



## Studying the relationship between corporate governance, financial management decisions and firm's financial performance

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### ABSTRACT

Corporate governance is one of the critical issues that lead to improve business environment. Corporate governance not only values firm managers interested in knowing the quality level and corporate governance structure and its adjustment with the best methods and regulations, but also is attractive for participants in the market who are interested in knowing governance risk in firms. On the other hand the major role of financial reporting is to transfer data to outsiders in an organization efficiently. Any business unit works within a field through which the result of performances could be studied and assessed and measured through different methods. Also the main goal of most firms is to create value for shareholders and to maximize it by using managerial decisions. The present study is going to investigate about the relationship between corporate governance, financial management decisions, and financial performance of firms. The statistical sample used in the present research includes 76 enlisted in Tehran Stock Exchange during the time period between 2010 and 2014. The dependent variable in this research is firm performance. The independent variables whose effect on firm performance is going to be investigated include corporate governance elements (ownership percentage of institutional investors, ownership concentration, board size, the proportion of not in charge board members), financial management decisions (over-investment, sub-optimal investment). The intended data were collected and were categorized in an excel file as data references. Also testing the hypotheses was carried out by using multiple variable regressions based on pooled data techniques by using Eviews economic measurement software. Research findings showed that there has been a negative and meaningful relationship between ownership percentage of institutional investors and financial performance with a probability of %95. Also there has not been a meaningful relationship between board size, the proportion of not in charge board members (independence of board), and financial performance. On the other hand, there has not been a meaningful relationship between over-investment and financial performance. But there has been a positive and meaningful relationship between sub-optimal investment and firm's financial performance.

### Keyword:

*Corporate governance, financial management decisions, financial performance*

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**INTRODUCTION**

Commercial banks with the aim of bringing profit for their From early 1980s a global economic movement happened. Capital markets gradually changed into an international and unitary market. The investors became more aware and tended to know more details about firms as much as possible and data such as historical cash earnings paid in the firm could not satisfy the investors to get more information. Financial statements like balance sheets and income statements were then prepared by using traditional methods and they did not present enough information for the investors. Therefore, cash statements were changed into an important criterion for information. Many consulting companies and academics were moving towards investigating new trends better than traditional auditing because they were studying more years. In fact, the main goal of many firms was to maximize firm value to attract the satisfaction of shareholders, staffs, customers, suppliers, and the society (Izadinia, 2003). Regarding the important role of capita; market in economy of each country it would be necessary that the investors should be aware of financial data of firms to set the ground for appropriate investment and optimal appropriation of resources in capital market (Bobakeri, 2012). Net profit is one of the most important financial information presented in income statement and is considered as a basis to assess performance and to identify firm value. Facts like estimates and different methods in accounting and benefits' controversy between managers and owners has led to different financial statements of a business unit in reported earnings than the real earnings and it creates doubts about the function of earnings as a criterion for decision making (Izadinia&Nazarzadeh, 2010).

**Theoretical foundation of the research**

By the emergence of the isolation of ownership and commencement of benefits between owners and managers, the assessment of firms' and managers' performance became noticed as important issues considered by different people like creditors, owners, government, and even managers (Jensen &Meckling, 1976). While issues such as information asymmetry, taxation, and high costs of agency in capital market are seen, benefits' controversy between beneficiaries has changed into one of the most important and effective factors because firms can divide their earnings among shareholders or can pay the earnings to repay debts or to finance for new investments. There is a close relationship between stock earning, investment, and investment. Thus, making appropriate decisions and policies regarding economic status, the intended industry and firm on the part of management leads to improve performance and thus increasing firms' value. Corporate governance and discussions related to beneficiaries in a firm (managers, staffs, customers, administrative managers, board, and shareholders) are among important issues in economy in many developing countries like Iran. Firms' financial performance has a direct relationship with corporate governance right and better managers lead to more effective corporate governance and more attention paid to beneficiaries and finally this would create higher returns. Also managers are expected to be successful regarding growth, in time repayment of commitments, creating value for shareholders, group work, management and risk control,

