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THE INFLUENCE OF CORPORATE SOCIAL RESPONSIBILITY ON THE RELATIONSHIP BETWEEN AGENCY COSTS OF FREE CASH FLOW AND THE SENSITIVITY OF INVESTMENT TO CASH FLOW OF THE COMPANIES LISTED ON TEHRAN STOCK EXCHANGE (TSE)

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Resumen: El presente estudio tiene como objetivo examinar la influencia de la responsabilidad social en la relación entre los costos de agencia de flujo de caja libre y la sensibilidad de la inversión al flujo de caja. Para ello, se investiga una muestra de 133 empresas cotizadas en la Bolsa de Teherán (TSE) durante 2011-2015. Los resultados de la prueba de hipótesis utilizando datos de panel muestran que en las empresas con altos costos de agencia de flujo de efectivo libre, la sensibilidad de la inversión al flujo de caja es mayor. Asimismo, la responsabilidad social corporativa (RSE) tiene un impacto negativo y significativo en la relación entre los costos de agencia de flujo de caja libre y la sensibilidad de la inversión al flujo de efectivo. En otras palabras, el apoyo a la RSE por parte de las empresas estudiadas mejora la calidad de la información y reduce los costos de agencia y por la reducción de las deficiencias del mercado de capitales a través de la reducción de la brecha entre los recursos internos y externos.

Palabras clave: Responsabilidad social corporativa, Gastos de agencia de flujo de caja libre, Sensibilidad de la inversión al flujo de caja.

Abstract: The present study is aimed to examine the influence of social responsibility on the relationship between agency costs of free cash flow and the sensitivity of investment to cash flow. To do this, a sample of 133 companies listed on Tehran Stock Exchange (TSE) during 2011-2015 is investigated. The results of hypotheses test using panel data show that in the companies with high agency costs of free cash flow, the sensitivity of investment to cash flow is higher. Also, corporate social responsibility (CSR) has a negative and significant impact on the relationship between agency costs of free cash flow and the sensitivity of investment to cash flow. In other words, supporting CSR by the studied companies improves the quality of information and reduces the agency costs and by the reduction of shortcomings of capital market via the reduction of the gap between the internal and external resources, the investment - cash flow sensitivity is reduced.

Keywords: Corporate social responsibility, Agency costs of free cash flow, Sensitivity of investment to cash flow.

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1. INTRODUCTION

Corporate social responsibility (CSR) is the unity and coherence among the activities and values of organization as the benefits of all stakeholders including shareholders, customers, employees, investment and people are reflected in the policies and performance of organization. In other words, the organization should consider itself as a part of society and be responsible to the society and make efforts to improve the public welfare as independent from the direct corporate benefits (Barzegar, 2013). The sensitivity of investment to cash flow is defined via the measurement of "The amount of changes in capital expenditures of company for one unit of change in operating cash flow". Investment - cash flow sensitivity indicates "The reliance of a firm on its internal resources" (Haghighat, 2013). The optimal investment is one of the most important duties of top managers of an organization. The lack of correct investment imposes many costs on the company. If the company invests great amounts of cash, its expenditures are also increased and this leads to considerable loss or bankruptcy under the unsuitable economic conditions. Inadequate investment reduces the competitive ability of company and the share of market of company is delegated to the competitors, also the customers are lost and sale is reduced and compensation of these items is highly costly and time-consuming. The capital development and the increase of investment efficiency is one of the important issues to solve the economic problems of the companies. Optimal investment requires the prevention of the consumption of resources in the activities in which overinvestment is performed (avoiding overinvestment) and on the other hand the resources are guided to the activities requiring investment (avoiding underinvestment). The various studies have shown that the changes of available cash flow can change (sensitivity) of investment amount as cash flow investment is considered by the managers as a cheap funding source more than other resources and this leads to overinvestment or underinvestment. Also, the theories of incomplete capital market state that the financial friction created by agency problem increases the sensitivity of capital expenditure to the internal funding fluctuations (Jensen, 1986). The agency theory predicts that overinvestment performed by the powerful managers in the organization can increase the investment - cash flow sensitivity. In other words, one of the reasons of high investment - cash flow sensitivity is regarding the agency problem (Jensen, 1986), (Stulz, 1990).

