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Management Overconfidence and Co-Financing Decision in Tehran's Securities Stock Exchange

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ABSTRACT

The aim of this research is to determine the effect of management overconfidence and government interference on co-financing decision. This research in terms of the aim is applicable and in terms of the nature, it is descriptive-correlation. In order to test the hypotheses, regression model and data panel model were used for the period of 2011-2016 and this research annually studied a 136-company sample from the stocks of companies listed on Tehran's securities stock exchange which were selected by systematic elimination method. To analyze the data, the econometric software of Eviews9 has been used. The results indicate that the management overconfidence influences on co-financing. The variables of the profile picture of managing director, managing director experience, managing director relation, ex- managing director performance and governmental ownership influence on co-financing decision. Also, the results indicated that the possessive structure of government moderates the relation between management overconfidence and co-financing decision.

Keywords: Stock Exchange, Overconfidence, Finance Decision
JEL Classifications: E44, G2

1. INTRODUCTION

One of the most important decisions ahead of managers of commercial unit is the decision related to the co-financing. Co-financing is one of the necessary elements of operations of each commercial unit. Adopting the co-financing policies by managers has a worthy role in risk and creating wealth for stockholders. Anyway, cognition of the factors influencing on co-financing decisions of managers has more importance. Many factors influence on co-financing decision-making of managers in commercial unit that these factors can be divided into two groups: First group, those factors which are related to the corporation structure like agency problems, corporation size and financial insolvency and second group, those factors which are related to the behavioral features of managers like conservativeness and overconfidence (Chavoshi et al., 2015). About the factors influencing on the capital structure, different features have been concentrated. In this field, a few works have studied the effect of behavioral features on financial affairs decisions. The managers especially have undeniable role on selection of capital structure. In the meantime, the managing director features influence on co-financing decisions (Kiong et al., 2016). Those managers who estimate over- profitability or are optimistic about the profitability of commercial unit, feel that the capital market values their stocks papers less than the real amount, therefore, in those cases that the commercial unit needs the financing , the financing managers through issuance prefer the debts papers over the stocks issuance (Mirzaie, 2013).

The managers of corporations by cognition of the factors influencing on investment and applying them in reaching to the optimum investment level can create the extremity of return on stocks so that both don't lose the profitable opportunities of investment and attract the satisfaction of stockholders. But, inefficient markets have some deficiencies which can influence on the optimum investment level of corporation and finally lead to the "over-investment" or "low-investment" process (Arabsalehi et al., 2014). With regard to the proposed discussions, current research seeks to answer this question that how the management overconfidence and ownership structure of corporations affects the co-financing decisions of corporations.

2. THE THEORETICAL LITERATURE AND RESEARCH BACKGROUND

2.1. Management Overconfidence

Self-overconfidence can be defined as an unfounded belief about cognitive abilities, judgements and intuitive reasoning of person. The concept of overconfidence has been studied in a vast collection of psychological studies and tests from cognitive kind which indicates that the persons have over-estimation both about their abilities in prediction and precision of their information. Also, in estimation of probabilities, they act weakly and mostly, know that the incidents with occurrence probability much <100% are sure to happen (Pompian, 2006). Overconfident managers as the result of this belief that have special information and others are portionless of it, over-estimate the information precision and consequently, future profits and cash flows of their commercial unit and have positive perspective about the future risk and return on stocks of the corporation. Overconfident managers estimate the probability and effect of desirable incidents on cash flows of corporation more than the reality and evaluate them for the negative incidents less than the reality (Malmendier and Teat, 2008). Enjoyment of overconfidence features in managers influences on the manner of identification of profit, loss and official sum of assets and debts. Overconfident managers estimate the future return on stocks in investment projects of corporation more than the other managers. Therefore, they may delay in identification of loss and have optimistic estimates in determining the value of current or long-term assets (Ramesheh and Mollanazari, 2014).

Expressed that the effect of overconfidence on personal and private information is stronger and it is weaker on the information which is kept and accepted extensively. The management beliefs about some of investment opportunities may be according to the personal information, while for others, the manager's beliefs may depend on the general information which is available extensively. The management overconfidence in the first case has more effect than the second one. To combine this feature of overconfidence, we should distinguish between the innovative projects (those projects which are evaluated according to the personal information of management) and growth projects which reflect the growth opportunities of the corporation, are observed publicly and management has no private information about them (Deshmukh et al., 2013). Overconfident managers as the result of this belief that have special information (that others don't have) over-estimate the precision of their information and consequently, future profits and cash flows of their commercial unit and have positive perspective about the future risk and return on stocks of the corporation (Bouwman, 2014).

