

An Empirical Investigation of the Relationship between Corporate Ownership Structures and their Performances (Evidence from Tehran Stock Exchange)

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Abstract This study investigates the effects of ownership structure on the performance of the listed companies in the Tehran Stock Exchange (TSE). Consequently, a main hypothesis is presented, which states that there is a significant relationship between companies' ownership structures and their performances and then five sub-hypotheses are provided. For testing the hypotheses, the statistical "panel data" technique is employed. For testing each hypotheses, 4 accounting and economics performance evaluation variables models based on different ownership structures are established. The statistical population includes 66 companies in the period between 2003-2008. Based on the research results, all hypotheses except the fourth one, were confirmed. The findings revealed a significant negative relationship between the "institutional ownership" and companies' performances; and the relationship between "corporate ownership" and companies' performance generally was significantly positive. "Management ownership", however, would affect the performance significantly and negatively. For "foreign ownership", there was no information that would indicate ownership of the foreign investors in our samples companies. With respect to the "company ownership", just in the models based on the accounting variables (i.e., ROA and ROE) coefficients are significant and negative. But in the models based on the "market variables" (i.e., Q-Tobin and MBVR) coefficients are not significant. In general, there was a significant relationship between companies' ownership structures and their performances.

Keywords: *ownership structure, corporate governance, Tehran Stock Exchange (TSE), panel data, performance evaluation*

1. Introduction

In its primitive form, agency theory, [30] and [6], with respect to the owner- management relations, hypothesizes that firms consist of two individuals; the agent (management) and the principal (the owner). The principal delegates authority of the decision makings concerning utilization of the firms' scarce resources to the agent based upon a designated fee schedule. However, since the objectives of the agent may be incompatible with the principal's objectives and their incentives may not be congruent, the agent's performance evaluation must be appropriately exerted [43].

Recently, the concept and applications of the basic agency theory, however, has been extended to more realistic situations-i.e., the corporate governance situations [60] and [58] in that, the role of the board of directors, management and those who are responsible in governing the corporation, are being identified and their potential relationships with corporate performances are being sought. However, as it will be explained later, the findings are primitive and sometimes opposite. Additionally, in developing countries, this kind of studies is in its early stages and a solid empirical studies are limited. (see e.g.,

[23] and [40], Hence, no conclusive results in this vital area can be derived from the existing literature.

Consequently, the major objective of this study is providing an empirical evidence to respond to this inquiry: does different corporations', ownership structure would lead to different financial performances? If that is the case, which form of the ownership structures, is the most appropriate one for enhancing the firms' financial performances? In approaching these questions, data for the companies listed in the Tehran Stock Exchange (TSE) will be extracted for 5 year period (2003-2008).

The structure of the paper is as follow. Section 2 is devoted to explain theoretical foundation of the paper. Section 3 reviews the domestic and foreign literature regarding the kinds of the ownerships and their significance in the corporate governance domain. The research method ,including hypotheses, research variables ,model buildings, population and sample selection ,data collection method, and statistical test is provided in section 4. Section 5 reveals the findings of the study and hypotheses. The concluding remarks and discussion of the article is reported in section 6. Finally, section 7 offers suggestions for future studies.

2. Theoretical Structure

Theoretical framework of this study is centered on the concept of the "corporate governance". This concept is based upon governing corporations in such a manner to respond to the stockholders and other stakeholders' financial demands and performing managements' stewardship functions [28]. In essence, different groups have attempted to define corporate governance. One group defines it as an attempt to discover a structure in such a manner that the power of realizations and decision makings of the managers will be exerted for servicing the firm's stockholders by the best channel [58].

Another group emphasizes corporate governance from the economic realm and considers it as a means for making corporations more efficient by establishing appropriate infrastructures such as contracts and designing corporate rules and regulations. This view is focused on the principle of increasing the value (wealth) for the stockholders [37].

The Organization for Economic Cooperation and Development (OECD, 1998) also has defined corporate governance as an organizational structure among stockholders, board members and management which determines their responsibilities.

Recently, different corporate governance models have been introduced in the literature. [50] and [4], for example, identify two distinctive models:

English-American (Anglo.-Saxon), and
German-Japanese model.

In the first model, private ownership is the key matter and stock exchange is the major source for providing corporations' funds. In the second model, a corporation is viewed as a coalition of different groups with incompatible interests and thus the function of the top management is to reach to equilibrium among different stakeholders. [63] consider these two models as the "Control Originated" and "Arms-Length Financing" models.

Given the nature and objective of this study, the Arms-length financing model will be adopted.

3. Literature Review

Kumar [34] identifies two main ownership structures: 1) institutional ownership and 2) private ownership. The first kind of ownership is referred to as the percentage of the stocks from the whole stocks which is maintained by the public corporations. The corporations include insurance companies, financial institutions banks, public corporations and other government sections. The second structure consists of private ownership and is divided into the following sub-sections:

1) firm investors, 2) management investors and 3) foreign investors [13]

In Iran, until almost 5 years ago and before the emergence of the so called "The Principle 44", most businesses were under the ownership and control of the government. After promulgation of this principle", government was forced to follow privatization and offering public stocks to private individuals. Thus, institutional firms were reduced and private ownerships were increased. The first private ownership structure is "Corporate Shareholding" in that public ownership is transferred to private firms which are known as "corporate

shareholding". These firms attempt to obtain more of the firms' stocks in order to control operations of the invested firms. Another significant group of this category is mainly "Investment Companies" that are striving to obtain other firms' stocks in an effort to optimize their profits.

The second private ownership structure is known as the "Managerial Shareholding" in that public stocks are offered to private individuals through the stock market mechanism. The separation of ownership and management has mostly occurred in this situation and some family firms are listed in this category.

The third type of the private ownership structure is via the foreign investments, which is based upon a particular laws and regulations. This type of ownership is very limited in Iran and thus, does not play a significant role in the TSE ownership structure [35] and [23]

Since in this study we would investigate two main variables- ownership structures and company's performance-in the TSE, merely those studies will be reviewed here which will support these two selected variables.

In Iran, limited empirical studies have been conducted in this domain directly. Thus, some researches in this field, which is somehow related to our study, will be reviewed. Furthermore, some of these studies are enunciated just to support employment of the selected variables and their selections in the performance evaluation realm.

3.1. Institutional Investors and Privatization

3.1.1. Foreign Studies

Tsaia and GU, [60] investigated the relationship between "institutional ownership" and "company performance" in the Casino Industry from 1999 to 2003. An institutional ownership was determined by the percentage of the stocks which public corporations maintained from the whole stocks. Corporations included insurance companies, financial institutions, banks, public corporations and other government sections. The study revealed that institutional ownership in Casinos could possibly help investors in this industry to reduce obstacles of separating management from ownership. In addition, financial institutions would prefer to invest in those Casinos which maintained lower financial leverages.

Fernando et al. [20], theoretically and experimentally, studied the difference in institutional ownerships and the level of stock prices among American companies in the NYSE and AMEX from 1985 to 2005. The findings showed that companies with higher values, did maintain more institutional ownerships and higher stock price levels and the positive relation between stock prices and the institutional ownership was independent of the liquidity consideration and sizes of the companies.

Cornett et al. [13] also investigated the relation between institutional investors' involvement and operational performances of the large firms. They found that there was a significant relationship between "operating cash flow returns" of the companies and the percentage of the institutional stock ownerships and institutional stockholders. However, this relationship was just observed for a sub-group of institutional investors that did have less business relations with the firms.

Elyasiani and Jia, [18] have also studied the dependence of the Bank Holding Company (BHC) and the

"institutional ownership stability". The results of their study showed that first, the performance of the BHC Companies are related positively to institutional ownerships. Second, dependence, of the BHC Companies on returns is weaker than the dependence in the firms' industry. Third, this dependency is stronger in new deregulated years and for the BHC Companies, in which they have lower possibility of adjustments.