relationship with working environment and on the whole, trying to achieve firm goals. If the quality of firms' performance is affected by corporate governance structure, the shareholders need more control over managers to reduce the effects of benefits' controversies resulting from agency costs affecting firm's profitability. Corporate governance system in each country is determined regarding a set of factors like firms' ownership structure, economic status, legal system, governmental and cultural policies and ownership structure and legal frameworks are among the most important and determinative factors. Any change in elements and structure of firms' ownership leads to change strategic moving route and their performance and also increasing or reducing agency costs (Rahnomay-e-Rouposhti&Latifi, 2010). The financial assessment of investment plans is done by managers. Managers should invest optimally in investment plans that create value for the company- plans with positive net current values (Bidel& Hillary, 2006). Investment sufficiency or optimal investment requires on the one hand to avoid spending resources in activities with over-optimal status, and on the other hand, resources are directed towards activities that require more investment (Modarres&Hesarzadeh, 2008). Unlike the presence of reasons for over-investment, faithful reporting can avoid it. There are several parties in investment decisions including managers who make investment decisions, board members who review capital budget, and other external capital suppliers (Mc Nicoles&Stoben, 2008). Accounting goals arise from information needs and demands of the users and the main goal of financial reporting accounting is to state the financial status and performance of business unit for outsider users of organizations to help them in financial and investment decisions. The main tools to transfer information to individuals mentioned is basic financial statements such as income statement (the figure for reported earnings). One of the management strategies to realize the main goal of any business unit is increasing stock value or earnings management (Luo, 2008). Hilly &Wallen believe that earning management occurs when managers use their personal judgments in financial reporting and manipulate exchange structure to change financial reporting. This is done either to deviate some of shareholders and investors regarding economic performance of the firm or aiming at affecting the results of contracts whose settlement is bound to achieve certain earnings (Noravesh& et al, 2005). During some recent years in Iran and regarding the administration of article 44 of Constitutional law to implement privatization, the presence of different investors among firms' shareholders has been considerable and studying the quality and quantity of corporate governance and its effects on firms' performance can be useful to support investors and to help financial analysts and the founders of capital market. In the present research we tried to identify the effects of corporate governance and financial management decisions on financial performance of firms. Thus, the main research question is whether corporate governance and financial management decisions affect financial performance of firms or not?

## Research literature

Bauer & et al (2004) studied the relationship between corporate governance quality and firms' performance in 141 firms active in Stock Exchange in Kenya during the years between 2000 and 2003. Their research findings showed that there has been a positive meaningful relationship between corporate governance quality and firms' performance.

Khanchel (2007) investigated about the relationship between corporate governance and firms' performance in a sample of 240 firm-year observations of firms present in Stock Exchange in Tunisia during the years between 2000 and 2005. He used three elements of board, ownership structure, and financial market to measure corporate governance. The research findings showed a strong relationship between ownership and firms' performance.

Ihikioya (2009) carried out a research entitled: "the relationship between corporate governance structure and firms' performance in newly emerged economies", to study the relationship between some elements of corporate governance and firms' performance considering a sample of 107 active firms in Stock Exchange in Nigeria during the time period between 1998 and 2002. The research findings showed that ownership structure, leverage, and firm size have had a positive relationship with firm's performance and the duality of CEO has had a meaningful negative relationship with it. Meanwhile, there has not been any meaningful relationship recognized between the composition of board members and firm's performance.

Vincent & Nicole (2010) studied about the relationship between firms' performance and size and the composition of board. In this research earning before tax and interest to total assets and Q Tobin ratio were used to assess performance. Results of their study showed that board size and performance are related conversely and this negative effect is less in small companies. Also the percentage of non-administrative managers (board independence) has a positive effect on firms' performance.

Alnour&Almazroghi (2011) investigated about the relationships between institutional ownership and performance in 35 firms in Stock Exchange in France during the years between 2002 and 2011. Results of their research showed that there has been a meaningful and reverse relationship between institutional ownership and firm performance measured by Q Tobin.