The managers with excessive self-reliance due to the over-optimism may take action for investment in those plans that don't have the expected return on stocks in reality. Therefore, lack of acquisition of the expected cash flows may cause the corporation to face with problem in paying the debts and doing the commitments and the corporation may be affected by financial agitations (Dastgir et al., 2014). There are different methods for measurement of management overconfidence. The past researches have used of some criteria like the time of keeping the right of corporation authorities by management, media coverage, difference between the predicted profit and real profit, abundance of merger and combinations accomplished by the corporation management, relative rights of the corporation management, present performance of corporation, special concession of corporation, purchase of the corporation stocks and distance between two predicted extents for profit.

2.2. The Ownership Structure

The ownership structure is said to the combination and constituents of stockholders (such as real and legal) that have share in managing the corporation which can be shown in different forms and includes: Governmental, private, corporative, institutional, external, management, individual and familial ownership that specifies the distribution of rights and responsibilities between different partners of corporation like management board, managers, stockholders and other beneficiaries (Velury and Jenkins, 2006). The ownership structure is accounted from the important subjects of corporative sovereignty; because, it influences on the motivation and eagerness of managers and therefore, it influences on the return on stocks of each corporation. In the recent years, many cases of benefits contrariety between the groups and manner of corporations confrontment with this kind of contrarieties have been proposed which are entitled "the agency theory". One of the external control mechanisms influencing on the corporative sovereignty which has incremental importance, is the emergence of institutional investors as the capital owners. The institutional stockholders have the potential ability of effectiveness on managers' activities directly through ownership and indirectly through exchanging their stocks. The indirect effect of institutional stockholders can be very strong.

2.3. The Capital Structure

The capital structure refers to a combination of debt and rights of the corporation stockholders that indicates the corporation behavior in the general operation financing and its growth and it has been considered as one of the important decisions in the financial management. Financing through debt includes issuance of long-term loan papers or debt papers, rent and bank loan. Overuse of debt in financing due to the bankruptcy cost causes the corporations to be affected by risk. The funds arising from debt are provided through banks, persons and financial institutes like investment corporations, leasing and insurance corporations that invest in the debt papers such as loan papers and etc. Financing through the stockholders' rights includes the normal stocks which have higher capital cost. Because, the stockholders for more risk that tolerate than the debt owners, want more profit too. The notable point is this issue that the financial structure includes short-term and long-term debts and also stockholders' rights or in other words, left side of balance sheet (Fathi et al., 2014).

2.4. The Governmental Corporation

A company in which at least 50% of its stocks directly or indirectly belongs to the government, is considered as the governmental corporation (the law of civil public accounts).

With regard to the theoretical principles in this research, we seek to answer these questions that how the management overconfidence influences on the corporation financing decision. Why does the governmental ownership influence on the corporations financing decision? Which one of the ownership structures of government does moderate the relationship between the management overconfidence and corporative financing decision?

2.5. Domestic Background of the Research

Ramesheh and Mollanazari (2014) studied the management overconfidence and accounting conservativeness, conditional conservativeness measure is based on Khan and Watt's regression model (2009) and two measures of unconditional conservativeness are based on commitment items and difference between the profit skewness and cash flows. The results indicated that there is a negative and significant relationship between conditional and unconditional conservativeness and management overconfidence. Moreover, the findings indicated that the external control reduces the negative effect of overconfidence on conditional conservativeness, but, it will not have similar effect about unconditional conservativeness.

Moradi and Kheirollahi (2015) studied the effect of ownership overconfidence on investment sensitiveness in Tehran's securities stock exchange. The results indicated that in the low levels, increase of lack of confidence causes to increase the investment level and in the higher levels, increase of lack of confidence reduces the investment, in other words, lack of confidence also causes to increase the investment motivations in the current period due to the increase of expectation value and delay in investment. Existence of a proper corporative sovereignty system can help the corporations in attracting the trust of investors and encouraging them for investment.

Shahi (2015) studied the management overconfidence and accounting conservativeness. The results gained from the research estimation including 62 corporations for the period of 1999-2012 indicated that there is a negative and significant relationship between conditional and unconditional conservativeness and management overconfidence. In other words, existence of overconfidence feature in the senior managers causes to reduce the conservativeness in the financial reporting process.

Aramideh et al. (2016) studied the relationship among the management overconfidence, abnormal costs of auditing and the moderating role of management ownership in the corporations listed on Tehran's securities stock exchange. The research hypotheses have been tested by using of logistic and multiple regression and the estimative method for analyzing the research data in the multiple regression was the panel data method with random effects. The results gained from the hypotheses test express that there is a direct and significant relationship between the management overconfidence and abnormal costs of auditing, namely, increase of the management overconfidence increases the abnormal costs of auditing.

Vahedian and Tari-Verdi (2016) studied the effect of management overconfidence on the financial reporting quality. The results of the hypotheses test express that there is a positive and significant relationship between the management overconfidence criterion and criteria of estimative errors of commitment items and there is a positive and significant relationship between the management overconfidence and profit smoothing criterion. In other words, existence of the overconfidence property in management leads to reduce the financial reporting quality through increasing the profit smoothing and reducing the commitment items quality.