1.1. Statement of problem

The major concerns of managers of companies are dedicated to funding for long-term investment. According to Modigliani and Miller (1958), in a complete capital market, the investment of companies is independent from their financial structure and liquidity and there is no difference in funding costs from internal or external resources of company. Under such condition, the companies can fund via the capital market without having any problem regarding definite capital costs. The capital market can not be completely efficient and the companies are managed by the managers who are not owners and they have different benefits from that of the main owners of company. According to the free cash flow theory of Jensen (1986), the managers of the companies with excess free cash flow not only divided the excess free cash flow among the shareholders but also, hold it in cash or use by investment in the real assets. This overinvestment maximizes the personal benefits of the managers but the value of company is reduced (Haghighat, 2013). By considering the motivational issues including reward and supervision costs on mechanisms, the foreign investors responsible for funding the companies require high returns to compensate the costs of supervision and potential ethical problems of the control of managers. Thus, agency costs create distinction between the internal and external funding costs and the sensitivity of investment to cash flow is increased [12]. The impact of CSR on the shortcomings of market (e.g. information asymmetry and agency costs) is a channel by which CSR can lead to value creation (Attig, 2012). Indeed, CSR can reduce the frictions of market of a company and is effective on the gap between the internal and external resources costs via the reduction of information asymmetry and reduction of agency costs. The activities of CSR are effective on financial and non-financial information of the companies in the long-term. The commercial units can maximize their long-term returns via the reduction of their negative impacts on society voluntarily as today, commercial units are formed increasingly and their long-term success is actualized via the management of operation of company at the same time with creating assurance from environmental supports and the progress of CSR (Odemilhin, 2010). Zahra et al., (2005) stated that voluntarily actions of managers via earnings management can hide the real value of assets and financial condition of the company and it has negative outcomes for the stakeholders namely shareholders, employees, society, reputation of managers and their job security. CSR refers to the ethical issues about the behavior and decision making of company about some issues including human resources management, environmental

support, work health, social relations and relationship with the suppliers and customers (Castelo, 2006). The behaviors of earnings management can take the benefits of stakeholders at risk and it is expected that the managers of the companies engaged in the behaviors of earnings management consider CSR to attract the satisfaction of the stakeholders (Jennifer, 2016). The present study examines the impact of CSR on the relationship between agency costs of free cash flow and the sensitivity of investment to cash flow of the companies listed on TSE.

1.2. Review of literature

Samet (2017) in a study examined the effect of CSR on the relationship between investment-cash flow sensitivity and agency costs of free cash flow in 398 European firms listed during 2009-2014. The results showed that CSR performance weakened the sensitivity of investment to internal funds; agency costs of free cash flow mediated the negative moderating effect of CSR on investment-cash flow sensitivity. Jennifer et al., (2016) evaluated the impact of CSR on earnings management. The study results showed that CSR had a negative and significant impact on earnings management. Zeng (2016) examined the relationship of corporate social responsibility (CSR), tax aggressiveness, and firm market value in Canada stock market during 2005-2009. The results of study indicated that that the higher the CSR ranking of a firm, the less likely a firm was to engage in tax aggressiveness. It also indicated that a reputation of higher CSR would enhance firm market value. Also, taking tax aggressive policies increased the Canadian firm market value (Jennifer, 2016). Servaes and Tamayo (2013) in a study examined the impact of CSR on the firm's value. The results of study showed that that corporate social responsibility (CSR) and firm value were positively related for firms with high customer awareness, as proxied by advertising expenditures. For firms with low customer awareness, the relation was either negative or insignificant. In addition, we found that the effect of awareness on the CSR-value relation was reversed for firms with a poor prior reputation as corporate citizens (Servaes, 2013). Dagiliene (2013) in a study examined the influence of corporate responsibility (CR) reporting to listed company's value and found that the Managers of structured organizations in comparison with the other organizations had high CSR and ethics level (Dagiliene, 2013).