3.1.2. Domestic Studies

Ahmadzadeh et al. [2], studied the capital structure of the Bank Keshavarzi during ten years (1991-2000) and estimated its' cost of capital. The results of this study indicated that there was no relationship between capital structure and costs of the capital within this period and it showed that capital structure of this bank in 2000 was non-optimal.

Hasasyeganeh and Pouria Nasab [23] argued that the more active the shareholder is, the better supervision on the company's management performance could be exerted and the agency problems would be reduced. In addition, institutional investors, as the main owners, of the companies are responsible for effecting the company management to maintain a significant role in their investments.

Mahdavi and Maydari [35], after investigation of privatization experiments in socialist countries especially Czech, estimated the extent of the ownership focus in the stock exchanges and determined the profitability of different kinds of ownerships structures. The results demonstrated that in Czech and China, ownership focus has a positive effect on the company's' performance efficiency.

Rahchamani [52], also studied the role of the ownership structure and protection of the investors and shareholders' rights after privatization of the companies. The result exhibited that in countries which investors are supported less, the focus on the ownership is more and privatization and private ownership would cause a superior performance.

Mokarami [40] by presenting the modern structure in managing enterprises and creating values for all stakeholders, argued that the responsibility of the evaluation of the enterprise performance and existing managers are related to institutional stockholders.

3.2. Firm Investors

3.2.1. Foreign Studies

Cheung et al. [12] studied the relationship between market returns and accounting revenues for sample companies in Japan from 1975 to 1994. The results indicated that company's relationship between returns and revenues were negatively affected by the ownership level of the investment in real states, level of investments in other firms' stocks and financial leverages. However, the level of foreign ownership affects this relationship positively. The company ownership is the percentage of keeping stocks from all stock investments by the company and includes all kinds of the firms except those that are presented in the following sections.

Kapopoulos and Lazaretou [31] have also investigated the effects of ownership structure on the company's

performance by studying 175 Greek companies. They concluded that more focus in ownership structure would be positively related to higher profitability of the firm; and for gaining a higher profitability, ownership with less scattering is required.

3.2.2. Domestic Studies

Rahman Seresht and Mazloomi [53] studied the relationship between companies' investors, management performance and their shares of ownerships for listed companies in the TSE. They investigated the role of the company's investors and attempted to reply to this question: Does the ownership structure of the organizations provide a convincing result for their different performances? The results revealed that different groups of the owners (real and legal person) did not maintain the same strength and congruencies to affect company's performances and generally the difference of ownership structures of the companies could explain some of the variations in the companies' performances.

Sinaie and Rezaian [57], by focusing on financial performances of the public corporations in TSE, attempted to review the capital structure and changes of the financial parameters within the companies in the kinds of ownership and industrial structures. They presented modern approaches in the development of the financial markets. Their findings illustrated that a strong relationship existed between companies' key variables –i.e. company size, profitability, development chances, tangible assets - and the capital structure of the companies.

Namazi and Shirzadeh [44] studied the effect of the capital structure on the profitability of the TSE companies in different industries. The results of their study exhibited that there was a positive relationship between capital structures and company's profitability; but this relationship was statistically weak and depended on the industry type and the definition of the profitability. In addition, optimal capital structure of different industries could be determined.

Nowravesht and Ebrahimi Kordlar [45] had also investigated the role of the company's investors in reducing informational asymmetry in the TSE. In this research, investment companies and other business institutions were defined as "investors companies". The results indicated that companies with higher percentages of the investors, would report more information concerning future profits and, as a result, one would observe more informational asymmetry in companies with lower investors.

3.3. Management Investors

3.3.1. Foreign Studies

Bhagat [9] studied the effects of the plans of sharing managers in the company's ownership and it's impacts on the shareholders' wealth. He concluded that this plan could increase share holders' wealth.

Murphy [42] and Jensen and Murphy [29] have also studied the relationship between managers' compensations and company's performances by expensing combinations of the measurable data and Black and Schools stock options models. The results of their studies indicated that

there was a positive relationship between stock options and changes of the shareholders' possession.

Hill and Stevens [26] also investigated the relationship between the managers' rewards and accounting profits and stock prices in the New York Stock Exchange. They also studied the relationship between parts of the managers' rewards and low index annual stock revenues (the weak form of evaluating company's performances) and annual revenues without the relevant industry index (the strong form of evaluating company performances). Their study showed that there was a positive relationship between short-term reward managers' ownership and stock returns. And in those companies in which the manager had more stocks, a superior performance could be attained. In addition, the reward and ownership had more positive and significant relations with stock returns. In a time that managers' ownership was increased and most of his wealth was depended on the stock increase, managers' motivations for increasing stock returns would be enhanced as well.

Mishra et al. [39] have also investigated the firm values and its relationship with control structures. They studied a sample of 120 Norwegian companies and concluded that the relationship between family board of directors and company's values for newly established firms, companies with less board of director members and firms with one kind of stocks, is very strong.

Mcconaughey et al. [38] have also studied the effects of the family ownership on the company's capital structure and values. Their results indicated that firms which were governed by family structures had higher values and efficiency and also had fewer liabilities.

Anderson and Reeb [3] have also investigated the performance of the family companies. They found that the family companies had a superior performance in comparison with others. They also reported a non-linear relation between company's performance and percentages of the family ownerships; indicating that when family members are in the board of directors, a more favorable performance could be attained.

Enqvist [19] has investigated the relationship between management ownerships and shareholder's supervision with company's performance. By exerting the concept of "Q Tobin" for Swedish companies, he concluded that stockholders' supervision had negative impacts on the Q-Tobin.

Halpern et al. [24] studied the relation between management investors and company's values for the acquired firms. The results showed that there was a non-linear relation between moral hazard costs and management investors and they indicated that acquired firms could be divided based on management's investments. The division would be different according to the following criteria: 1) sources of the wealth gains, 2) managerial resistance, 3) persons who acquire the firms and 4) how shareholders' objectives are being achieved.

Mueller and Spitz-Oener [43] interpreted the relationship between management ownerships (includes keeping stocks by the board of directors members) and the medium and small German private companies' performance with incentive criteria. In their search, they focused on economic units which were the most important sections of the German economy. They extracted a sample of 356 companies in the service segment which were

related to business from 1997 to 2000. Their findings showed that in companies in which management ownerships percentage were more than 40%, the performance was improved.

Wang [61] in investigating family companies' ownership and profit quality, showed that family ownership would increase the relationship between users of the financial statements and internal organizations' members. He also concluded that high quality of profits may be resulted from true combinations of the family members and shareholders' interests.

Khan et al. [32] have also studied the mathematical relationship between management's stock ownership and companies' performance for Austrian companies' form 2000 to 2003. They found no evidence of non-linear relations between management's stock ownerships and Q-Tobin ratio. However, a significant negative relations between management stock ownerships and Q-Tobin ratio was found.

3.3.2. Domestic Studies

Poorhaydari and Hematy [51] studied effects of the confounding factors on profit management in the TSE. Consequently, the effect of the debt contracts, political costs, bonus and ownership plans in management's manipulation were investigated. The results showed that: 1) there was no significant and positive relations between stockholders' equity and profit manipulation, 2) by increasing the company's size, motivations for more profit would increase, 3) in firms with more staffs, for decreasing political pressures, manager would decrease profit and 4) there was a insignificant relationship between bonuses and ownerships and profit manipulations.

