The Relationship Between Ownership Structure and Firms' Performance in Tehran Stock Exchange

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ABSTRACT

The purpose of present research is to investigate the ownership structure and the performance evaluation indices in listed companies of Tehran Stock Exchange. In this study, the relationship among research’s variable using multiple mean comparison tests and variance analysis (ANOVA) is investigated and the relationship between research’s variables together with the past data is analyzed. Surveyed companies include 102 listed companies in Tehran Stock Exchange over the five-year period from 2007 to 2011. The results show that the main research hypothesis regarding the performance evaluation criteria has significant differences in different ownership structures, was confirmed. Research subsidiary hypothesis test also showed that return on asset (ROA), return on equity (ROE), market to book value (MBV) and market value added (MVA) has significant differences in the different ownership structures. Moreover, the final hypothesis regarding the ownership structure of companies in various industries creates significant difference in performance evaluation indexes, was confirmed. The research provides useful information on the impact of ownership structure on criteria for evaluating the performance of listed companies on Tehran Stock Exchange.

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1. Introduction

Economic growth and development, increasing public companies and separation of management from ownership, is considered as the most important investors' concerns these days. According to Jensen and Meckling (1976), agency relation is a contract between firms' owners and agents in decision making actions. The purpose of owners is wealth maximization and therefore to achieve the objectives, they supervise on representative work and evaluate his performance. In this case, the considered question is that whether being different the ownership structure of companies has an impact on their performance? (Jiang, 2004). It means If various groups such as government, financial institutions, banks and other companies form the owners of companies, how will they work? And which one of the different combinations of ownership is more efficient in improving company performance? With these questions in order to improve the company performance, investors will notice the combination of company owners to achieve the response of optimal performance for economic units. Thus, it seems to be necessary studying the relationship between ownership structure and firm performance for better and more accurate assessment of users about director's performance (Namazi et al., 2008).

It is noteworthy that in this study, the Investor Institution are individuals who invest that are comprised of two groups: 1) institutional investors (who makes a huge invest such as companies and investment funds or the other companies which they own other companies’ stock). 2) Natural investors (people who invest in a small amount such as individuals and other businesses and industrial companies, etc.).

2. Literature and Research Background

The main subject of ownership structure is agency problem as a conflict of interest between managers and shareholders may lead to agency costs. Distributed ownership (decentralized) causes the agency problem in companies as the ability and incentives of shareholders to control the management will be reduced because they share a few. In addition, shareholders usually invest in different companies to reduce the risk through diversification. In fact, they invest in the hope of future profits of their stock portfolio, not in the hope of a better future of a specific company. In addition, Dispersed shareholders do not have the ability to control the management effectively, because they do not have enough information and necessary expertise to make the correct decisions.

In contrast, concentrated ownership considerably motivates major shareholders and Parallel to the increase of their share in company, their incentives to improve company’s
operations and controlling the management will increase. There are quite obvious benefits of concentrated ownership, but some discussion of the opposite is also true. First, the major shareholders are typically risk-averse. Dispersed ownership causes the ability to improve stock liquidity and provides investors with creating diversification to lower risk. Second, when the excessive control is done by concentrated ownership, internal stakeholders (managers and employees) will be discouraged from costly investing. Thirdly, concentrated ownership may cause the agency problem in another way and it is that the conflict between major shareholders and minor shareholders components arises. Major shareholders will have the required incentives to use their controllable position so that they can obtain their specific interests through expense of minor shareholders (FazlZade, Mohammadzade and Tahbaz Hindi, 2009).

The purpose of Ownership structure is, to determine the texture and combination of a company’s shareholders and sometimes the final major owner of shares of the company. Many economic theorists believe that any type of ownership can also be an impact on firm performance. Therefore, controlling methods of manager performance and factors affecting their performance as well as ways to measure the impact of each type of ownership on firm performance, are among issues that has been the concern and interest of many shareholders, managers and researchers (Etemadi et al., 2009).

Therefore, determining the type of ownership structure and composition of company shareholders, is considered as a mechanism for monitoring and enforcing governance in companies. After governing in various dimensions, it determines the type of company ownership such as the distribution of ownership, ownership concentration, and presence of minor shareholders, major minority in combination of company ownership and the percentage of their ownership can be investigated. Also the combination of companies’ shareholding follows of different patterns such as legal shareholders, managerial ownership, public and private stakeholders. Ownership structure measures through the four variables of private ownership, state ownership, institutional ownership and family ownership.