Aghaie and Saeedi (2016) studied the relationship between the management overconfidence and renewal of financial statements presentation in the corporations listed on Tehran's securities stock exchange. The results gained from the hypothesis test express that there is direct and significant relationship between the managers' overconfidence and renewed presentation of financial statements; namely, with increase of the managers' overconfidence, the probability of renewal of financial statements presentation is also increased.

Davoodi and Jenabi (2016) studied the relationship between the management overconfidence and abnormal return on stocks in Tehran's securities stock exchange. The results indicated that there is a significant relationship between the managers' overconfidence and abnormal return on stocks.

2.6. The Outsider Background of the Research

Duellman et al. (2015) in their researchers concluded that overconfidence in managers causes them to be over-optimistic about the future return on stocks of their company investments and they believe that using of conservative accounting causes that the overconfident managers to act better in determining and delaying those projects that their return on stocks is less and also, they expressed that the controls out of organization on managers performance can cause to reduce the management prejudices and misgivings.

Bouwman (2014) found out that there is a positive relationship between the managers' overconfidence and profit smoothing. In other words, overconfident managers take action for profit smoothing more than the other managers.

Chen et al. (2014) in a research studied the effect of management overconfidence on internal controls. They concluded that the probability of keeping the ineffective internal controls in the companies with overconfident managers is more. Also, in the companies with overconfident managers and strong corporative sovereignty structures, the probability of keeping the effective internal controls is more.

Chyz et al. (2014) studied the management overconfidence and tax avoidance. The results of this research indicated that the management overconfidence has positive and significant effect on tax avoidance. According to the other results, the management overconfidence reduces the effective rate of cash tax equal to 6.6% and increases the difference between the accounting profit and profit included in tax equal to 1.5%.

Duellman et al. (2015) studied the relationship between the management overconfidence and auditing wage. The results of their research indicated that those companies which have overconfident managers, pay less wage for auditing. Also, the overconfident managers with less probability use of the industry specialist auditor.

With regard to the review of the theoretical principles and research background according to the regression model of Kiong et al. (2016) and by using of graphical model, the relations have been studied.

2.7. The Research Hypotheses

1. The management overconfidence has significant effect on co-financing decision.
2. The governmental ownership has significant effect on co-financing decision.
3. The ownership structure of government moderates the relationship between the management overconfidence and co-financing decision.

3. THE METHODOLOGY

With regard to this issue that the results gained from the research can be used in decision-making process, this research in terms of the aim is applicable and in terms of the nature, it is descriptive-correlation. In order to test the research hypotheses, the regression model has been used by applying the panel data. Due to the importance of the role of corporations listed on stock exchange in each country, the corporations listed on Tehran's securities stock exchange have been selected as the statistical population. The cause of selection of the corporations existing in Tehran's securities stock exchange as the tested corporations, is the control of important economic organs and organizations like ministry of asset and Markazi Bank on this organization. Moreover, since, the financial statements of the corporations which are the members of Tehran's securities stock exchange, should be confirmed by the trustworthy auditors of stock exchange organization, therefore, they have more reliability. On the other hand, since, the corporations which are the members of securities stock exchange, are obliged to present their financial reports uniformly, therefore, they also have more comparability. Thus, the most desirable institute for extraction of financial information of corporations for better conclusion of the research is Tehran's securities stock exchange organization. In order to select the research sample, the systematic eliminative sampling method has been used. In this method, at first, the necessary conditions have been defined for selection of sample and then, the samples without the mentioned conditions are eliminated. The cause of using of the intended method and defining such conditions is to assimilate the statistical sample with the entire population and possibility of generalizing the results gained from the tests to the statistical population. In selection of statistical sample, two issues have been considered. First, it should be a desirable representative of statistical population and second, it should be proportional with the fundamental variables of the research. According to this, the statistical sample of the research has been selected with regard to the following criteria:

- The end of financial year of corporation should lead to 20th March.
- The transaction symbol of active corporation and its stocks should be traded at least once in a year.
- The financial information of corporation should be available in the studied period.

In this research, with regard to the variables conditions, the systematic elimination sampling method was used for reaching to the sample. With regard to the exertion of above limitations in the period of 2011-2016, the number of remainder corporations has been specified equal to 136 corporations.

The data collection method has been in two stages of library studies (for studying different theoretical aspects of research and viewpoints of researchers about the research subject and in order to compare it with different results and research background) and documentary studies (by using of Rahavard Novin Software and studying the financial statements). To analyze the data, the econometric software of Eviews9 has been used.

3.1. The Research Variables and Models

3.1.1. Dependent variable

LEVE: It indicates the ratio of debt to the total assets of corporation.

3.1.2. Independent variables

The management overconfidence: There are different methods for measurement of the management overconfidence. The past researches have used of criteria like the time of keeping the right of corporation authorities by management, media coverage, difference between the predicted profit and real profit, abundance of merger and combinations accomplished by the corporation management, relative rights of corporation management, present performance of corporation, special concession of corporation, purchase of corporation stocks and distance between two predicted extents for profit.