Mashayekh and Esmaele [36] also studied the relationship between profit quality and some aspects of the managing capital structures including ownership percentages of the board of director's members and numbers of managers in 135 companies accepted in the TSE during 2002 to 2003. The results showed that with 95 percent probability, there was no relation between profit quality ownership percentages of the board of director's relationship and accrual items and ownership percentages of the board of director's members. In addition, the number of managers and ownership percentages of the board of directors' members did not exhibit a significant role in improving profit quality of the TSE companies.

Sinaie [56] investigated the effects of companies' internal factors on the formation of the capital structure of the TSE companies and concluded that particular characteristics of the companies would affect financial structure of the companies.

3.4. Foreign Investors

3.4.1. Foreign Studies

Foreign investments are the percentage of stocks by keeping the foreigners. This includes foreign partners, foreign financial institutions, foreign nations and Iranian non-residents. The results showed that positive effects existing between foreign ownerships of the company's performance, basically was related to the companies with bigger investments and higher commitment and longer investments.

Cheung et al. [12] studied the relationship between market returns and accounting revenues for a sample of Japanese companies from 1975 to 1995. Their findings indicated that the strength of the returns-relationships would negatively affect company's ownership level, level of investments in real estates, level of investments in other companies investments and financial leverages; but foreign ownerships' level would positively affect this relations.

Aydin et al. [5] studied whether Turkish companies with foreign ownerships did obtain a significantly superior performance. They employed T-test, operating margin variables, returns on assets, returns on equity and pertinent information relating to all companies in the Istanbul Stock Exchange for 2003 and 2004. The results showed that companies with foreign ownerships actually did experience superior returns on assets in comparison with the ones with domestic ownerships. These finding also supported the hypothesis that foreign ownerships would improve company's performance.

3.4.2. Domestic Studies

So far, there has been no empirical study concerning the effects of the foreign investors' ownership on the TSE Company's performances. The major reason for this situation could be related to the existence of a few numbers of these investors as the main owners in the TSE companies.

In sum, from the whole preceding internal and external literature reviews, the following tentative general conclusions may be inferred:

- 1). Firm's ownership structure affects the performance of the corporations. More specifically, there is a significant relationship between the institutional ownership structure and the performance of the companies.
- 2). Different ownership structures, (private or government) could lead to different corporate performances.
- 3). Private ownership structures would enhance corporate performances. This relationship is particularly holds for the family companies.

4. Research Method

In this study, the role of the different "ownership structures" on the performances of the TSE companies will be investigated for the first time. Hence this study's research plan is based upon the one shot ex-post plan [1] and [59]. This plan is exerted when the researcher attempts to study the subjects after its occurrence without any control group and furthermore the manipulation of the independent variables are impossible.

4.1. Research Hypotheses

The objective of this research is to identify financial effects of the various ownership structures on the performances of the TSE companies. Consequently, this study, is based upon the results of the domestic and foreign studies which were reviewed in previous sections. It posits one main hypothesis and five subs-hypotheses as follows:

4.1.1. The Main Hypothesis:

There is a significant relationship between "ownership structure" and the "performances" of the TSE companies.

4.1.2. Sub Hypothesis

1. There is a significant relationship between "institutional ownership" and the "performances" of the TSE companies.

2. There is a significant relationship between "company's ownership" and the "performances" of the TSE companies.

3. There is a significant relationship between "company's managerial ownership" and the "performances" of the TSE companies.

4. There is a significant relationship between "foreign ownership" and the "performances" of the TSE companies.

5. There is a significant relationship between "private ownership" and the "performances" of the TSE companies.

4.2. Research Variables

In this research, four independent variables were considered: 1) institutional investors, 2) corporate shareholding, 3) managerial shareholding and 4) foreign investors, shareholding. These variables are in fact representing current and various ownership structures in Iran, in that the first one is related to the government structure and the last three are demonstrating private ownerships. The measurement of these variables was based upon the following definitions:

Foreign: Foreigners' Share Holding is equity shares held by foreigners as the percentage of total equity shares. These include foreign collaborators, foreign financial institutions, foreign nationals and non-resident Iranians.

Institutional investors: Governments and financial institutions' share holding is equity shares held by the government companies which is measured by the percentage of total equity shares. These includes insurance companies, mutual funds, financial institutions, banks, central and state government firms, state financial corporations and other government bodies.

Corporate shareholding: corporate share holding is equity shares held by corporate bodies which is determined as a percentage of total equity shares. These include corporate bodies excluding institutional managerial and foreign investors.

Managerial shareholding: Managers' shareholding is equity shares held by directors of the firms and includes shares held by the family members of the directors (see e.g., [40] and [35]).

This classification has also been adopted by Kumar [34]. In addition, each of these variables has been extensively exerted in the literature including the following studies:

Institutional investors: Tsaia and GU, [60], Fernando et al. [20], Cornett et al. [13], Elyasiani and Jia, [18].

Corporate investors' shareholding: Imam and Malik, [28], Kapopoulos and Lazaretou [31] and Cornett et al. [13].

Managerial shareholding: Himmelberg, et al. [27], Enqvist [19], Chen [11], Rose [55], Halpern et al. [24], Mueller and Spitz-Oener [41], Khan et al. [32], Cornett et al. [14].

Foreign investors' shareholding: Barbosa and Louri, [8], Douma et al. [16], Aydin et al. [5].

The dependent variable of this study is "the value of the firm" which is represented by the performances of the companies. The performance was measured by the following two traditional accounting variables: 1) Return on Assets (ROA) and 2) Return on Equity (ROE),

$$ROA = \frac{PBDIT}{TA} \quad (1)$$

PBDIT = Profit before depreciation, interest expense and taxes

TA = Total Assets

and 2) Return on Equity (ROE)

$$ROE = \frac{PBDIT}{EC} \quad (2)$$

EC = Equity Capital

And also by the two contemporary market variables-i.e. 1)

Q-Tobin's average and 2) Market to Book Value Ratio (MBVR),

$$Q-Tobin = \frac{TB + MV}{TA} \quad (3)$$

TB = Total Borrowings

MV= Market Value (Equity)

TA = Total Assets

$$MBVR = \frac{TB + MV}{BV} \quad (4)$$

BV= Book Value

These variables have also been adopted by Kumar [34], among others.

The major reason for selecting preceding accounting variables is that they maintain a straight relationship with the firm's strategies and performances. For example, %80 of the studies that have identified the significant variables affecting company's performances, have utilized "ROA" as a profound variable [62]. However, in order to examine companies' performances, accurately and comprehensively, considering merely accounting performance evaluation variables is not sufficient since they are based upon historical cost basis and hence some market evaluation criteria, which determine the current situation and value of the firm's performances, should be expended. In addition, these variables have been exerted frequently in the related literature, including the followings: Return on Assets (ROA); Randoy and Goel [54], Enqvist [19], Chen [11], Douma et al. [16], Krivogorsky [33], Omran et al. [47], Cornett et al. [47] and Elyasiani and Jia, [18].

Return on Equity (ROE): Bianco and Casavola [10], Krivogorsky [33], Aydin et al [5] and Omran et al. [47].

Q-Tobin's Average: Randoy and Goel [54], Enqvist [19], Chen [11], Rose [55], Douma et al. [16], Tsaia and GU [60], Imam and Malik [28], Omran et al. [47], Fernando et al. [20], Cornett et al. [14] and Elyasiani and Jia, [18].

Market to Book Value Ratio (MBVR): Halpern et al. [18] and Krivogorsky [33].

In order to control the effects of extraneous variables on the performance of the companies, three control variables were also selected: 1) size of the company, 2) Debt Intensity (Debt.Int) and 3) Capital Intensity (Cap.Int). These variables have also been utilized in various studies

including Himmelberg, et al. [27] and Habib and Ljungquist [21] and [22]) and also were selected based upon the literature review made in section 2.

