tehran, the Center for Government Management Education.*

[2] ***Al-Tuwaijri S.A., Christensen T.E., Hughes II K.E., (2004)****"The relations among environmental disclosure, environmental performance, and economic performance: A simultaneous equations approach",Accounting, Organizations and Society, 29, PP. 447-471.*

[3] ***Ball, R and Brown, Ph. (1968).*** *An Empirical Evaluation of Accounting Income Numbers. Journal of Accounting Research. Vol. 6, No. 2 (Autumn, 1968), PP. 159-178.*

[4] ***Drucker, P. (2000).*** *An Abridged and Revised Version of Management: Tasks, Responsibilities and Practices, Butterworth-Heinemann.*

[5] ***Hasasyeganeh, Y., Barzegar, Gh. (2014).*** *Theoretical foundations of corporate social responsibility and its research paradigm in accounting profession. Management Accounting: Fall 2014, Volume 7, issue 22; PP; 109-133.*

[6] ***Henderson, J. C. (2007)*** *corporate social responsibility and tourism: Hotel companies in Phuket, Thailand, after the Indian Ocean tsunami, Hospitality Management, 26:PP. 228–239.*

[7] ***Hediger, H. (2010).*** *Welfare and capital-theoretic foundations of corporate social responsibility and corporate sustainability, The Journal of Socio-Economics 39:PP.518–526.*

[8] ***Iman, M. and Jalalianbakhshande, V. (2010).*** *Investigating the relationship between social responsibility and social capital among youth in Shiraz. Applied sociology. 21 (37). PP: 42-19.*

[9] ***Javanrouh, S. (2007).*** *How will corporate social responsibility be realized in terms of organizational excellence model?, Journal of Automotive Industry 109, Issue 109.*

[10] ***Jalili, S. Gheisari, F. (2014).*** *Investigating the relationship between earnings quality and social responsibility of companies listed on the Tehran Stock Exchange. Audit knowledge. No. 57 PP: 172-147.*

[11] ***Nasresfehani, A. and Faghani, F. (2012).*** *Investigating the relationship between social responsibility and organizational Reputation; a case study of Irankhodro Co. First Annual Conference of Modern Management Sciences, Gorgan*

[12] ***Pourali. M. and Hejami, M. (2013).*** *Effect of environmental performance on corporate financial performance; explaining the impact of the mediating variable social responsibility disclosure. Journals of Iran's conferences. The 2nd National Conference on the Study of Strategies of Promoting Issues of Management, Accounting and Industrial Engineering in Organizations. Islamic Azad University, Gachsaran Branch.*

[13] ***Salehi Omran, E., Sabeti. A., Hassanzadeh, S. (2012).*** *Quarterly journal of Iranian Higher Education Association, Year 4th , No. 2. 35-1.*