PP: It indicates the picture and specifications of corporation's managing director. In the event that the managers in the annual report allocate the pictures to themselves in about 1.5 pages, the score will be four. If they are in less than half of one page, this score will be three; if the picture of managing director is with other persons of corporation, the score will be two; in the event that he has no picture, the score one will be allocated to him.

EDU: It indicates the educational level of managing director. For this variable, the scores of one to seven are used. If managing director is in the high school level, this score will be one; if he is graduated from high school, his score will be two; if he is in bachelor's degree level, his score will be three; in the Master degree level, his score is four; in the level of PhD student, the score is five; if he is graduated from complementary education, his score will be six; if he has PhD degree, his score will be seven.

EXP: It indicates the education level of managers, if they have the experience of managing director, this variable will be equal to one, and otherwise, it will be equal to zero.

GEN: It is the metaphorical variable for showing the gender of managing director. Indicated that women as managing director have equal trust level for using of investment opportunities in comparison with men. In this research, if managing director is man, this variable will be equal to one, otherwise, it will be equal to zero.

NET: It indicates the relational status of the management board members. If managing director is in relation with other corporations, it will be equal to one, otherwise, it will be equal to zero.

PERF: It indicates the performance status of managers. It is gained from the ratio of operational cash flow to the total assets.

3.1.3. Moderator variable

GVO: It indicates the governmental ownership structure, if 30% of the highest stockholders of corporation is affiliated with governmental organizations, this variable will be equal to one, and otherwise, it will be equal to zero.

3.1.4. Control variable

OC: It indicates the ownership concentration which is gained from the ratio of 5 groups of the largest stockholders to the total stocks.

ROA: It indicates the return on assets.

R & D: It indicates the costs of research and development which is gained from the ratio of cost to the total assets.

Tang: It is the title of the ratio of fixed assets to the total asset.

SIZE: It is gained from the logarithm of total assets of corporation.

GROWTH: It indicates the purchase changes of corporation in comparison with the previous year.

According to the regression model of Kiong et al. (2016), in order to study the effect of ownership structure on financing decision, this regression model is used:

$$\begin{aligned}LEVE_{it}=&\alpha_0+\alpha_1 PP_{it}+\alpha_2 EDU_{it}+\alpha_3 EXP_{it}+\alpha_4 GEN_{it}+\alpha_5 NET_{it}\\&+\alpha_6 PERF_{it}+\alpha_7 GVO_{it}+\alpha_8 OC5_{it}+\alpha_9 ROA_{it}+\alpha_{10} SIZE_{it}\\&+\alpha_{11} TANG_{it}+\alpha_{12} R\&D_{it}+\alpha_{13} GROWTH_{it}+\sum\alpha_i Year_i\\&+\sum\alpha_t Industry_t+\alpha_{it}\end{aligned}$$

To study the effect of moderator role of governmental ownership structure, two regression models are used as follows:

$$\begin{aligned}LEVE_{it}=&\lambda_0+\lambda_1 PP_{it}+\lambda_2 EDU_{it}+\lambda_3 EXP_{it}+\lambda_4 GEN_{it}+\lambda_5 NET_{it}\\&+\lambda_6 PERF_{it}+\lambda_7 GVO_{it}+\lambda_8 OC5_{it}+\lambda_9 ROA_{it}+\lambda_{10} SIZE_{it}\\&+\lambda_{11} TANG_{it}+\lambda_{12} R\&D_{it}+\lambda_{13} GROWTH_{it}+\lambda_{14}(PP\times GVO)_{it}\\&+\lambda_{15}(EDU\times GVO)_{it}+\lambda_{16}(EXP\times GVO)_{it}+\lambda_{17}(GEN\times GVO)_{it}\\&+\lambda_{18}(NET\times GVO)_{it}+\lambda_{19}(PERF\times GVO)_{it}\\&+\sum\lambda_i Year_i+\sum\lambda_t Industry_t+\lambda_{it}\end{aligned}$$

$$\begin{aligned}LEVE_{it}=&\mu_0+\mu_1 PP_{it}+\mu_2 EDU_{it}+\mu_3 EXP_{it}+\mu_4 GEN_{it}+\mu_5 NET_{it}\\&+\mu_6 PERF_{it}+\mu_7 GVO_{it}+\mu_8 OC5_{it}+\mu_9 ROA_{it}+\mu_{10} SIZE_{it}\\&+\mu_{11} TANG_{it}+\mu_{12} R\&D_{it}+\mu_{13} GROWTH_{it}\\&+\mu_{14}(PP\times DUMGVO)_{it}+\mu_{15}(EDU\times DUMGVO)_{it}\\&+\mu_{16}(EXP\times DUMGVO)_{it}+\mu_{17}(GEN\times DUMGVO)_{it}\\&+\mu_{18}(NET\times DUMGVO)_{it}+\mu_{19}(PERF\times DUMGVO)_{it}\\&+\sum\mu_i Year_i+\sum\mu_t Industry_t+\mu_{it}\end{aligned}$$

4. DATA ANALYSIS

4.1. Descriptive Statistic

Data analysis in this part has been done by calculating the central indexes such as mean, middle and distribution indexes such as standard deviation, maximum and minimum amounts of variables.