4.3. Model Buildings

In some research problems, especially the ones in which the researcher is seeking to predict the extent of a variable, determining the main variable (which is to be predicted) and the correlations and combination of predicting variables is extremely important. In essence, the method which combines the predicting variable is titled "multi-variant regression" [49].

The multivariate regression method consists of different forms and their difference is related to selecting the predicting variables. For determining the regression equation in this article, the following formula was extracted:

$$Y = a + b_1x_1 + b_2x_2 + \dots + b_nx_n \quad (5)$$

Y: company's performance

a: Constant

x_1, x_2, \dots, x_n : all independent variables used in this study

b_1, b_2, \dots, b_n : coefficient of the achieved regressions for all variables in this study.

The statistical data could be managed via three ways: cross sectional, time series and panel approach. The panel data method is an approach for combining cross sectional observations within different time periods. In this study, considering the data type and analysis approach, the panel method [49] was exerted. By employing panel data a group of data which includes a great number of cross sectional variables (N) that is obtained during a time period (T) is collected. In this case, the number of observations are $N \times T$, that could be estimated by different models.

By exerting the panel data, efficient estimations could be determined. The general form of the panel model, which is based upon the "error components method", is obtained from the following formula [15]:

$$Y_{it} = \beta_1 + \sum_{j=2}^k \beta_j X_{jit} + \sum_{p=1}^s Y_p Z_{pit} + \delta_i + \varepsilon_{it} \quad (6)$$

In the above formula, Y is the dependent variable, X is the observed explanatory variable and Z is the unobservable explanatory variable which affects the dependent variable in each period. For a more unambiguous explanation of the panel method, these groups of variables are separated. In effect, t is the time duration and j and p are observed and unobserved variables. $\varepsilon(it)$ shows estimated errors of the panel data, which holds for all different conditions relevant to error statements under the Gauss-Markov hypothesis and δt shows the changes of the fix statements during the time. This model is known as "two-sided panel data model" [15]. As Z variables are immeasurable, one could show the sum of them as $\alpha 1$. In this case, the above equation could be presented as follows:

$$Y_{it} = B_1 + \sum_{j=2}^k B_j X_{jit} + \alpha_i + \delta_t + \varepsilon_{it} \quad (7)$$

In the above formula, $\alpha_i = \sum_{p=1}^s \gamma_p Z_{pi}$. If α_i is dependent on each of the X explanatory variables, estimation and analysis by this equation will be biased in relation to variables which are not estimated [15].

If the immeasurable variables are controlled by exerting Ordinary Least Squares (OLS) or Generalized Least Squares (GLS), then the variables have efficient estimations. One way for controlling is expending the fixed effects model. In the fixed effects model, the unobserved effects will enter into the fixed statement of the regression model. In this model, by employing virtual variables method or the deferential method, the effects of the unobserved variables could be controlled.

With different tests such as Hausman or the Breusch-Pagan Lagrange Multiplier (LM) test, one could select suitable estimates. After selecting a suitable model, the continuity of the time series and the reliability of the regression should be followed [7].

Based upon preceding explanations, this study's model is presented as below:

$$\text{Performance}_{it} = f(\text{Foreign}_{it}, \text{Institutional}_{it}, \text{Corporate}_{it}, \text{Director}_{it}) \quad (4)$$

$$\text{Ln Sale}_{it}, \text{DebtInt}_{it}, \text{Cap.Int}_{it} + \alpha_i + \delta_t + \varepsilon_{it}$$

$$\text{Performance}_{it} = \alpha + \beta (\text{Ownership})_{it} + \gamma X_{it} + \alpha_i + \delta_t + \varepsilon_{it} \quad (5)$$

In this research, the followings were studied by the regression equation: 1) self correlations, 2) the amounts of determining coefficient, 3) the significance of the model and its coefficient.

For determining whether a regression model error statements were self correlated or not, the Durbin-Watson test was employed. In Durbin-Watson test the model hypotheses are [49]:

$$H_0 : \rho = 0$$

$$H_1 : \rho \neq 0$$

In this model, when ρ is positive, self correlation is positive and when ρ is negative, self correlation is negative and if $\rho=0$ there's no self correlation.

Determining coefficient is a criteria which explain the strength of the relationship between the dependent and independent variables. The amount of this coefficient, in fact, determines what percentages of changes of the dependent variables are explained by the independent variables.

The significance of the regression equation was determined by F-statistic and related hypothesis were as follows [49]:

$$H_0 : \beta_1 = \beta_2 = \dots = \beta_k = 0$$

$$H_1 : \exists \beta_i \neq 0 : i = 1, 2, \dots, k$$

If H_0 is rejected (with 95 percent probability), the regression equation is significant. After implementing the regression significance test, the regressions of each of the coefficients should have been tested. The test hypotheses are presented below:

$$H_0 : \beta_i = 0 \text{ The population coefficient is zero}$$

$$H_1 : \beta_i \neq 0 \text{ The population coefficient is not zero}$$

For testing these hypotheses, t test was employed. In this test (with 95 percent probability) if we couldn't reject H_0 , it means that the considered coefficient isn't significant and its rejection means the opposite.

4.4. Population and Sample Selection

The population of this study includes all Tehran Stock Exchange (TSE) firms from 2003 to 2008 (5 years period). TSE was reopened in 1968. It is an open stock market which is controlled by the governmental organization. It is a member of World Federation of Exchanges and a founding member of the Federation of Euro-Asian Stock Exchanges. It is also one of the world's best performing stock exchanges and has been categorized as an emerging market. During the time period of the study, it encompassed about 430 companies in recent years the number of private ownership companies listed in TSE has been increased significantly. Due to the adoption of the so called "principle 44".

However, the following conditions were considered for selection of the firms based upon the nature of the TSE market and this study:

1. Firms listed in the TSE up to the end of 2008.
2. Their financial year ended in the end of each year.
3. Their book value of the stockholders equity was not negative in any year.
4. They had a continual activity during the study period and their stocks were traded actively.
5. They shouldn't have changed their financial year during the study's period.
6. They shouldn't have stopped their activities during the time period of the study.
7. Their financial information required for this study would be available from 2002 to 2008.
8. They should not be listed as an investment company.
9. They should be profitable throughout the period of the study.

Considering preceding limitations, 66 companies were identified. Consequently, their information were gathered from the TSE computer web and Dena-sahm, Sahra and Tadbirpardaz software's.-three main software which revealed data pertaining to the TSE companies.

4.5. Data Collection Method

In this study, for data and information collection, the library and archival method [59] was also employed. In the library section, theoretical basis were gathered from the Persian and English journals and books (see references). Research data were gathered by means of the sample company data with reference to their financial statements, notes to financial statements, weekly and monthly reports of the stock exchange and by employing Dena-Sahm, Sahra and Tadbirpardaz software.

4.6. Test of the Reliability

At first, reliability of the continuity of the dependent variables as well as control variables was studied. Reliability of the study variables showed that variables

mean and variances during the time period of the study and the covariance of the variables during different years were stable. As a result of exerting these variables in this model, we did not have a spurious regression. For the final investigations, the unit root tests, Levin, Lin and Chu, Im, Pesaran and Shin and Philips Perron tests, were expended [48]. Each of this test variable was conducted under two

different methods: 1) the fixed amount approach and 2) the trend amount approach.

5. Findings

Table 1 shows the descriptive statistics of the study.