Neelam Rani (2013) studied the interference level of corporate governance and short-term performance of the firms for a sample of firms by establishing an index of corporate governance. Studying on a questionnaire of a sample of 155 firms was done during January 2003 and December 2008. Based on documents there has been a positive relationship between board size and audit committee and unnatural short-term return in governmental firms in India.

Habib & Jiang (2014) investigated about the relationship between corporate governance effect on financial reporting and audit quality. In order to improve financial reporting we need to foster efficient resource appropriation decisions by managers in big companies. Also the domination of government on firms leads to the formation of an obligatory responsibility on managers to disclose and of course a meaningful difference in audit market would be created compared to other countries.

Hassas-e-Yeghaneh&et al (2012) studied about the effect of corporate governance (institutional ownership) on financial performance of firms enlisted in Tehran Stock Exchange during the time period between 2005 and 2009. The experimental evidences showed a meaningful relationship between the existence of institutional shareholders and financial performance indexes like return on sales, return on assets, operational earning to assets, and return on equity.

Ansari & et al (2012) investigated about the relationship between firm leadership criteria and performance assessment indexes regarding value creation criterion in firms enlisted in Tehran Stock Exchange. The characteristics considered in firm leadership in this research were categorized into two overall groups of ownership structure and board structure. Findings in this research showed that regarding value creation criterion in firms, ownership structure has had a meaningful relationship with performance. Meanwhile, there has not been any relation observed between board structure and performance.

Moeiloldin& et al (2014) studied the effect of corporate governance system on the relationship between capital structure and value of firms enlisted in Tehran Stock Exchange for the time period between 2003 and 2009 by using structural equations and regression. Research findings showed that corporate governance did not have an intermediary role regarding the relationship between capital structure and firm value and there has been a meaningful relationship between corporate governance and firm value and capital structure.

## Hypotheses development

To respond the research questions based on theoretical foundations and experimental studies the major and minor hypotheses were devised as shown below and were tested:

**Major hypothesis 1:** there is a meaningful relationship between corporate governance elements and financial performance of firms enlisted in Tehran Stock Exchange.

**Major hypothesis 2:** there is a meaningful relationship between financial management decisions and financial performance of firms enlisted in Tehran Stock Exchange.

## Minor hypotheses:

**Hypothesis 1-1:** there is a meaningful relationship between the percentage of institutional investors' ownership and financial performance of firms enlisted in Tehran Stock Exchange.

**Hypothesis 1-2:** there is a meaningful relationship between ownership concentration and financial performance of firms enlisted in Tehran Stock Exchange.

**Hypothesis 1-3:** there is a meaningful relationship between board size and financial performance of firms enlisted in Tehran Stock Exchange.

**Hypothesis 1-4:** there is a meaningful relationship between not in charge board members (board independence) and financial performance of firms enlisted in Tehran Stock Exchange.

**Hypothesis 2-1:** there is a meaningful relationship between over-investment and financial performance of firms enlisted in Tehran Stock Exchange.

**Hypothesis 2-2:** there is a meaningful relationship between sub-optimal (undesirable) investment and financial performance of firms enlisted in Tehran Stock Exchange.

## Methodology

The present research is correlation regarding method and applied regarding the goal. Since historical data will be used

in testing the hypotheses it can be categorized within quasi-experimental researches. Also this research is experienced based and inference has been used in it and a field-library study has been used by using historical data in a post

$$Q - TOBIN_{it} = \beta_0 + \beta_1 INST.OWN_{it} + \beta_2 Con.own_{it} + \beta_3 Size.board_{it} + \beta_4 NEDP_{it} + \beta_5 Size_{it} + \beta_6 growth_{it} + \varepsilon_{it}$$

$$Q - TOBIN_{it} = \beta_0 + \beta_1 OVERINV_{it} + \beta_2 SUBOPTINV_{it} + \beta_3 Size_{it} + \beta_4 growth_{it} + \varepsilon_{it}$$