According to the Table 1, comparison of the standard deviations of the studied variables indicates that the evident asset variable has the least standard deviation which indicates low distribution of this variable. The ownership concentration variable also has the most amount of standard deviation and it has high distribution in a manner that difference between the maximum and minimum amounts of this variable expresses high distribution of this variable. According to the Table 1, skewness of all variables is positive except the variables of ownership concentration, return on assets and corporation size and all variables have positive protraction.

4.2. Stability Test of the Variables (Unit Root)

Unit root test is one of the most usual tests which is nowadays used for determining the stability of the variables. The tests which have been used in this research for studying the stability of variables, consist of Leven test, Sheen and sons' test, Fisher ADF and Fisher PP. The results gained from the unit root test of integrative data have been mentioned in the Table 2.

The results of Table 2 indicate that for all variables, the results of all tests express the stability of these variables.

4.3. Studying the Research Models

Studying the first model of the research:

4.3.1. F-Limer test

In order to estimate the model, at first, the kind of estimation method should be specified. Therefore, at first, for distinction between pooling data method and integrative data method, F-Limer statistic is calculated (Table 3).

With regard to this issue that P-Value is equal to 0.0028, so, the null hypothesis of this test which expresses the preference of pooling data method over integrative data method, is rejected and estimation with integrative data method is preferred and the intercept should be considered for the equation.

4.3.2. Haussmann test

For distinction between estimation with fixed effect and estimation with random effect, Haussmann test has been used (Table 4).

With regard to this issue that P-Value of Haussmann test is equal to 0.0507, the null hypothesis based on estimation of equation by random effects method has been accepted and its opposite hypothesis is rejected, so, the model should be estimated by using of the random effects.

Estimation of the first model

In this part of the research by using of data of the years of 2011-2016 for the intended corporations, we study the first and

Table 1: Descriptive statistic of the research variables

	Financial leverage	Ownership concentration	The return on asset	Corporation size
Mean	1.434986	84.01539	0.028778	13.11689
Middle	0.666012	84.25000	0.096590	13.28042
Maximum	58.98935	96.41000	0.626784	18.11569
Minimum	0.017960	71.44000	–2.699139	7.754482
Standard deviation	5.267678	7.237816	0.401316	1.693793
Skewness	9.852962	–0.008260	–4.085403	–0.443806
Protraction	105.8419	1.833260	24.53225	3.890154
The number of corporations	816	816	816	816
	Evident asset	**Research and development**	**Growth**	
Mean	0.287659	0.079155	0.226015	
Middle	0.255705	0.037688	0.136663	
Maximum	0.954851	2.456069	16.38290	
Minimum	0.000274	0.000006	–6.625709	
Standard deviation	0.199256	0.236515	0.759827	
Skewness	0.960776	8.187153	12.14714	
Protraction	3.454298	77.83758	272.8993	
The number of corporations	816	816	816	

Reference: The researcher findings

Table 2: Studying the stability of the variables (the numbers inside the table express P-value)

Variable	Leven	Sheen and sons	Fisher ADF	Fisher PP
LEVE	0.0000	0.0000	0.0000	0.0000
PP	0.0000	0.0000	0.0000	0.0000
EDU	0.0000	0.0000	0.0000	0.0000
EXP	0.0000	0.0014	0.0002	0.0000
GEN	0.0000	0.0000	0.0000	0.0000
NET	0.0000	0.0001	0.0000	0.0000
PERF	0.0000	0.0000	0.0000	0.0000
GVO	0.0000	0.0000	0.0000	0.0000
OC5	0.0000	0.0000	0.0000	0.0000
ROA	0.0000	0.0000	0.0000	0.0000
SIZE	0.0000	0.0000	0.0000	0.0000
TANG	0.0000	0.0000	0.0000	0.0000
R&D	0.0000	0.0000	0.0000	0.0000
GROWTH	0.0000	0.0000	0.0000	0.0000

Reference: Researcher findings

Table 3: The results of F-Limer test

Test	Statistic	d.f	P
F	1.444195	(135,468)	0.0028
Chi-square	214.873858	135	0.0000

Reference: Research findings

Table 4: The results of Haussmann test

Test	Chi-square statistic	Chi-square d.f	P
Haussmann	22.315663	13	0.0507

Reference: Research findings

second hypotheses of the research. We define the first model as follows (Table 5):

$$\begin{aligned} LEVE_{i,t} = {} & \beta_0 + \beta_1 PP_{i,t} + \beta_2 EDU_{i,t} + \beta_3 EXP_{i,t} + \beta_4 GEN_{i,t} \\ & + \beta_5 NET_{i,t} + \beta_6 PERF_{i,t} + \beta_7 GVO_{i,t} + \beta_8 CS5_{i,t} \\ & + \beta_9 ROA_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} TANG_{i,t} \\ & + \beta_{12} R\&D_{i,t} + \beta_{13} GROWTH_{i,t} + \varepsilon_{i,t} \end{aligned}$$

The results gained from estimation of equation are as follows.