Table 1. The Descriptive Statistics of the Variables of the Study

	ROA	ROE	QTOBIN	MBVR	SIZE	DEB	CAP
Mean	0.157240	0.525822	2.347166	8.034859	12.36420	0.664307	1.683878
Median	0.132065	0.450956	1.549900	5.189585	12.18973	0.664722	1.487572
Maximum	0.692751	3.777655	40.21069	202.7036	17.62304	0.940159	8.711818
Minimum	0.006044	0.033216	0.293129	0.394061	9.399306	0.225208	0.418849
Std. Dev.	0.103535	0.394593	3.309204	13.38217	1.267601	0.132212	0.936429
Skewness	1.878153	3.046605	7.339826	10.24180	1.105596	0.475943	3.482627
Kurtosis	8.307626	20.05267	72.55957	139.8714	6.143799	3.301086	20.91898
Jarque-Bera	581.3600	4508.910	69492.86	263358.8	203.1266	13.70517	5082.064
Probability	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	51.88926	173.5214	774.5647	2651.504	4080.186	219.2213	555.6796
Sum Sq. Dev.	3.526742	51.22647	3602.824	58918.13	528.6413	5.750951	288.4998
Observations	330	330	330	330	330	330	330

Table 2 and Table 3 disclose necessary information concerning the reliability test of the ROA variable under the fixed amount approach and the trend amount approach respectively, just as a sample. Similar tests were conducted for ROE, Q-Tobin, MBVR, Size, debt and capital under the fixed amount approach and also the trend

amount approach. The results of these tests indicated that their P-values were lower than 0.05 and hence, these variables were stable and their weighted average and standard deviations were also statistically stable during the period of the study.

Table 2. The Reliability Test of the ROA Variable Based Upon the Fixed Amount Approach

Panel unit root test: Summary				
Sample: 2003 2008				
Exogenous variables: Individual effects				
Automatic selection of maximum lags				
Automatic selection of lags based on SIC: 0				
Newey-West bandwidth selection using Bartlett Kernel				
Balanced observations for each test				
Method	Statistic	Prob.**	Cross-sections	Observation
Null: Unit root (assumes common unit root process)				
Levin, Lin and Chu t^*	-21.3227	0.0000	66	264
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-4.46307	0.0000	66	264
PP- Fisher Chi-square	206.772	0.0000	66	264
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	15.8611	0.0000	66	330

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality

Table 3. The Reliability Test of the ROA Based Upon the Trend Approach

Panel unit root test: Summary				
Sample: 2003 2008				
Exogenous variables: Individual effects, individual linear trends				
Automatic selection of maximum lags				
Automatic selection of lags based on SIC: 0				
Newey-West bandwidth selection using Bartlett Kernel				
Balanced observations for each test				
Method	Statistics	Prob.**	Cross-sections	Observation
Null: Unit root (assumes common unit root process)				
Levin, Lin and Chu t^*	-60.9418	0.0000	66	264
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-2.86473	0.0021	66	264
PP- Fisher Chi-square	236.369	0.0000	66	264
Null: No unit root (assumes common unit root process)				
Hadri Z-stat	79.1349	0.0000	66	330

** Probabilities for Fisher tests are computed using a Chi-square distribution. All other tests assume normality

For studying each hypothesis 4 different models based upon each of the dependent variables for performances-Return on Assets (ROA), Return on Equities (ROE), Q-Tobin and Market Book Value Return (MBVR) – were defined and estimated. Then, the results of these 4 models

for each hypothesis were investigated separately and finally the overall outcome for each hypothesis was presented.

5.1. First Hypothesis

In testing the first hypothesis, at the beginning, the relationship between "institutional ownership" and ROA along with the designated control variables- size of the company, debt structure and the amount of capital- were examined. The results are shown in [Table 4](#).

Then, the same procedure was followed for other dependent variables. A summary of the results are presented in [Table 5](#).

Table 4. The Relationship between "Institutional, ROA and Control Variables

Dependent Variable: ROA Method: Pane EGLS (Cross-section weights) Sample: 2003-2008 Cross-sections included: 66 Total panel (balanced) observations: 330 Linear estimation after one-step weighting matrix				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
INS	-0.020231	0.005121	-3.950550	0.0001
SIZE	0.006927	0.001912	3.622742	0.0003
DEB	-0.285504	0.022289	-12.80936	0.0000
CAP	-0.025984	0.004279	-6.072670	0.0000
C	0.308119	0.025345	12.15698	0.0000
Weighted Statistics				
R-squared	0.788479	Mean dependent var.		0.255734
Adjusted R-squared	0.785875	S.D. dependent var.		0.196811
S. E. of regression	0.091072	Sum squared residual		2.695565
F-statistic	302.8720	Durbin-Watson stat.		1.803290
Prob. (F-statistic)	0.000000			
Un weighted Statistics				
R-squared	0.201000	Mean dependent var.		0.157240
Sum squared residual	2.817868	Durbin-Watson stat		1.359648

Table 5. The Results of the Relationship between "Institutional Ownership" and 4 Models of Performance

R-Squared	Durbin-Watson statistics	Coefficient symbol	Significance of coefficient (t)		Significance of all model (F)		Independent variable	Dependent variable
			P-Value	Accepted Or rejected	P-Value	Accepted Or rejected		
%78/8	1/80	negative	0/000	accepted	0/000	accepted	Institutional ownership	ROA
%84/9	1/82	negative	0/000	accepted	0/000	accepted	Institutional ownership	ROE
%73	1/82	negative	0/002	accepted	0/000	accepted	Institutional ownership	Q-Tobin
%79/9	1/90	negative	0/000	accepted	0/000	accepted	Institutional ownership	MBVR

From [Table 5](#) with respect to 4 applied performance models, it can be inferred that because the independent variable of the institutional ownership coefficient in all 4 models is negative and significant, thus generally there is a negative relationship between institutional ownership and company's performance. This means that considering the high level of R^2 and the independent variable of the institution ownership coefficient in all 4 models, the higher the institutional ownership, the weaker is the company's performance – hence, the first hypothesis is accepted. This finding is similar to other studies (Ahmadzadeh et al. [2] and Mokarami [40] as far as the existence of the significant relationship; is concerned. However, in regard to the kind of the relationship, the finding is different from some studies such as Tsaia and GU [60], Cornett et al. [14] and Mahdavi and Maydari [35].

The reason for this finding that the institutional ownership and company's performance is significantly and negatively related, could be related to situations in which institutional investors don't expend enough motivations to attempt for improving firm's performances and gaining profits. Additionally, in most cases, the major objective of the institutional investors is not extracting profits and obtaining high profitability, rather their goal, is protecting society from foreign invasion, establishing disciplines and security in the society, offering public services and fundamental facilities. It is also possible that some of

these companies have benefited from government's supports such as subsidiaries. Hence, it seems that for obtaining profit gains and a financial superior performance, one should pay attention to owners' viewpoints and thoughts. It means that if the company desires accessing to profitability and a favorable performance, it should move towards private investors' companies.

5.2. Second Hypothesis

In approaching the second hypothesis a similar procedure, just like the preceding approach for the first hypothesis, was adopted. [Table 6](#) illustrates the results' summary.

Based upon information presented in [Table 6](#), one could conclude that because company's ownership coefficient in all four models is significant and positive (at $\alpha = 0.5$), there is a positive relationship between company's ownership structure and performances. Since R^2 is high and the independent variable of the company's ownership coefficient is significant and positive, when company's ownership is increased, a superior company's performances would be attained. Thus, the second hypothesis is accepted. These results are in agreement with most of the previous studies [31,44,45,53] and is inconsistent with some other like Cheung et al. [12].