Performance assessment issue is one of the extensive discussions that wide range of disciplines and experts have affected on it and they have written many new reports and articles about it. The concept of performance is a significant issue in financial management, which has led to have different meanings in different dimensions. performance evaluation in the Financial area includes: Maximizing profits, increase profits arising from assets and increase shareholder profits that are located in the center of company’s effectiveness.
Assessment of financial performance also includes increasing and growing in company sales and also increasing the stock market value that with these description, a broad definition of performance is presented that leads us to predict the company’s financial performance (Sefidgar, 2011). Performance evaluation indices include two groups of traditional indices of accounting based including Return on Assets (ROA), Return on Equity (ROE), Market to Book value ratio (MBV), and Market Value Added (MVA).

The relationship between ownership structure and firms' performance according to Berle and Means (2013), which have widely studied U.S. companies in which capital ownership was distributed among small shareholders and the control was in hands of the managers, caused the performance to be lower than desired level. During this problem, Jensen and Meckling (1976), formally studied the issue of the manager and owner’s brokerage classically.

Therefore, convergence interest hypothesis predicts that the amount of the basic company's ownership will lead to better performance and in contrast, against Demsetz (1983) and Fama and Jensen (1983) pointed out that increase of the stock of managerial ownership may have a counterproductive result, in which it improves the broker’s conflicts and leads to further managerial opportunities. While Demsetz (1983) argues in relation to the managerial structure and says it should have no effect on performance. Mark et al., (1988) assume that such a relationship may exist but it is not much effective in relation to managerial stock ownership. Therefore, adverse effects and entrenchment hypothesis imply to the relationship between ownership and firm performance that will have positive and negative effects on managerial stock ownership. Shleifer and Vishny (1986) believe that the focus on foreign ownership has likely a positive effect on firm performance in situations controlled by persons abroad that their number is high, it may serve as a substitute for legal support in countries with weak investor support and market are less developed.

The importance of the study of ownership structure and its impact on the performance evaluation indices is that experimentally shows the managers, investors and other decision makers that being different in ownership structure of stock companies has an impact on their performance. In other words, if the various groups such as government, financial institutions, banks and other private companies form the company’s owners, their performance will vary. Moreover, since investors and shareholders specially consider stock value and company’s performance status to invest in, it can be investigated that one of the various combinations of ownership will be more effective in improving companies' performance.
Shaqhelany Lor (2012) has addressed the relationship between capital structure, ownership concentration and firm performance in his study. The results showed that there is a significant inverse relationship between the financial leverage (capital structure index) with Q Tobin and the ratio of price-to-earnings (performance index). Also there is a significant direct relationship between the ownership share of the five greater shareholders (ownership concentration index) with Q Tobin and the ratio of price to earnings. On the other hand, there is a significant inverse correlation between the ownership share of the largest shareholder (ownership concentration index) and Q Tobin and finally, no relationship was found between the ownership share of largest shareholder and the ratio of price to earnings.

Ebrahimi Kordlor et al. (2010) examined the impact of institutional ownership type on the performance of listed companies in Tehran Stock Exchange during the years 1998 to 2006 began. To measure company’s performance, three in dices of Q Tobin, return on assets and net profit margin has been applied. Research’s find in as generally represent a significant positive relationship between both institutions al ownership (both active and passive) with the company’s performance.

Rahmani et al. (2010), examined the effect of ownership structure type on company’s performance in their study. The criteria were considered for the performance of return on assets rate, the return on of asset cash flow, return on sales, productivity (sales per capita and asset per capita) and Q Tobin’s ratio. The results acquired of hypotheses testing using regression test showed that the ownership structure affect son firm performance. The results also showed that the companies which their major shareholders are the Quasi-governmental public groups, have better performance than others. Governmental and state groups, non-governmental public groups, and the private sector respectively are in the next category.

Namazi et al. (2009), studied the impact of institutional ownership on the past and future financial performance of listed companies in Tehran Stock Exchange. The study period was over 2004 to 2006 and the selected sample includes 72 companies. In this study, the results of this research hypotheses test using the method of partial least squares related to partial regression suggest that there is a significant relationship between institutional ownership and firm performance. Further analysis of these findings indicates a significant positive relationship between performance and institutional ownership.

Namazi et al. (2008) studied the impact of ownership structure on the performance of companies listed in the Stock Exchange of Tehran. The main hypothesis of the study is that there is a significant relationship between companies’ ownership structure and their
performance. Research’s findings indicate that there is a significant negative relationship between institutional ownership and firm performance and there is a positive and significant relationship between firm ownership and firm performance. Managerial ownership significantly and negatively affects the performance and about foreign ownership, information representing ownership of foreign investors in the statistical sample firms has not been observed. The major ownership is better to be in possession of company investors in private ownership. In general, there is a significant relationship between firm ownership structure and their performance.

Bhattacharya and Graham (2009) has addressed the relationship between institutional ownership and firm performance from the disaggregated view of Finnish companies. A system approach includes using the potential size of the two-way causal relationship between performance and ownership structure. Evidence shows the problem of being endogenous between firm performance and institutional ownership. They achieved the results that more than an equal distribution of voting power among the largest institutional shareholders may lead to enforce positive effects on performance. They also found the significant difference related to firm performance and ownership equality between two categories of institutional investors.