According to the Table 6, the determination coefficient is equal to 0.94 and this amount expresses that the number and kind of selected variables have been proper for justification of the financial leverage variable in regression and the mentioned independent variables have been able to justify dependent variable. Also, the amount of probability statistic of F-test is equal to 0.000 which expresses goodness of the fitness of studied model statistically. The amount of Durbin-Watson statistic in this study is equal to 1.61 which indicates lack of existence of self-correlation that is the desirable state in the main hypotheses related to the remainders.

Studying the second model of the research

4.3.2. F-Limer test

In order to estimate the model, at first, the kind of estimation method should be specified. Therefore, at first, for distinction between the panel data method and combinative data method, F-Limer statistic is calculated (Table 7).

With regard to this issue that P value is equal to 0.0051, so, the null hypothesis of this test which expresses preference of pooling data method over integrative data method, is rejected and estimation by integrative data method is preferred and intercept should be considered for the equation.

4.3.2. Haussmann test

For distinction between estimation by fixed effect and estimation by random effect, Haussmann test has been used (Table 8).

With regard to this issue that P-Value of Haussmann test is equal to 0.0136, the null hypothesis based on estimation of equation by random effects method has been rejected and its opposite hypothesis is accepted, so, the model should be estimated by using of the fixed effect.

4.4. Estimation of the Related Model

In this part of the research by using of data of the years of 2011-2016 for the intended corporations, we study the third subsidiary hypothesis of the research. We define the studied model as follows (Table 9):

Table 5: The model variables

LEVE: Financial leverage	PP: The profile picture of managing director	EDU: Education level of managing director
EXP: Experience of managing director	GEN: Gender of managing director	NET: Relation of managing director
PERF: Performance of ex-managing director	GVO: Governmental ownership	CS5: Ownership concentration
ROA: Return on asset	SIZE: Corporation size	TANG: Evident asset
R & D: Research & Development	Growth: Corporation growth	

Table 6: The results of estimation of the first model

Variable	Coefficient		t-statistic	P-value
	Size	Sign		
	−0.022838	–	−4.601078	0.0000
	0.000825	+	0.200725	0.8410
	−0.017689	–	−5.456500	0.0000
	−0.056401	–	−1.321017	0.1870
	−0.010332	–	−5.614241	0.0000
	0.016995	+	2.599065	0.0096
	0.474813	+	68.54707	0.0000
	−0.000554	–	−2.424714	0.0156
	0.159665	+	5.637914	0.0000
	−0.433951	–	−51.00507	0.0000
	0.088619	+	4.309160	0.0000
	0.730830	+	8.231763	0.0000
	0.000367	+	0.177151	0.8594
Fixed amount	0.634632	+	18.21276	0.0000
P(F)= 0.000 R^2=0.94, R^2=0.94 d.w=1.61				

Reference: Research findings

Table 7: The results of F-Limer test

Test	Statistic	d.f	P
F	1.407846	(135,462)	0.0051
Chi-square	212.600031	135	0.0000

Table 8: The results of Haussmann test

Test	Chi-square statistic	Chi-square d.f	P
Haussmann	35.090954	19	0.0136

Reference: Research findings

$$
\begin{aligned}
LEVE_{i,t} = \beta_0 &+ \beta_1 PP_{i,t} + \beta_2 EDU_{i,t} + \beta_3 EXP_{i,t} + \beta_4 GEN_{i,t} \\
&+ \beta_5 NET_{i,t} + \beta_6 PERF_{i,t} + \beta_7 GVO_{i,t} + \beta_8 CS5_{i,t} \\
&+ \beta_9 ROA_{i,t} + \beta_{10} SIZE_{i,t} + \beta_{11} TANG_{i,t} \\
&+ \beta_{12} R\,\&\,D_{i,t} + \beta_{13} GROWTH_{i,t} \\
&+ \beta_{14}(PP_{i,t} \times GVO_{i,t}) + \beta_{15}(EDU_{i,t} \times GVO_{i,t}) \\
&+ \beta_{16}(EXP_{i,t} \times GVO_{i,t}) + \beta_{17}(GEN_{i,t} \times GVO_{i,t}) \\
&+ \beta_{18}(NET_{i,t} \times GVO_{i,t}) + \beta_{19}(PERF_{i,t} \times GVO_{i,t}) + \varepsilon_{i,t}
\end{aligned}
$$

The results gained from estimation of equation related to the hypothesis are as follows.