Table 6. The Results of the Relationship between "Company Ownership" and 4 Models of Performance

Dependent variable	Independent variable	Significance of F model		Significance of t coefficient		Coefficient symbol	Durbin-Watson Statistics	R- squared
		Accepted Or rejected	P-value	Accepted Or rejected	P-value			
ROA	Company ownership	accepted	0/000	accepted	0/000	positive	1/81	%81
ROE	Company ownership	accepted	0/000	accepted	0/003	positive	1/87	%83/1
Q-Tobin	Company ownership	accepted	0/000	accepted	0/000	positive	1/90	%72/3
MBVR	Company ownership	accepted	0/000	accepted	0/001	positive	1/96	%80/9

These groups of investors are potentially the sources of effects on external organization's strategies and firm's performance. This issue is also emphasized by Fifer and Salanisc [53]. They argued that ownership is a facility making power which is fundamental in the organization. From this viewpoint, ownership type of an organization, should affect companies' performances and strategies. Viewing relevant models presented by these two researchers, an organization is not only a collections of groups with different profits, but also are markets in which the power and control are exchanged and companies' power is focused around sensitive and rare resources in which capital is one of them [53]. Thus, institutions which have investments in other companies' subjects such as capital structures and establishing strategy and performances of owned companies could be potentially effective and being in the board of directors could also be helpful. The ownership ratio has its own role as well. Hence, one could conclude that company's ownership maintains positive relations with firm's performance models.

By changing companies' ownership structure and combining all ownership forms, one could expect that firms' behavior and performance be reduced and changed as well. Considering this issue is important from different aspects. First, the board ownership and its characteristics, could affect the company's financial performance. Long-term focus on special subjects such as long-term investments period for research, market development and products are also very necessary for the economic life of the enterprises. And with this, one could gain the

necessary quality and capability and thoughtful investors could think about short - term goals. This fact is also very important because of its effect on companies' investments on research, development and creativity.

Thus, with respect to the second hypothesis, which is in the field of private investors, the results of this study revealed that in entrance of the company's investors, the dominated thought on company's performance is profit gain and superior performance. The results revealed that company's ownership holds a significant and positive relationship with company's performances. This means that by effective presence of the company's ownership in the companies' ownership structure, the company's performance will be improved. Because this type of investors are following profits and obtaining superior performances, they gain from company's ownership structure and they attempt to meet this goal. Another reason is that, in this case, the ownership structures are more focused and hence the goal of gaining profitability would cause more supervision on the company's performance. Also, in this condition, companies would report more information about their performance and future profits, because they have unambiguous and widespread necessities for reporting.

5.3. Third Hypothesis

In approaching the third hypothesis, a similar approach like preceding hypothesis was adopted. Table 7 reveals a summary of the results.

Table 7. The Results of the Relationship between "Managerial Ownership" and 4 Models of Performances

Dependent variable	Independent variable	Significance of F model		Significance of t coefficient		Coefficient symbol	Durbin-Watson Statistic	R-squared
		Accepted Or rejected	P-value	Accepted Or rejected	P-value			
ROA	managerial ownership	accepted	0/000	accepted	0/000	negative	1/81	%93/4
ROE	managerial ownership	accepted	0/000	accepted	0/000	negative	1/89	%86/8
Q-Tobin	managerial ownership	accepted	0/000	accepted	0/010	negative	1/96	%77/1
MBVR	managerial ownership	accepted	0/000	accepted	0/037	negative	1/87	%71/5

As Table 7 illustrates, generally one could conclude that the relationship between managerial ownership and company's performance is negative, because by considering four models, the managerial ownership coefficient is negative and significant. Since R^2 is high and the independent variable of the managerial ownership coefficient is significant and negative in all four models, one could conclude that when managerial ownership is

increased, the company's performance tend to get weaker. These results are consistent with Khan et al. [32]. However, they are inconsistent with the findings of Bhagat [9], Mcconaughey et al. [38], Anderson and Reeb [3] and Mueller and Spitz-Oener [41]. A reason for this finding could be the fact that all companies with managerial ownerships in our samples are family companies, indicating the main ownership of these firms

are belong to one family or a group of family. Considering the congruency of this group of owners with each other, they don't provide true and real results to externals and smoothing information may be attempted.

5.4. Fourth Hypothesis

With respect to the fourth hypothesis, since the number of foreign investors was very limited in the TSE and there was no information related to foreign investor's ownership

in our study, no result was found. In effect, presenting a reliable performance evaluation model was not possible.

5.5. Fifth Hypothesis

For testing this hypothesis, the relationship between private ownership structure (consisting of "company ownership" and "managerial ownership") and control variables (size, debt and capital) were examined. A selected summary of the results are presented in [Table 8](#).

Table 8. The Relationship between * "Private Ownership" Structure and 4 Performance Models of Performance

Dependent variable	Independent variable	Significance of F model		Significance of the coefficient		Coefficient symbol	Durbin-Watson Statistic	R-squared
		Accepted Or rejected	P-value	Accepted Or rejected	P-value			
ROA	Private ownership	accepted	0/000	accepted	0/000	negative	1/81	%85/4
ROE	Private ownership	accepted	0/000	accepted	0/000	negative	1/85	%85/6
Q-Tobin	Private ownership	accepted	0/000	accepted	0/755	negative	1/94	%72/9
MBVR	Private ownership	accepted	0/000	accepted	0/756	positive	1/87	%81/0

* Private Ownership Consists of the "Company Ownership" and "Managerial Ownership"

Based upon 4 presented models, the independent variable of "the company ownership" coefficient was positive and significant in all four models. Thus, the relationship between company's ownership and company's performance was positive. Since R^2 is high and the independent variable of the company's ownership coefficient is positive and significant, if this kind of ownership is increased, the company's performance will be improved. On the other hand, because the independent variable of the "managerial ownership" coefficient was significant and negative in all 4 models, generally there is a negative relationship between managerial ownership and company's performance. Since the amount of R^2 is high and the coefficient of the independent variable of the managerial ownership is negative and significant, one could ascertain that as managerial ownership increases, the company's performance gets weaker significantly.

Now, if one wants to conclude the general role of the "private ownership" as a whole, only in the fourth model, which is based upon the MBVR, the company's performance is enhanced. In the rest of the models, coefficients are, however, in such a way which indicate that company's performance tend to get weaker. But, this result is reached just by a quick overview and with a deeper consideration, one could not conclude the preceding point based upon positive and negative coefficients. For a valid conclusion, the number of companies should be equal for both arriving at a firm "company's ownership" and "managerial ownership"; otherwise one could not jump to a clear and straight forward results. Hence, it could be ascertained that in "private ownership", if the company's ownership increased, the result is favorable.

[Table 9](#) indicates the findings for the "institutional ownerships" and "private ownerships". Considering [Table 9](#) and four presented models, the coefficient of the "institutional ownership" in all four models is negative and significant. Hence, in can be inferred generally that the relationship between "institutional ownership" and company's performances is negative. As R^2 is high and the coefficient of the independent variable of the

"institutional ownership" increases, the company's performance gets significantly weaker. On the other hand, because the coefficient of the independent variable of the "managerial ownership" as a representative of "private ownership" in all models is also negative and significant, then generally, the relationship between "managerial ownership" and the company's performances is negative. R^2 is high and the coefficient of the independent variable of the "managerial ownership" is significant and negative in all four presented models. Thus, when managerial ownership increases, the company's performance get tends to significantly weaker. However, with respect to the "company ownership", just in the models based on the accounting variables (i.e., ROA, ROE) coefficients are significant and negative. And in the models based on the "market variables" (i.e., Q-Tobin and MBVR), the coefficient is not significant. These results disagree with the second hypothesis. However, generally speaking, the main hypothesis is accepted. This finding implies that there is a significant relationship between company's structure and their performances. This result agrees with almost all previous studies and disagrees with some studies like Mashayekh and Esmalee [36].

In sum, comparing the "institutional ownership" and "private ownership" (except for the ROE model), the weaknesses of the company's performance is stronger in the "institutional ownership". Hence, the fifth hypothesis is generally accepted. But, one could not ascertain whether private ownership increases or decreases the performance, because it just reveals that there is a significant relationship. This result agrees with the findings of the most previous studies; but from the type of relationship viewpoint, disagrees with the results of some studies like Earle [17], Omran et al. [47] and Rahchamani [52].