### Dependent variable:

#### Q Tobin ratio

The dependent variable in this research is firms' financial performance. Firm performance is the result of activities and return of its investments within a certain period. In this research we have used market value of equity to net book value of assets ratio to calculate Q Tobin as follows:

$$Q - TOBIN_t = \frac{MVE_{it}}{BV_{it} - DEBT_{it}}$$

Where,

MVE: market value of equity (the number of common stocks\*stock price)

DEBT: total value of current debts and book value of long-term debts

BV: book value of total assets of the firm

### Independent variables

#### Institutional ownership (INST.OWN)

According to the definition posed and used in researches by Rubin (2007) and Cueto (2009), to calculate the amount of institutional ownership the total stocks owned by the banks and insurances, holdings, investment firms, pension funds, investment firms and investing funds, governmental organizations and institutions and governmental firms to total stocks issued by the firm, were divided by the percentage or amount of institutional ownership.

#### Ownership concentration (Con.own)

Ownership concentration in this research has followed the definition posed by Astami & Tower (2006) as: total stocks of real or legal individuals that own more than 10 percent of firm's stocks. This percentage is calculated through presenting the data in financial statements of firms.

#### Board size (Size.board)

Board size is equal to the number of managers in board. Board size is one of corporate governance mechanisms used in different research projects. Most researchers have found that board size leads to firm's performance improvement in two ways: a) more needs of the firm to create relationship with outside environment, b) more administrative responsibility in firms (Krivogorsky, 2006).

#### Not in charge board members (NEDP)

One of the supervision costs to control agency problem is to use not in charge (independent) board members in board (to supervise management behavior). Not in charge members are professional specialized managers to control decision. Their duty is activities along with agency problems between in charge board members and shareholders such as devising

incidental format. Below there is the calculation methods used to calculate each of the variables:

### Data analyses

First model: the model defined for testing the first major hypothesis and its sub-hypotheses were as follows:

Second model: the model defined for testing the second major hypothesis and its sub-hypotheses were as follows:

rewards for administrative managers and supervising and controlling the alteration of top managers. Additionally, academic literature shows that not in charge members in board support benefits of shareholders better and are better representatives for them (Kumar, 2003). Accordingly, independent members control agency problem and reduce information asymmetry between managers and shareholders by better and more qualified disclosure (Kumar, 2003). The percentage of not in charge board members is calculated by dividing not in charge board members into total board members. Not in charge members do not have administrative positions in the firm.

### Over-investment

Over-investment will be calculated in a way that after determining firms' investment, the amount of industrial investment where the firm works is determined and then the difference between firm's investment and industry median will be considered as over-investment.

This is a variable that if firm's investment is higher than the related industry's median, number 1 and if not so number 0 will be appropriated to it. This in fact represents over-investment to be analyzed further.

### Sub-optimal (undesirable) investment (SUBOPTINV)

Sub-optimal investment is calculated regarding the median of investment industry where the firm works and then firm's investment is calculated. Industry median is subtracted from firm's investment. Then absolute amount gained is considered as sub-optimal investment.

### Control variables

#### Firm size (Size)

Using logarithm is done to remove non-linearity of the data related to firm size. Non-linearity status of the data is created due to the fact that value of assets of firms is dispersed a lot and using logarithm leads to foster investigations (Namazi & Kermani, 2008). In this research we have used the logarithm of total assets' value at the end of the year to identify the comparability of the research with previous researches in the field for firm size and have used the following equation:

$$SIZE_{it} = \log(Assets_{it})$$

#### Sales growth (growth)

It represents the amount of changes in sales of a firm during a financial period and is calculated using the following equation:

$$Growth = \frac{sale_{it} - sale_{it-1}}{sale_{it-1}}$$

Where,

**Research findings**

Sale<sub>it</sub>: sales of firm i in year t

Sale<sub>it-1</sub>: sales of firm i in year t-1

**Table (1): Results of descriptive statistics**

variable	mean	median	minimum	maximum	Standard error
<i>Q – TOBIN</i>	1.505	-0.8090	-73.6869	599.640	38.4302
<b>INST. OWN</b>	0.2527	0.2000	0.0500	0.7000	0.2076
<b>Con. own</b>	31.2874	36.5388	-180.738	91.6116	34.0573
<b>Size. board</b>	0.3605	0.2666	0.1000	0.9000	0.2462
<b>NEDP</b>	0.6181	0.6700	0.1000	1.000	0.2437
<b>OVERINV</b>	0.3587	0.000	0.000	1.000	0.4805
<b>SUBOPTINV</b>	167748.9	17247	19.000	6174804	566247.3
<b>Size</b>	5.8883	5.6854	4.4215	7.9181	0.8181
<b>growth</b>	1.1473	0.1824	-1.000	170.3259	10.7152