Ferns and Prakash (2012) analyzed trends in CR reporting by western European and North American

corporations. Their findings suggested that European companies have a higher rate of publishing social reports comparing with companies from North America. The quality of social reports varied from country to country within Western Europe, but compared to their North American counterparts, as a group Western European companies provided greater detail about issues in their social reports (Ferns, 2012).

Mishra et al., (2011) found that the companies investing on the disclosure of CSR in their reports have lower capital expenditure that the companies not performing this disclosure.

Heidarzade and Samadzade (2015) in a study evaluated the role of CSR in creating sustainable competitive advantage via the increase of intellectual capital of Saipa automotive group. Based on the results of hypotheses test regarding the direct relationship between CSR, intellectual capital and sustainable competitive advantage, we can say, the member companies of Sapipa automotive group can observe the different dimensions and principles of CSR for effective management and improving their intellectual capital and this creates distinction of the company among the other companies. Barzegar (2013) performed an extensive study as a model to disclose CSR and survival of the companies in the firms listed on Iran stock exchange market. The results of study showed that of 60 indices in this study, about 45 indices, 75% of them are not disclosed in the annual reports of the board activities of stock companies. Low level of disclosure of CSR in stock companies shows the gap between the existing conditions of the stakeholders' expectations. Arabsalehi et al., (2013) stated the results of his study as the evaluation of the relationship between CSR and financial performance of the firms listed on TSE as the financial performance of stock companies had a positive and significant relationship with the CSR to the existing customers and institutes in society but the financial performance had no significant relationship with CSR to employees and environment. Hejami (2012) in a study "The relationship between CSR disclosure and institutional ownership in the firms listed on TSE", the results showed that disclosure of CSR in all its dimensions (social participation, environment, relationship of employees, feature of products) had a negative relationship with institutional ownership of the firms listed on TSE.

2. STUDY HYPOTHESES

2.1. First main hypothesis: There is a significant relationship between agency costs of free cash flow and investment - cash flow sensitivity.

2.2. Second main hypothesis: Corporate social responsibility moderates the relationship between agency costs of free cash flow and investment - cash flow sensitivity.

2.3. Study variables

2.3.1. Corporate social responsibility

- Conceptual definition: Corporate social responsibility is the unity and coherence among the activities and values of organization as the benefits of all stakeholders including shareholders, customers, employees, investment and public are reflected in the policies and performance of organization. In other words, the organization should consider itself as a part of society and be responsible to the society and make efforts to improve the public welfare as independent from the direct corporate benefits (Forughi, 2008).
- Operating definition: CSR in this study consists of four dimensions and each dimension has specific strengths and weaknesses. By deducting the strengths from the weaknesses, the score of the dimension is achieved. Finally, by adding all the above dimensions, a total score is achieved for corporate social responsibility. It is worth to mention that in case of any relevant strength or weakness, the score is one, otherwise, the score is zero. The required data for these variables are disclosed in the board report of the companies (Hajiha, 2014). Equation 1, Equation 2, Equation 3, Equation 4 and Equation 5 can show this.

$$CSR_S = CSR_{COM} + CSR_{EMP} + CSR_{ENV} + CSR_{PRO} \quad (1)$$

$$CSR_{COM} = \sum Strengths - \sum Concerns \quad (2)$$

$$CSR_{EMP} = \sum Strengths - \sum Concerns \quad (3)$$

$$CSR_{ENV} = \sum Strengths - \sum Concerns \quad (4)$$

$$CSR_{PRO} = \sum Strengths - \sum Concerns \quad (5)$$

Where,

CSR_S : Score of corporate social responsibility

CSR_{COM} : The score of disclosure of social participation as calculated strengths minus concerns.

CSR_{EMP} : The score of disclosure of relationship of employees as calculated strengths minus concerns.

CSR_{ENV} : The score of disclosure of environmental as calculated strengths minus concerns.

CSR_{PRO} : The score of disclosure of products feature as calculated strengths minus concerns.