As it is observed, the determination coefficient of this estimation is equal to 0.97 and this amount expresses that the number and kind of selected variables have been proper for justification of the financial leverage variable in regression and the mentioned independent variables have been able to justify dependent variable. The amount of Durbin-Watson statistic in this study is equal to 2.47 which indicates lack of existence of self-correlation that is desirable state in the main hypotheses related to the remainders.

Table 9: Estimation of the related model

Variable	Coefficient		t-statistic	P-value
	Size	Sign		
	0.154781	+	3.466736	0.0006
	−0.157618	–	−3.460694	0.0006
	0.113703	+	4.234298	0.0000
	15.03892	+	10.34427	0.0000
	−0.101781	–	−8.145816	0.0000
	0.008185	+	0.225192	0.8219
	0.676463	+	25.64437	0.0000
	−0.000422	–	−1.898515	0.0583
	0.170571	+	5.480094	0.0000
	−0.513703	–	−38.66592	0.0000
	0.006345	+	0.302255	0.7626
	0.716179	+	7.589590	0.0000
	0.000047	+	0.022104	0.9824
GOV	−0.014196	–	−4.117971	0.0000
GOV	0.012842	+	3.663592	0.0003
GOV	−0.008189	–	−4.368879	0.0000
GOV	−0.826170	–	−10.25643	0.0000
GOV	0.007187	+	7.452756	0.0000
GOV	−0.000689	–	−0.253507	0.8000
Fixed amount	−0.962994	–	−3.672391	0.0003
P(F)= 0.000 R^2=0.96, R^2=0.97 d.w=2.47				

Reference: Research findings

5. CONCLUSION

The results gained from fitness of first model indicate that:

- The variables of profile picture of managing director, experience of managing director, relation of managing director, performance of ex-managing director, governmental ownership of corporation as the independent variables have significant relationship with financial leverage as dependent variable. Consequently, the first hypothesis of this research which expresses "management overconfidence influences on co-financing decision" by using of the variables of profile picture of managing director, experience of managing director, relation of managing director, performance of ex-managing director and second hypothesis of this research which expresses that "governmental ownership influences on co-financing decision", are accepted.
- The variables of education level of managing director, gender of managing director as the independent variables don't have significant relationship with financial leverage as dependent variable. Consequently, the first hypothesis of this research that says "the management overconfidence influences on co-financing decision", is rejected by using of the variables of education level and gender of managing director.

The results of fitness of the second model of the research indicate that:

- There is significant relationship between independent variables (*PP×GOV, EDU×GOV, EXP×GOV, GEN×GOV,* *NET×GOV*) and financial leverage as dependent variable. Consequently, the third hypothesis of this research which says "the ownership structure of government moderates the relationship between the management overconfidence and co-financing decision", is accepted by using of the variables of profile picture, education level, experience, gender and relation of managing director.

- There is not significant relationship between the variable of PERF×GOV as independent variable and financial leverage as dependent variable. Consequently, the third hypothesis of this research which says "the ownership structure of government moderates the relationship between management overconfidence and co-financing decision", is rejected by using of the variable of ex-managing director performance.

Generally, the results gained from the fitness of the first model of the research for testing the first and second hypotheses of the research conform to the results of Kiong et al. (2016), Aramideh et al. (2016) and the results gained from the fitness of second model of the research for testing the third hypothesis of the research conform to the results of Kiong et al. (2016).

6. APPLICABLE SUGGESTIONS

With regard to the theoretical principles of the research and findings gained from testing the research hypotheses, the following cases are suggested:

- The investors at the time of making the sale and purchase decisions should consider combination of stockholders, ownership concentration and amount of governmental ownership as one of the variables of decision.
- The investors and creditors should consider the ownership structure at the time of decision-making about investing or giving credit.
- In order to keep the financial health and investment of investors and especially bulk stockholders, in determining the corporation management, they should consider a behavior like overconfidence and have more control at least on activities of the corporation management.
- Existence of financial leverage can be considered as a mechanism for bank debt of corporation and it can be suggested to Tehran's securities stock exchange organization that in order to increase the bank debt and control on performance of corporations' managers should provide the conditions of corporations' use of financial leverage in the capital structure.
- Existence of an amount of leverage (not with much amount) helps in keeping the investors benefits and reducing the opportunistic behaviors of management. Therefore, it can be suggested to the investors to consider the amount of their financial leverage in corporations analysis.

REFERENCES

Aghaie, B.A., Saeedi, P. (2016), Studying the Relationship between the Management Overconfidence and Renewal of Financial Statements Presentation in the Corporations Listed on Tehran's Securities Stock Exchange, the Second International Conference of Accounting, Management and Innovation in Business, Rasht, Lutheran University in California, Rasht Municipality. Available from: http://www.html178_02ICAMIB-02, http://www.civilica.com/Paper-ICAMIB.