Dispersion indexes are standard deviation and other indexes include minimum, maximum, skewness, and pulling.

Regarding the descriptive statistics we can divide the scales above into central tendency, dispersion and other indexes. Central tendency indexes include mean and median.

Results of normality test are as follows:

**Table (2): Results of normality test**

variable	(K-S) statistic	(Sig) Importance level
<b>Q Tobin ratio</b>	<b>0.424</b>	<b>0.368</b>

Regarding table (2), since after normalizing the data the importance level (Sig.) of Kolomogorov-Smirnov statistic for the dependent variable has been higher than 0.05 (0.368), the hypothesis H<sub>0</sub> is approved with an assurance

level of %95 and this shows that Q Tobin ratio has a normal distribution after normalization process.

Then, to test consistency we have used Levin’s test. The results of this test are represented in table (3):

**Table (3): Results of unitary root test of Levin for model variables**

variable	Levin statistic	probability	Result
<i>Q – TOBIN</i>	10.319	0.000	consistent
<b>INST. OWN</b>	6.6321	0.000	consistent
<b>Con. own</b>	42.798	0.000	consistent
<b>Size. board</b>	16.5317	0.000	consistent
<b>NEDP</b>	12.3398	0.000	consistent
<b>OVERINV</b>	0.0031	0.000	consistent
<b>SUBOPTINV</b>	4.1810	0.000	consistent
<b>Size</b>	0.1003	0.000	consistent
<b>variable</b>	114.94	0.000	consistent

**Variances’ congruence**

Regarding the results presented in the table above all research variables has had consistency in an assurance level of %95. Below the results of testing hypotheses are presented as the tables show:

In this research and to avoid the incongruence of variances when model is estimated we have used White’s test to recognize the presence of variance congruencies.

**Table (4): Studying Variances’ congruence**

Models	Null hypothesis	White statistic	Probability	Result
<b>First model</b>	Variance congruence	<b>0.4415</b>	<b>0.8506</b>	<b>Approval of the hypothesis regarding the congruence of error variances</b>
<b>Second model</b>	Variance congruence	<b>0.7650</b>	<b>0.5488</b>	<b>Approval of the hypothesis regarding the congruence of error variances</b>

Beruish Godfrey test. Results of this test are summarized in table (5).

**Self-correlation between disturbance elements**

In this research and to identify the presence or lack of presence of self-correlation of error utterances we have used

**Table (5): Results of Beruish Godfrey test to recognize self-correlation**

Models	Null hypothesis) $H_0$ (	F statistics, Godfrey test	p-value	Test result
First model	There is not self-correlation	0.0293	0.9710	$H_0$ is approved
Second model	There is not self-correlation	0.0347	0.9658	$H_0$ is approved

Regarding the results shown in figure above, the research model does not suffer from self-correlation of error utterances.

If the amount of F statistic calculated is bigger that critical amount of F the null hypothesis is rejected and the difference of latitude from the bases is accepted for different planes. Results related to F test are presented in table 6:

**Identifying research models' estimation methods**

**Table (6): Results of F Limer test for research models**

Model	statisticF	Meaningfulness level	Test result
First hypothesis model	0.8233	0.048	rejection $H_0$
Second hypothesis model	0.8459	0.046	rejection $H_0$

Results of this table show that the null hypothesis claiming the equality of latitudes from the bases in different plates for all models is rejected. After identifying the inequality of

latitudes from bases we should identify the method used in estimating the model (fixed or random effects) and to do so we use Hausman's test.