Although there are some similarities and shared views in activities of the private firms and governmental companies, the motivations and behaviors of the private firms are completely different from the governmental companies. According to the International Bank's research, the stock investment rate in governmental industries returns is one third of the private industries. In other

words, private ownerships, overall, would lead to a higher economic variables compared to the governmental performance from both aspects of the quality and ownership [25].

Table 9. The Results of the Relationship between "Institutional and Private Ownership" Structure and 4 Models Performance

Dependent variable	Independent variable	Significance of F model		Significance of t coefficient		Coefficient symbol	Durbin-Watson Statistics	R-squared
		Accepted Or rejected	P-value	Accepted Or rejected	P-value			
ROA	Institutional and ownership	accepted	0/000	accepted	0/000 And 0/000	negative	1/81	%85/8
ROE	Institutional and ownership	accepted	0/000	accepted	0/000 And 0/000	negative	1/86	%85/1
Q-Tobin	Institutional and ownership	accepted	0/000	accepted	0/038 And 0/000	negative	1/92	%72/9
MBVR	Institutional and ownership	accepted	0/000	accepted	0/036 And 0/000	negative	1/95	%81/3

6. Concluding Remarks and Discussion

The results of this study demonstrated that different ownership structures of the firms would actually lead to different financial performances. In general, private structures would lead to significant performances. Thus, there is a significant relationship between company's ownerships structure and company's performance. In the setting, in which both "institutional ownership" and "private ownership" structures were presented, the results illustrated that when ownership is governed by the institutional investors' type, the firm's performance will tend to get weaker than the private ownerships structure. With respect to private ownerships, however, it could be ascertained that there is just a significant relationship; but one could not infer the type of the relationship. This means that generally, one cannot ascertain whether private ownerships would actually lead to a superior performance or not.

In settings in which private ownerships were divided into sub classes—company's managerial and company's ownership—the results need to be analyzed in more details. They revealed that the existence of the company's investors in the company's structure would lead to a superior performance. This means that the relationship between groups of investors and company's performance is significant. However, if one considers managerial investors in the company's structure, the company's performance would be weaker. Finally in terms of the statistical sampling of this study, we couldn't observe any information which demonstrate the existence of the foreign investors in the company's foreign companies in Iran.

In effect, the significance of this study are as follows:

1). It provided an ex-post empirical evidence concerning the relationship between the structure of the company and its performance. Thus, it extended current knowledge concerning contemporary issues of the corporate governance.

2). It extricated the role of the governmental and / or privatization in the firms' performance process. In effect, it unambiguously demonstrated the usefulness of the privatization empirically.

3). It identified the most effective and appropriate forms of the firms' structures, (private or institutional)

which affect the corporations' performances, among different structures.

4). It provided valid empirical evidence concerning the role of the corporate governance in the TSE Market. Given the internal and external validity of this research, the results would also be useful at the international level and thus, it would contribute to extending current knowledge in the growing field of the corporate governance.

7. Suggestion for Future Studies

There are different subjects in this field that could be important for future studies. Therefore, we suggest, the following issues be studied in more depth:

1. The effect of the industry on the ownership structure and company's performance relationships.

2. The investigation of other dependant variables of the study—the ownership structure- and its effect on company's performances.

3. The employment of other performance evaluating variables.

4. Investigation of the effects of the main economic variables such as inflation, oil prices and currency exchange rates on the ownership structure and performance relationships.

5. Studying and testing the relationship between ownership structures and company's performances for short-term periods (less than a year).

6. Studying and testing the effects of the ownership structures on the performance of loss maker companies in comparison with profitable companies by deployment of virtual variables.

7. Analyzing the effect of political problems and elections' effects on the company's performances.

References

- [1] Abdel-Khalik, R. and B.B. Ajinkia, 1979. Empirical Research in Accounting: A Methodological Viewpoint. American Accounting Association, USA., Pages: 125.
- [2] Ahmadzadeh, M., R. Noori, M.R. Asfidani and M. Akbari, 2005. The investigation of the capital structure and financial resources of the Keshavari bank and offering a way for optimizing it. Accounting and Auditing Review No. 39, pp: 3-29.