Arabsalehi, M., Amiri, H., Kazemi, N.S. (2014), Studying the effect of senior managers overconfidence on investment sensitiveness-cash flows. Journal of Financial Accounting Researches, 6(2), 115-128.

Aramideh, A., Davood, F., Taghavi, A. (2016), Studying the relationship between the management overconfidence and abnormal costs of auditing and the moderating role of management ownership in the corporations listed on Tehran's securities stock exchange. International Conference of Dynamic Management and Economy of Iran-Malaysia, Malaysia-Penang Island, USM University, the Center of Development of New Education in Iran (CDNEI). Available from: http://www.html166_01-MDEHAMAYESH01, http://www.civilica.com/Paper-MDEHAMAYESH.

Bouwman, C. (2014), Managerial optimism and earnings smoothing. Journal of Banking and Finance, 41, 283-303.

Chavoshi, K., Rastgar, M., Mirzaie, M. (2015), Studying the relationship between the managers overconfidence and selection of financing policies in the corporations listed on Tehran's securities stock exchange. Financial Knowledge of Securities Analysis (Financial Studies), 25(8), 29-41.

Chen, S., Lai, S., Liu, C., McVay, S. (2014), Overconfident Managers and Internal Controls, Working Paper, National Taiwan University and University of Washington.

Chyz, J., Gaertner, F., Kausar, A., Watson, L. (2014), Overconfidence and Aggressive Corporate Tax Policy. Available from: http://www.ssrn.com/ abstract=2408236.

Dastgir, M., Miraki, F., Kazemi, N.S. (2014), The Effect of Excessive Self-Reliance of Senior Managers on Financial Agitation, Accounting Studies, Spring, 2014, First Year-No. 2. p5-37.

Davoodi, F., Jenabi, M.H. (2016), Studying the Relationship between the Management Overconfidence and Abnormal Return on Stocks in Tehran's Securities Stock Exchange, the Fourth International Conference of Applicable Researches in Management and Accounting, Tehran, Shahid Beheshti University. Available from: http://www.html371_04-AMSCONF04, http://www.civilica.com/Paper-AMSCONF.

Deshmukh, S., Goel, A., Howe, K. (2013), CEO overconfidence and dividend policy. Journal of Finance Intermediation, 22(3), 440-463.

Duellman, S., Hurwitz, H., Sun, Y. (2015), Managerial overconfidence and audit fees. Journal of Contemporary Accounting and Economics, 11(2), 148-165.

Fathi, S., Abzari, M., Habibi, S. (2014), Meta-analysis of the determining factors of capital structure in the corporation level. Scientific-Investigative Journal of Asset Management and Financing, (4)2, 55-74.

Kiong, I.W.T., Hooi, H.L., Qian, L.K., Noor, A.A. (2016), Managerial overconfidence, government intervention and corporate financing decision. International Journal of Managerial Finance, 12(1), 4-24.

Malmendier, U., Tate, G. (2008), Who makes acquisitions? CEO overconfidence and the market's reaction. Journal of Financial Economics, 89(1), 20-43.

Mirzaie, M. (2013), Studying the Relationship between Overconfidence and Financing Policies of Corporations Listed on Tehran's Securities Stock Exchange, MSc Thesis, and Faculty of Economic Sciences.

Moradi, H., Kheirollahi, F. (2015), Studying the Effect of Excessive Self-Reliance of Ownership on Investment Sensitiveness in Tehran's Securities Stock Exchange, the First International Conference of Applicable Economy and Commerce, Tehran, Ortakheh Knowledge-Based Corporation. Available from: http://www.html10401-ICAEB01, http://www.civilica.com/Paper-ICAEB.

Pompian, M.M. (2006), Behavioral Finance and Wealth Management. Translated by, Ahmad, B. Kayhan Publishers.

Ramesheh, M., Mollanazari, M. (2014), Management overconfidence and accounting conservativeness. Accounting Knowledge: Spring, 5(16), 55-79.

Shahi, M. (2015), The Management Overconfidence and Accounting Conservativeness, The First International Conference of Accounting and Auditing in Management and Economy, Isfahan, The Conference Secretariat. Available from: http://www.html218_01CAAME-01, http://www.civilica.com/Paper-CAAME.

Vahedian, S., Tari-Verdi, Y. (2016), The Effect of Management Overconfidence on Financial Reporting Quality, the First International Conference of New Investigative Achievements in Management, Accounting and Economy. Tehran: The office of International Confederation of the World Inventors in Iran, Mino's University of Applied Science and Technology. Available from: http://www.html011_01AMCONF-01, http://www.civilica.com/Paper-AMCONF.

Velury, U., Jenkins, D. (2006), Institutional ownership and the quality of earnings. Journal of Business Research, 59, 1043-1051.