**Table (7): Results of Hausman's test to select from among fixed and random effects**

Model	statistic $\chi^2$	Meaningfulness level	Result	Approved method
First hypothesis model	2.3474	0.021	rejection $H_0$	Fixed effects
Second hypothesis model	1.6258	0.041	rejection $H_0$	Fixed effects

Results in the table above show that in all models the null hypothesis is rejected, therefore, models should be estimated based on fixed effects.

**First major hypothesis and its minor hypotheses**  
Results of testing the hypotheses based on estimating the model above have been represented in table (8).

**Results of testing hypotheses**

**Table (8): Statistical results of research model test, the dependent variable of Q Tobin ratio**

Variable	Coefficient	statistic	Amount of probability Prob	Relationship type	Meaningfulness level (5 & 10 error)
fixed	42.8806	1.3277	0.1895	positive	Lack of meaningful relationship
<b>INST. OWN</b> Institutional ownership	-17.5978	-2.0614	0.0437	negative	Meaningful relationship
<b>Con. own</b> Ownership concentration	-0.0047	-0.0822	0.9348	negative	Lack of meaningful relationship
<b>Size. board</b> Board size	-5.0984	-0.1897	0.8502	negative	Lack of meaningful relationship
<b>NEDP</b> Not in charge board members	-13.9415	-0.5108	0.6114	negative	Lack of meaningful relationship
<b>Size</b> Firm size	-4.6140	-1.9158	0.0603	negative	Meaningful relationship
<b>growth</b> Sales growth	-0.0128	-0.1526	0.8792	negative	Lack of meaningful relationship
Identified coefficient amount $R^2$	0.1508				
Adjusted Identified coefficient amount $R^2$	0.0630				
Durbin-Watson test $D-W$	2.525				
Test of disturbance utterances- Jarque-Bera test statistic	1.528				
Jarque-Bera test statistics probability	0.384				
Test amount $F$	1.9872				
amount $Prob$	0.0331				

Regarding the primary results of model estimation, the amount of Durbin-Watson statistic equals 2.425 (Durbin-Watson should be between 1.5 and 2.5) and since it is between 1.5 and 2.5, we can conclude that residuals are independent and the model does not have self-correlation problem among disturbance elements. In studying the meaningfulness of the overall model and regarding the amount of F statistics probability that is smaller than 0.05 (0.033), we can approve the meaningfulness of total model with an assurance of %95. Below the research hypotheses are discussed in isolation:

**Hypothesis 1-1 states that:** there is a meaningful relationship between the percentage of institutional investors' ownership and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of the percentage of institutional investors' ownership (INST.OWN) is negative and in error level of %5, it is meaningful. Thus, hypothesis  $H_0$  is rejected and hypothesis 1-1 is approved in error level of %5.

**Hypothesis 1-2 states that:** there is a meaningful relationship between ownership concentration and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of ownership concentration (Con.OWN) is negative and in error level of %5, it is not

meaningful. Thus, hypothesis  $H_0$  is not rejected and hypothesis 1-2 is not approved in error level of %5.

**Hypothesis 1-3 states that:** there is a meaningful relationship between board size and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of board size (Size.board) is negative and in error level of %5, it is not meaningful. Thus, hypothesis  $H_0$  is not rejected and hypothesis 1-3 is not approved in error level of %5.

**Hypothesis 1-4 states that:** there is a meaningful relationship between the ratio of not in charge board members (board independence) and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of board size (NEDP) is negative and in error level of %5, it is not meaningful. Thus, hypothesis  $H_0$  is not rejected and hypothesis 1-4 is not approved in error level of %5.

Regarding the results gained from minor hypotheses we can say that the first research hypothesis claiming that: "there is a meaningful relationship between corporate governance elements and financial performance of firms enlisted in Tehran Stock Exchange" is not accepted.

**Second major hypothesis and its minor hypotheses**

Results of testing the hypotheses based on estimating the model above have been represented in table (9).