2.3.2. The agency costs of free cash flow

- Conceptual definition: The agency relationship is a type of contract in which one or some people (owner or owners) delegate operating implementation to another agent or manager and taking some decisions is also dedicated to him. By establishing agency relationship, each of parties attempt to maximize their personal benefits. As the suitability function of managers is not equal with that of owners, there is benefits conflict between them. Due to the benefits conflict, the managers don't attempt to achieve the maximum benefits for the owner (owners). Agency problem is encouraging the agent to take decisions to maximize the welfare of owner (owners)[11].
- Operating definition: To measure agency costs of free cash flow, the model of Jenifer (2016) is applied. (Equation 6)

$$AC_{i,t} = \alpha_0 + \alpha_1 AC_{i,t-1} + \alpha_2 Cash_{i,t-1} + \varepsilon_{i,t} \quad (6)$$

Where,

$AC_{i,t}$: The ratio of public, administrative and sale costs to the assets of company i in period t

$AC_{i,t-1}$: The ratio of public, administrative and sale costs to the assets of company i in period t-1

$Cash_{i,t-1}$: The sum of cash flow and short-term investment to assets of company i in period t-1

α_0 : Intercept

$\alpha_1, \dots, \alpha_2$: Coefficients of regression model

$\varepsilon_{i,t}$: Disturbance term of regression model [18]

2.3.3. Sensitivity of investment to cash flow

- Conceptual definition: The sensitivity of investment to cash flow via measuring "The changes in capital expenditures of company for one unit change in operating cash flow". The sensitivity of investment to cash flow indicates the "Reliance of one company on internal funding". The higher the sensitivity of investment to corporate cash flow, the higher the reliance of the company on internal resources and higher financial limitation (Haghighat, 2013).
- Operating definition: In this study, to evaluate the investment-sensitivity cash flow, the adjusting model of Hovakimian et al., (2006) is applied (Equation 7).

$$Inv_{i,t} = \beta_0 + \beta_1 MB_{i,t} + \beta_2 CF_{i,t} + \beta_3 CF_{i,t-1} \quad (7)$$

Where,

$Inv_{i,t}$: Investment in capital asset equal to the sum of long-term investment divided by the capital of the first period of company i in year t

$MB_{i,t}$: The market value to equity of assets at the beginning of company I in year t

$CF_{i,t}$: The operating cash flow of company i in year t indicating the relationship between financial limitation of investment.

$CF_{i,t-1}$: The cash flow of the previous period as the excess regressor to cope up with the investment probability with the funded flow from the previous year.

2.3.4. Q-Tobin ratio

Tobin (1969) applied the following ratio to evaluate the profitability of capital projects (Equation 8).

$$Q_s = \frac{VOCSILOY_{i,t} + EMVOPSILOY_{i,t} + BVLTLILOY_{i,t} + BVCLLOY_{i,t}}{BVTALLOY_{i,t}} \quad (8)$$

Where,

Q_s : Tobin-Q index

$VOCSILOY_{i,t}$: Value of common stocks at the end of the year

$EMVOPSILOY_{i,t}$: Estimation of market value of outstanding stock at the end of the year

$BVLTLILOY_{i,t}$: Book value of long-term liabilities at the end of the year

$BVCLLOY_{i,t}$: Book value of current liabilities at the end of the year

$BVTALLOY_{i,t}$: Book value of total assets at the end of the year (Heidarpour, 2009).

2.3.5. Firm size

In the present study, due to the reliability of balance sheet items, the natural logarithm of total assets to the date of balance sheet to evaluate the firm size is applied (Sayah, 2005).

2.3.6. Returns on asset (ROA)

The return on asset ratio is the result of dividing net profit to the mean of assets in the first and last period of business unit (Wang, 2010), (Equation 9).

$$\frac{\text{Net profit}}{\frac{\text{Asset of current period} + \text{asset of previous period}}{2}} = \text{Financial} \quad (9)$$

In the present study, the liabilities to equity ratio are used (Setayesh, 2011).

3. STUDY POPULATION AND SAMPLING METHOD

The study population of present study is total companies listed on TSE. To select the study sample,

at first the data including the list of companies listed on TSE during 2011-2015 are extracted from the

information of stock market, Tadbirpardaz, Rahavard Novin software and based on the study nature and some inconsistency among the firms listed on TSE, systematic elimination method (purposeful) is used. The following conditions in Table 1 are considered to determine the study sample.