Tsai and Gu (2007), studied the relationship between institutional ownership and firm performance in the casino industry for the years 1999 to 2003. Institutional ownership is the percentage of the share held by state companies from the total capital stock, and these companies include insurance companies, financial institutions, banks, state companies and other components of government. They showed that institutional investing in the casinos may help the industry’s investors so the agency problems resulting from the separation of management and ownership decreases.

Mueller and Spitz (2006), analyzed the relationship between managerial ownership (which includes the stock held by family members of the board of directors) and performance of medium and small private enterprises in Germany with motivation hypothesis testing. In their research, they used a sample of 356 firms in the service sector associated with the trade, for the years 1997 to 2000. This research’s findings show that the companies’ performance with percentage of managerial ownership above 40 percent, is improving.
3. Data and Methodology

3.1. Population and Sample Selection

The statistical population has been selected from listed companies in Tehran Stock Exchange according to the following criteria:

- Required Information to calculate the research’s variables of those companies should be available during the research period.
- Companies that their stock is traded on the exchange during the research period and transactions are not interrupted.
- Companies which have been listed in Tehran Stock Exchange prior to 2007.
- Due to the comparison ability, the end of their fiscal year ends in March, and the fiscal year has not been changed over the time domain.
- Some of the listed companies, including banks and financial institutions (investment companies, financial intermediaries, holding and leasing companies) are removed from the statistical population due to the nature of the activity or different structure of ownership and capital.
- Also the companies suffered losses during the financial year are excluded from the population.
- In final hypothesis, in addition to considering the above cases, given that the industry of surveyed companies were 17 cases and due to the heterogeneous and small nature of some industries, 7 industries were removed that finally 10 industries were studied.

Based on the above criteria, selected companies include 102 listed companies in Tehran Stock Exchange for the period of five years from 2007 to 2011.

3.2. Research Variables

In this study, to collect financial data, firms' financial statements and explanatory notes, weekly and monthly reports of the Stock Exchange and some data sources such as Rahavard Novin and Tadbir Pardaz data base have been used. In this section research variables based on the literature and hypotheses development are as following:

**Private ownership**: represented by the percent of stock hold by individual shareholders with more than 5 percent of ownership.

**State ownership**: represented by the percent of stock hold by government and quasi-government institutions.
Institutional Ownership: represented by the percent of stock hold by insurance companies, financial institutions and banks.

Family ownership: represented by the percent of stock hold by one or more than one members of one or two families.

Return on Assets: represented by proportion of net operating profit divided to total assets as follows:

\[ ROA = \frac{Nopat}{Asset} \]

Return on Equity: represented by proportion of net operating profit divided to total equity as follows:

\[ ROE = \frac{Nopat}{Equity} \]

Market to Book Value: represented by proportion of market value of equity to book value of equity which is calculated as follows.

\[ MBV = \frac{(the \ number \ of \ outstanding \ shares \times \ share \ price)}{Book \ Value \ of \ Equity} \]

Market Value Added: represented by market value of equity minus book value of equity as follows:

\[ MVA = Market \ Value \ of \ Equity \ - \ Book \ Value \ of \ Equity \]

3.3. Hypotheses Development

According to the case literature, and the relationship between ownership structures and performance evaluation indices, the current study aims to test the types of ownership structures and indices of performance evaluation in various industries. Based upon the research objectives, following hypotheses are developed:

Main Hypothesis: Performance evaluation indices are significantly different among different ownership structures.

\[ H_1: \] Firms' Return on Assets (ROA) is significantly different among different ownership structures.

\[ H_2: \] Firms' Return on Equity (ROE) is significantly different among different ownership structures.
structures.

**H3:** Firms' Market to Book Value ratio (MBV) is significantly different among different ownership structures.

**H4:** Firms' Market Value Added (MVA) is significantly different among different ownership structures.

### 3.4. Model Specification

Since companies are divided by different ownership structures, such as state ownership, private ownership, institutional ownership and family ownership, to compare the variable means among multiple groups (more than two), one-way ANOVA method is used. In this test, the test statistics calculated by the following equation:

\[ F_{(df_1, df_2)} = \frac{MSB}{MSW} \]

Where, MSB is the mean squares between groups and MSW is the mean squares within groups. Besides, after performing the ANOVA, to identify the best team in the event that the said test is significant, post hoc tests (Tukey and Duncan) are used. Note that Data Normality, is one of defaults of conducting the analysis of variance test (ANOVA). Kolomogorov–Smirnov statistic is used to examine the data normality. If the observations are not normal, inevitably the non-parametric tests such as the Kruskal-Wallis or H-test should be used.