**Table (9): Statistical results of research model test, the dependent variable of Q Tobin ratio**

Variable	Coefficient	statistic	Amount of probability <i>Prob</i>	Relationship type	Meaningfulness level (5 & 10 error)
Fixed	22.4939	1.6344	0.1074	positive	Lack of meaningful relationship
<b>OVERINV</b> Over-investment	-4.7812	-1.3514	0.1816	positive	Without relationship
<b>SUBOPTINV</b> Sub-optimal investment	0.9305	2.8517	0.0060	positive	Meaningful relationship
<b>Size</b> Firm size	-3.8087	-1.6873	0.0967	negative	Lack of meaningful relationship
<b>growth</b> Sales' growth	-0.0161	-0.2010	0.8413	negative	Lack of meaningful relationship
Identified coefficient amount $R^2$	0.2028				
Adjusted Identified coefficient amount $R^2$	0.1497				
Durbin-Watson test <i>D-W</i>	2.383				
Test of disturbance utterances- Jarque-Bera test statistic	1.528				
Jarque-Bera test statistics probability	0.384				
Test amount <i>F</i>	3.8178				
amount <i>Prob</i>	0.0078				

Regarding the primary results of model estimation, the amount of Durbin-Watson statistic equals 2.383 (Durbin-Watson should be between 1.5 and 2.5) and since it is between 1.5 and 2.5, we can conclude that residuals are independent and the model does not have self-correlation problem among disturbance elements. In studying the meaningfulness of the overall model and regarding the amount of F statistics probability that is smaller than 0.05 (0.007), we can approve the meaningfulness of total model

with an assurance of %95. Below the research hypotheses are discussed in isolation:

**Hypothesis 2-1 states that:** there is a meaningful relationship between over-investment and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of over-investment (OVERINV) is positive and in error level of %5, it is not meaningful. Thus, hypothesis  $H_0$  is not rejected and hypothesis 2-1 is not approved in error level of %5.

**Hypothesis 2-2 states that:** there is a meaningful relationship between sub-optimal (undesirable) investment and financial performance of firms enlisted in Tehran Stock Exchange. As it can be seen in the table above, estimation coefficient and t statistic related to the variable of sub-optimal (undesirable) investment (SUBOPTINV) is positive and in error level of %5, it is meaningful. Thus, hypothesis  $H_0$  is rejected and hypothesis 2-2 is approved in error level of %5.

Regarding the results gained from minor hypotheses we can say that the second research hypothesis claiming that: "there is a meaningful relationship between financial management decisions and financial performance of firms enlisted in Tehran Stock Exchange" is not accepted.

#### **Discussion and conclusion**

In this part and based on theoretical foundations and previous researches, also models and variables utilized in the present study, the interpretation of results of testing the hypotheses would be presented:

**Hypothesis 1-1:** this research tested the relationship between the percentage of institutional investors' ownership and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed a negative and meaningful relationship with an assurance of %95 between the percentage of institutional investors' ownership and financial performance. Thus, this research hypothesis is accepted.

**Hypothesis 1-2:** this research tested the relationship between ownership concentration and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed that there is not a meaningful relationship between ownership concentration and financial performance.

**Hypothesis 1-3:** this research tested the relationship between board size and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed that there is not a meaningful relationship between board size and financial performance. Thus, we can claim that board size does not have a meaningful effect on financial performance.

**Hypothesis 1-4:** this research tested the relationship between not in charge board members (board independence) and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed that there is not a meaningful relationship between not in charge board members (board independence) and financial performance in assurance level of %95.

Below we will deal with studying the second research hypothesis:

**Hypothesis 2-1:** this research tested the relationship between over-investment and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed that there is not a meaningful relationship between over-investment and financial performance in assurance level of %95.

**Hypothesis 2-2:** this research tested the relationship between sub-optimal (undesirable) investment and financial performance of firms enlisted in Tehran Stock Exchange. Result of testing the hypothesis showed that there is positive and meaningful relationship between sub-optimal (undesirable) investment and financial performance in

assurance level of %95. Thus, this research hypothesis is accepted.