Table 1. The process of selection of sample companies

The number of companies listed on TSE during 2011-2015		567
They are not financial brokerage companies banks, investment and (leasing	76-	
The data required for the study procedure are not available	102-	
To compare the information, the fiscal year of company is not leading to March 20 (11/29th of Esfand)	85-	
,During the study period the fiscal year is changed	32-	
The stock trade of the company is stopped more than 3 months in the TSE	139-	
Sum of excluded companies		442-
Number of investigated companies		133

Based on the limitations, 133 companies are selected and the data of these companies are collected from TSE, site of TSE and Rahavard Novin software.

4. STUDY METHODOLOGY AND HYPOTHESES TEST METHOD

This study is an analytic-quasi-empirical study. The research is also quantitative in terms of data type and it is positive research in terms of nature. In this study, the data of fiscal period are achieved from the financial statements and reports of companies. The data of member companies are extracted during the fiscal year 2011-2015 from some resources including Rahavard Novin and Tadbirpardaz software, site of stock market, etc. and are transferred to Excel extended sheet. To process data, E-views software is applied. To test the study hypotheses, to determine the relationship between independent and dependent variables, a multi-variate regression is used. Also, Durbin-Watson test is used to analyze the relationship between error terms of model and variance inflation factor is used to analyze the co-linearity between the independent variables. Also, variance analysis is used to

determine the acceptable nature of estimation. The significance level to reject or support the hypotheses is 5%. The statistical data are collected and analyzed using E-views and Excel software. In this study, for each of regression partial coefficients, t-student test is used and for the significance of regression model, Fisher statistics (F) is applied at confidence interval (95%) and 5% error.

4.1. Study models

To test the first hypothesis, the following regression model is applied, (See Equation 10).

$$Inv_{i,t} = \alpha_0 + \alpha_1 AC_{i,t} + \alpha_2 Q_{i,t} + \alpha_3 Size_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 Leverage_{i,t} + \varepsilon_{i,t} \quad (10)$$

Where,

$Inv_{i,t}$: Investment in capital asset is equal to the total long-term investment divided by the capital of the first period of company i in year t

$AC_{i,t}$: The ratio of public, administrative and sale costs to the assets of company i in period t

$Q_{i,t}$: Q-Tobin ratio of company i in period t

$Size_{i,t}$: Firm size i in period t

$ROA_{i,t}$: Return on assets of company i in period t

$Leverage_{i,t}$: Financial leverage of company i in period t

α_0 : Intercept

$\alpha_1, \dots, \alpha_5$: Coefficients of regression model

$\varepsilon_{i,t}$: Disturbance term of regression model (Jennifer, 2016).

To test the second hypothesis, the following regression model is applied, (See Equation 11).

$$Inv_{i,t} = \alpha_0 + \alpha_1 AC_{i,t} + \alpha_2 CSR_S AC_{i,t} + \alpha_3 Q_{i,t} + \alpha_4 Size_{i,t} + \alpha_5 ROA_{i,t} + \alpha_6 Leverage_{i,t} + \varepsilon_{i,t} \quad (11)$$

Where,

$Inv_{i,t}$: The investment in capital asset equal to the total long-term investment by the first capital of company i in year t

$AC_{i,t}$: The ratio of public, administrative and sale costs to assets of company i in period t

$CSR_S AC_{i,t}$: The adjusting effect of corporate social responsibility on the relationship between agency

costs of free cash flow and sensitivity of investment to cash flow of company i in year t

$Q_{i,t}$: Q-Tobin ratio of company i in year t

$Size_{i,t}$: Firm size i in period t

$ROA_{i,t}$: Return on assets of company i in year t

$Leverage_{i,t}$: Financial leverage of company i in period t

α_0 : Intercept

$\alpha_1, \dots, \alpha_6$: Coefficients of regression model

$\varepsilon_{i,t}$: Disturbance terms of regression model (Jennifer, 2016).