- [3] Anderson, R.C. and D.M. Reeb, 2003. Founding-family ownership and firm performance: Evidence from the S&P 500. *J. Finance*, 58: 1301-1328.
- [4] Aoki, M. and H.K. Kim, 1995. *Corporate Governance in Transitional Economies: Insider Control and the Role of Banks*. The World Bank, Washington, DC., USA., Pages: 467.
- [5] Aydin, N., M. Sayim and A. Yalama, 2007. Foreign ownership and firm performance: Evidence from Turkey. *Int. Res. J. Finance Econ.*, 11: 103-111.
- [6] Baiman, S., 1990. "Agency Research in Managerial Accounting: A Second Look", *Accounting, Organizations and Society*, 15(4), pp. 314-371.
- [7] Baltagi, B.H., 2005. *Econometric Analysis of Panel Data*. 3rd Edition., Wiley Publishers, UK., Pages: 314
- [8] Barbosa, N. and H. Louri, 2002. On the determinants of multinationals' ownership preferences: Evidence from Greece and Portugal. *Int. J. Ind. Organiz.*, 20: 493-515.
- [9] Bhagat, S., 1983. The effect of pre-emptive right amendments on shareholder wealth. *J. Financial Econ.*, 12: 289-310.
- [10] Bianco, M. and P. Casavola, 1999. Italian corporate governance: Effects on financial structure and firm performance. *Eur. Econ. Rev.*, 43: 1057-1069.
- [11] Chen, M.Y., 2005. Group affiliation, identity of managers and the relation between managerial ownership and performance. *Int. Rev. Financial Anal.*, 14: 533-558.
- [12] Cheung, J.K., J.B. Kim and J. Leey, 1999. The impact of institutional characteristics on return-earnings associations in Japan. *Int. J. of Accounting*, 34: 571-596.
- [13] Cornett, M.M., A.J. Marcus and H. Tehranian, 2008. Corporate governance and pay-for-performance: The impact of earnings management. *J. Financial Econ.*, 87: 357-373.
- [14] Cornett, M.M., A.J. Marcus, A. Saunders and H. Tehranian, 2007. The impact of institutional ownership on corporate operating performance. *J. Banking Finance*, 31: 1771-1794.
- [15] Dougherty, C., 2004. Introduction to Panel Data Models. In: *Introduction to econometrics*, Dougherty, C. (Ed.). Chapter 14. Oxford University Press, USA., pp: 408-423.
- [16] Douma, S., R. George and R. Kabir, 2006. Foreign and domestic ownership, business groups and firm performance: evidence from a large emerging market. *Strategic Management Journal*. Vol. 27, pp. 637-657.
- [17] Earle, J.S., 1998. Post-privatization ownership structure and productivity in Russian industrial enterprises. Site Working Paper No. 127, Stockholm School of Economics, Central European University.
- [18] Elyasiani, E. and J.J. Jia, 2008. Institutional ownership stability and BHC performance. *J. Banking Finance*, 32: 1767-1781.
- [19] Enqvist, J., 2005. Managerial ownership, controlling shareholders and firm performance.
- [20] Fernando, C.S., V.A. Gatchey and P.A. Spindt, 2007. Institutional ownership, share price levels and the value of the firm.
- [21] Habib, M.A. and A. Ljungqvist, 2000. Firm value and managerial incentives: A stochastic frontier approach. London Business School Working Paper.
- [22] Habib, M.A. and A. Ljungqvist, 2003. Firm value and managerial incentives: A stochastic frontier approach.
- [23] Hasasyeganeh, Y. and A. Pouria Nasab, 2005. The role of the institutional investors in the corporate governance of the corporations", *Hesabdar*, Year 19, No. 4, pp. 24, 28, 47-48, 57-59 and 64-65.
- [24] Halpern, P., R. Kieschnick and W. Rotenberg, 2005. Managerial shareholdings, firm value and acquired corporations. *Q. Rev. Econ. Finance*, 45: 781-795.
- [25] Heracleous, L., 1999. Privatisation: Global trends and implications of the Singapore experience. *Int. J. Public Sector Manage.*, Vol. 12, No. 5, pp. 432-444.
- [26] Hill, N.T. and K. Stevens, 1999. CEO compensation and corporate returns: 1991 to 1996. University of DePaul, USA., pp: 1-14.
- [27] Himmelberg, C.P., R.G. Hubbard and D. Palia, 1999. "Understanding the determinants of managerial ownership and the link between ownership and performance." *The Journal of Financial Economics*, Vol. 53, pp. 353-384.
- [28] Imam, M.O. and M. Malik, 2007. Firm performance and corporate governance through ownership structure: Evidence from Bangladesh stock market. *Int. Rev. Bus. Res. Papers*, 3: 88-110.
- [29] Jensen, M.C. and K.J. Murphy, 1990. Performance pay and top management incentives. *J. Political Econ.*, 98: 225-264.
- [30] Jensen, M.C. and W.H. Meckling, 1976. "Theory of the firm: managerial behavior, agency costs and ownership structure." *Journal of Financial Economics*, Vol. 3, No. 4, pp. 305-360.
- [31] Kapopoulos, P. and S. Lazaretou, 2007. Corporate ownership structure and firm performance: Evidence from Greek firms. *Corporate Governance: An Int. Rev.*, Vol. 15, No. 2, pp. 144-158.
- [32] Khan, A.R., B. Balachandran and P. Mather, 2007. Managerial share ownership and firm performance: Evidence from Australia. *Proceedings of the AFAANZ Conference*, July 1-3, 2007, Gold Coast, Australia.
- [33] Krivogorsky, V., 2006. Ownership, board structure and performance in continental Europe. *The Int. J. Account.*, Vol. 41, pp. 176-197.
- [34] Kumar, J., 2004. Agency theory and firm value in India. *Soc. Sci. Res. Network*.
- [35] Mahdavi, A. and A. Maydari, 2005. Ownership structure and the efficiency of the active firms in the Tehran securities exchange. *J. Econ. Res.*, 71:103-132.
- [36] Mashayekh, S. and M. Esmalee, 2006. An investigation of the relationship between quality of the profit and some aspects of the strategic principles for the firms accepted in the Tehran securities exchange. *Account. Auditing Rev.*, 45: 25-44.
- [37] Mathiesen, H., 2002. *Managerial ownership and financial performance*. Ph.D. Thesis, Department of International Economics and Management, Copenhagen Business School.
- [38] McConaughy, D.L., C.H. Matthews and A.S. Fialko, 2001. Founding family controlled firms: Performance, risk and value. *J. Small Bus. Manage.*, Vol. 39, No. 1, pp. 31-49.
- [39] Mishra, C.S., T. Randqy and J.I. Jenssen, 2001. The effect of founding family influence on firm value and corporate governance. *J. Int. Finan. Manage. Accounting*, Vol. 12, No. 3, pp. 235-259.
- [40] Mokarami, Y., 2006. The strategic mechanism principles of the corporations. *Hesabdar*, Year 8, No. 32, pp. 40-45.
- [41] Mueller, E. and A. Spitz-Oener, 2006. Managerial ownership and company performance in German small and medium-sized private enterprises. *German Econ. Rev.*, 7:223-247.
- [42] Murphy, J.K., 1985. Corporate performance and managerial remuneration: an empirical analysis. *J. Account. Econ.*, 7: 11-42.
- [43] Namazi, M., 1985. Theoretical developments of principal-agent employment contract in accounting: The state of the art. *J. Account. Literature.*, 4: 113-163.
- [44] Namazi, M. and J. Shirzadeh, 2005. An investigation of the relationships between capital structure with profitability of the accepted firms in the Tehran securities exchange", *Accounting and Auditing Journal*, No. 42, pp. 97-124.
- [45] Nowraves, I. and A. Ebrahimi Kordlar, 2005. The investigation and determination of the relationships between the structure of the stockholders with information and the usefulness of accounting performance measures. *Accounting and Auditing Review*, No. 42, pp. 97-124.
- [46] OECD, 1998. *OECS economic surveys of the Netherlands*, Paris. OECD Pendet.
- [47] Omran, M.M., A. Bolbolb and A. Fatheldinb, 2008. Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter?. *Int. Rev. Law Econ.*, 28: 32-45.
- [48] Phillips, P.C.B., 1986. Understanding spurious regressions in econometrics. *J. Econometrics*, 33,311-340.
- [49] Pindyck, R.S. and D.L. Rubinfeld, 2001. *Econometric Models and Economic Forecasts*. 4th Edition., McGraw-Hill, New York, USA.
- [50] Prowse, S.D., 1994. Corporate Governance in an International Perspective: a survey of corporate control mechanisms among large firms in the United States, the United Kingdom, Japan and Germany. Vol. 4, BIS, Basle, Switzerland, Pages: 82
- [51] Poorhaydari, O. and D. Hematy, 2004. Search for the effects of liability contracts, political cost, incentive plans and ownership on management profit in exchange. *Listed Firms of the Tehran Securities*, *Accounting and Auditing Review* No. 36, pp: 47-63.
- [52] Rahchamani, A., 2006. Management of the insurance firms after the privatization period: The role of ownership structures and the extent of investors' supports. *The Quarterly Publication of Asia*, pp: 30-36.
- [53] Rahman Seresht, H.R. and N. Mazloomi, 2005 The relationship between managerial performance of the institutional investors with their shares for the firms accepted in the Tehran securities exchange. *Manage. Stud.*, 47: 135-160.
- [54] Randoy, T. and S. Goel, 2003. Ownership structure, founder leadership and performance in Norwegian SMEs: Implications for financing entrepreneurial opportunities. *J. Bus. Vent.*, 18: 619-637.

- [55] Rose, C., 2005. Managerial ownership and firm performance in listed Danish firms: In search of the missing link. *Eur. Manage. J.*, 23: pp. 542-553.
- [56] Sinaie, H.A., 2007. The investigation of the effects of internal factors on the formation of the capital structure of the firms accepted in Tehran securities exchange. *Account. Audit. Rev.*, 48: 63-84.
- [57] Sinaie, H. and A. Rezaian, 2005. The investigation of the characteristics of the firms on the structure of the capital (financial leverage). *Research Publication of the Humanities and Social Sciences of Mazandran University*, No. 19, pp: 123-148.
- [58] Shleifer, A. and R.W. Vishny, 1997. "A Survey of Corporate Governance." *The Journal of Finance*, Vol. 52, No. 2, pp. 737-83.
- [59] Smith, M., 2011. *Research Methods in Accounting*. 2nd Edition., Sage Publication Ltd., London, UK., ISBN-13: 9781849207973, Pages: 240.
- [60] Tsai, H. and Z. Gu, 2007. The relationship between institutional ownership and casino firm performance. *Int. J. Hosp. Manage.*, 26, 517-530.
- [61] Wang, D., 2006. Founding family ownership and earning quality. *J. Account. Res.*, 44: 619-656.
- [62] Wolfe, J., 2003. The TOBIN'*q*' as a company performance indicator. *Dev. Bus. Simul. Exp. Learn.*, 30, 155-160.
- [63] Xu, X. and Y. Wang, 1997. Ownership structure, corporate governance and firms' performance: The case of Chinese stock companies. *World Bank Policy, Research Working Paper*, No.1794.