Regarding the results gained from testing minor hypotheses of the second hypothesis we found out that there has not been a meaningful relationship between financial management decisions and financial performance of firms enlisted in Tehran Stock Exchange.

In today's world the increasingly changes in needs of customers and people, different demands of beneficiaries, complexities in rules and regulations and the technologies of doing work set the ground to notice corporate governance structure to regulate firms' goals and how to achieve the goals and how to supervise their performance. The goal of applying corporate governance is to make sure of the presence of a framework that prepares an appropriate balance between freedom of management, responsiveness, and benefits of different firm beneficiaries.

Regarding the results gained from testing minor hypotheses of first hypothesis we found out that there has not been a meaningful relationship between corporate governance elements and financial performance of firms enlisted in Tehran Stock Exchange.

Namazi&Kermani (2008) showed that there has been a positive and meaningful relationship between institutional ownership and firm performance. Hassas-e-Yeghaneh& et al (2009) showed that there has not been a positive and meaningful relationship between corporate governance quality and firm performance. Gholamhosseinzadeh (2010) found a direct and meaningful relationship between corporate governance and firm performance. Hassas-e-Yeghaneh& et al (2012) reported a meaningful relationship between the existence of institutional shareholders and financial performance indexes in experimental evidences. Bauer & et al (2004) showed that there is a positive meaningful relationship between corporate governance quality and firm performance. Atya&Rubina (2007) showed that board reward, institutional ownership, and major shareholders' ownership affect firms' performance meaningfully. Khanchel (2007) showed that there is a strong relationship between governance and firms' performance. Badula (2008) showed that from among different characteristics, board, board independence, and size have had a positive and meaningful relationship with firm's performance and duality of CEO has had a negative and meaningful relationship with firm's performance. Chang (2008) showed that there has been a positive relationship between board size and the percentage of not in charge managers and firm's performance. Iehikioya (2009) stated that firm performance and duality of CEO have had a negative and meaningful relationship. Vincent's and Nicole (2010) showed that board size and performance are related conversely and this negative effect is less for the small firms. Also the percentage of not in charge managers (board independence) has a positive effect on firms' performance. Alnour and Almarzoughi (2011) showed that there is a meaningful and reversed relationship between institutional ownership and firm's performance measured by Q Tobin. Fouladi&Shokour (2012) showed that there is a positive and meaningful relationship between board size and board independence and firm's performance. Also there is a



negative relationship between duality of CEO responsibility and firm's performance.

### Suggestions based on the present research

In this research and to investigate about the relationship between corporate governance, financial management decisions, and firm's financial performance the required tests were administered. On the one hand, the role of each one is significant for appropriate decision making and can help to enhance the correctness of decisions to help investors. Also finding appropriate resolutions and applied solutions are among our research goals. Although we seek to reduce risks and errors in Stock Exchange market, finding appropriate and applied resolutions is among our research goals.

- 1- Since in firms with more ownership concentration, major owners and managers are related more and mainly support each other reciprocally, this cooperation and relationship mostly results in reduction of supervision and this is followed by the probability of misuse of assets, deviations in financial statements, and reduction in earning quality regarding other shareholders' outlooks. Thus, we can suggest to devise more precise articles and guidelines to supervise based on outside organizational (external) corporate governance principles by supervising institutions and Stock Exchange Organization.
- 2- Since the bases of corporate governance such as board, general assemblies, inspectors, criminal laws, obligatory reports, strategies to support rights of shareholders in minority in laws approved in our country such as business rule and other rules such as Stock Exchange laws on Islamic Republic of Iran, the rule of fight against stealing, the law of developing means, new financial institutions, and ..., considering corporate governance principles in revising the rules mentioned is considered as an important and principal step in implementing appropriate corporate governance systems in firms and thus supporting shareholders' rights.
- 3- The results of the present research can be used in devising firms' leadership rules. Results of the present research can be noticed by assemblies and boards of firms to recognize strategies to increase performance level and the investors can make better decisions regarding the factors affecting firms' future performance.
- 4- Regarding the presence of firms in Stock Exchange and goals in absorbing investors, they can use the present research to move forwards to achieve their goals.

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