5. STUDY RESULTS

5.1. Descriptive statistics

Table 2- Descriptive statistics

Variable	Mean	Median	SD	Min	Max
CSR	0.335	0.3	0.096	0.112	0.573
Sensitivity of investment to cash flow	0.081	0.045	0.091	0.0004	0.623
CSR* Agency costs	0.046	0.036	0.068	-0.062	0.941
Agency costs	0.154	0.3727	1.012	-2.19	2.32
Financial leverage	0.567	0.585	0.206	0.01	1
Q-Tobin ratio	1.849	1.532	0.971	0.57	7.66
Firm size	14.262	13.9295	1.57	10.5	19.01
ROA	0.139	0.118	0.136	-0.36	0.63

As shown in the Table 2, the mean and standard deviation of CSR variable are 0.335, 0.096, respectively. This shows that in the majority of the studied companies, the disclosure of CSR is regarding this point (0.335) and the studied companies are not inclined to CSR activities. Also, the sensitivity of investment to cash flow shows 0.081 and it means the continuous investment by the total sample companies. The mean of agency costs of the companies is equal to 0.154.

Table 3- The tests not satisfying the classic assumptions of hypotheses

Condition	Result	Significance level	statistics P / J-B	Test	Model
Serial auto-correlation	Rejection H_0	0	40.01	Breusch-Godfrey test	First hypothesis
Lack of variance Heteroscedasticity	support H_0	0.973	0.211	Breusch-Pagan-Godfrey test	
Normal distribution of disturbance terms	support H_0	0.511	1.343	Jarque-Bera	
Serial auto-correlation	Rejection H_0	0	36.712	Breusch-Godfrey test	Second hypothesis
Lack of variance Heteroscedasticity	support H_0	0.942	0.291	Breusch-Pagan-Godfrey test	
Normal distribution of disturbance terms	support H_0	0.562	1.153	Jarque-Bera	

5.2. The tests of classic assumptions of regression

The investigation of serial auto-correlation of regression models shows that in all hypotheses of study, as the significance level of Breusch–Godfrey test is less than 5%, H0 is rejected (Sig<0.05). Also, the results of Breusch-Pagan-Godfrey test showed that at error level 5%, the statistics value of test for all regression models was bigger than 5% and non-significant (Sig>0.05). Thus, the variance homogeneity for regression models is not rejected and it means that in regression models, the disturbance terms have homogenous variance. In addition, at error level 5%, Jarque-Bera statistics for regression models of all hypotheses is bigger than 5% and we can say the distribution of disturbance terms in the mentioned hypotheses follows normal distribution.

Variable	VIF
CSR	1.362
Agency costs	1.126
CSR*Agency costs	1.36
Financial leverage	1.365
Q-Tobin ratio	1.119
Firm size	1.308
ROA	1.131

The variance inflation factor of the variables entering regression models for the hypotheses is less than 10 and about 1 and based on the results, we can say there is no co-linearity between the independent variables of regression models. To estimate regression models, we have no problem.

Table 4- Co-linearity test

(0.000) 26.240	F statistics	0.846	Coefficient of determination	
1.718	Durbin-Watson	0.814	Adjusted coefficient of determination	
Result	H ₀ hypothesis	Test value	Test of determining regression model	
Panel	Rejection H ₀	(0.000) 7.492	Fixed effects test (F Limer)	Pooled data test
Fixed effects	Rejection H ₀	(0.000) 70.351	Random effects test (Hausman)	

Table 5- The results of first hypothesis

Variable	Estimate coefficient	Standard error	T statistics	Significance level
Intercept	0.007	1.546	0.005	0.996
Agency cost	0.017	0.004	-3.790	0
Q-Tobin	0.025	0.053	0.474	0.636
Firm size	0.035	0.105	0.335	0.738
ROA	0.533	0.483	-1.104	0.27
Financial leverage	0.003	0.001	-4.698	0

The results of not satisfying the classic assumptions of first hypothesis showed that in regression model, the disturbance terms have second order serial autocorrelation and variance Heteroscedasticity and they have non-normal distribution (Sig<0.05). Also, the results of pooled data effects of regression model showed that significance level of F Limer test (7.492) at error level 5% is smaller than 5% (Sig<0.05) and it shows rejection of H0 at error level 5%. Thus, the lack of equality of crossed intercepts is supported. Based on the results, we can say to test the regression model, panel data method is suitable. The results of Hausman test (70.351) show that rejection of H0 is at error level 5% (Sig<0.05). Thus, we can say to estimate regression model, the fixed effect is preferred to random effects. The results of Table 5 show that in the firms with high agency costs of free cash flow, the sensitivity of investment to cash flow is higher. In other words, with the increase of agency cost of free cash flow, new investment is much sensitive to operating cash flow. Thus, first hypothesis is supported.

Table 6- The results of second hypothesis test

(0.000) 26.240	F statistics	0.846	Coefficient of determination	
1.718	Durbin-Watson	0.814	Adjusted coefficient of determination	
Result	H ₀ hypothesis	Test value	Test of determining regression model	
Panel	Rejection H ₀	(0.000) 7.492	Fixed effects test (F Limer)	Pooled data test
Fixed effects	Rejection H ₀	(0.000) 70.351	Random effects test (Hausman)	

Variable	Estimate coefficient	Standard error	T statistics	Significance level
Intercept	0.513	0.076	6.786	0
Agency cost	-0.108	0.06	-1.800	0.073
Q-Tobin	-0.671	0.192	-3.48	0
Firm size	0.131	0.036	1.108	0.268
ROA	0.107	0.061	1.683	0.093
Financial leverage	0.018	0.028	0.671	0.502
Intercept	0.107	0.007	15.389	0

The results of not satisfying the classic assumptions of second hypothesis showed that in regression model, the disturbance terms have second order serial autocorrelation and variance Heteroscedasticity and they have non-normal distribution (Sig<0.05). Also, the results of pooled data effects of regression model showed that significance level of F limer test (3.063) at error level 5% is smaller than 5%(Sig<0.05) and it shows rejection of H0 at error level 5% (Table 6). Thus, the lack of equality of crossed intercepts is supported. Based on the results, we can say to test the regression model, panel data method is suitable. The results of Hausman test (27.748) show that rejection of H0 is at error level 5%(Sig<0.05). Thus, we can say to estimate regression model, the fixed effect is preferred to random effects. The results of Table 6 show that CSR has a negative and significant impact on the relationship between agency costs of free cash flow and the sensitivity of investment to cash flow. In other words, supporting the activities of CSR by the studied companies improves the quality of information and agency costs are reduced and with the reduction of shortcomings of capital market via the reduction of the gap between internal and external resources, the sensitivity of investment to cash flow is reduced.

6. CONCLUSION AND RECOMMENDATIONS

As it was said, the present study is aimed to evaluate the impact of CSR on the relationship between the agency costs of free cash flow and the sensitivity of investment to cash flow. To do this, a sample of 133 companies listed on TSE during 2011-2015 is investigated. In the first hypothesis test, the relationship between agency costs of free cash flow and sensitivity of investment to cash flow was examined. The results showed a positive and significant relationship between these two variables. It means that in the firms with high agency costs, the sensitivity of investment to cash flow is higher. Based on the result of first hypothesis test, high sensitivity of investment to cash flow could lead to overinvestment or underinvestment, investment inefficiency and even failure in investment and crisis. It is required that the companies take steps to control and reduce their agency costs. The firms with high agency costs are required to be careful in investment decisions and selection of investment projects and reduce the factors increasing the sensitivity of investment to cash flow. Under equal conditions, the firms with low investment sensitivity are encountered with low financial limitation and under equal conditions; they are much inclined in engagement in CSR activities. These findings show that not only the reputation of company is

interrelated to the activities of CSR of companies, their competitive advantage is dependent upon CSR activities and this leads to the improvement of access to capital or financial resources. Thus, the effect of CSR on the shortcomings of market is a channel by which CSR can lead to value creation. Based on the results of second hypothesis test and as the increase in the sensitivity of investment to cash flow leads to the investment inefficiency, it is proposed to the companies to make efforts to be engaged in CSR activities to improve performance and create value via the increase of supervisory actions and reduction of agency costs and reduction of information asymmetry and it leads mostly to the reduction of investment sensitivity to cash flow.

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