### 4. Empirical Result

The main objective of this study was to study the performance assessment indices in the different ownership structures of companies. Companies’ ownership structure has been calculated for the 102 companies in the years 2007 to 2011, so 510 observations have been examined during this study, taking into account the percentage of ownership in each case, only five companies have family ownership, 25 companies have state ownership, 67 companies have private ownership and 413 companies have institutional ownership.

Given that there are four types of ownership to compare each of the indices of performance evaluation, one-way ANOVA test or the Wilcoxon test can be conducted. In fact, to examine the indices of performance evaluation, in each ownership is calculated depending on the observation normality of F-statistic or chi-squared statistic and then the decision will be made on rejecting or accepting the hypothesis. However, before examining
each hypothesis, that remote or outlier observations are detected and their effect is moderated or eliminated.

4.1. Test of Main Hypothesis:

To examine the above hypothesis is required to investigate four indices of return on assets, return on equity, the ratio of market value to book value and market value added in the ownership structure of companies. Thus, first to forth hypotheses should be tested.

4.2. Test of First Hypothesis:

To examine the first hypothesis, it is necessary to investigate the observation distribution for return on assets in order to allow appropriate statistical methods to be used. After adjustment for outlier observations in three phases, other outlier observation for return on assets index does not exist, therefore, to determine the appropriate method, Kolomogrov–Smirnov test should be conducted for the remaining data which is in the following table. Given that the p-value is less than 0.05, the rate of return on assets is not normal after removing observations, so to compare the rate of company’s return on assets in four types of company’s ownership, the nonparametric Kruskal-Wallis test was conducted and results are presented in the table 1.

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Number</th>
<th>Average of rating</th>
<th>Test statistic</th>
<th>Degree of freedom</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private ownership</td>
<td>67</td>
<td>195.63</td>
<td>18.807</td>
<td>3</td>
<td>0.001</td>
</tr>
<tr>
<td>State ownership</td>
<td>25</td>
<td>294.98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>153.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional ownership</td>
<td>405</td>
<td>263.84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of above table show that test statistic has calculated ($\chi^2_{(0.999,df=3)} = 16.807$) and it is more than the corresponding statistic in chi-squared table with three degrees of freedom ($\chi^2_{(0.95,df=3)} = 7.801$), therefore, considering that the significance level is less than 0.05 (p-value <0.05) under the null assumption is rejected. According to the collected data and rejecting the null assumption, the first research hypothesis regarding the rate of return on assets (ROA) of firms with different ownership structures have significant differences with 95% confidence will be accepted. Followed by Duncan test, to compare the pair's ownership structure is presented.
Table 2
Duncan test for the rate of return on assets (ROA)

<table>
<thead>
<tr>
<th>Code</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>8.607</td>
</tr>
<tr>
<td>Private ownership</td>
<td>67</td>
<td>12.975</td>
</tr>
<tr>
<td>Institutional ownership</td>
<td>405</td>
<td></td>
</tr>
<tr>
<td>State ownership</td>
<td>25</td>
<td>14.673</td>
</tr>
</tbody>
</table>

The results in Table 2 show that companies that are family ownership, have significant differences in terms of return on asset with companies which are institutional and state ownership, but private companies have no significant differences with none of other companies. Also in this table is shown that state ownership with an average of 14.673 had the high strata of return on assets, and then after that the Institutional, private and family ownership are respectively.

4.3. Test of Second Hypothesis:

To examine the said hypothesis, it is necessary that the observation distribution of the rate of return on equity is investigated so that allows appropriate statistical methods to be used. Outlier observations can be defined using a box plot of the rate of return on equity. After two steps, outlier observations for the rate of return on equity are identified and their effects are moderated. Considering that the p-value is less than 0.05, Rate of return on equity is not normal after removing observations, therefore, to compare the rate of return on equity of firms in four types of firms’ ownership, nonparametric Kruskal-Wallis test is used and results are presented in table 3.

Table 3
Kruskal-Wallis test for the rate of return on equity

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Average of rating</th>
<th>Test statistic</th>
<th>The degree of freedom</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The rate of return on equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private ownership</td>
<td>67</td>
<td>155.06</td>
<td>45.437</td>
<td>3</td>
<td>0.001</td>
</tr>
<tr>
<td>State ownership</td>
<td>25</td>
<td>336.50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>142.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional ownership</td>
<td>409</td>
<td>267.76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of above table show that the test statistic is calculated \( \chi^2_{(0.999, df=3)} = 45.437 \) and it is more than the corresponding statistic in chi-square table \( \chi^2_{(0.95, df=3)} = 7.901 \), therefore, given that the significance level is less than 0.05 (p-value < 0.05), the null assumption is
rejected. According to the collected data and rejecting the null assumption, the second hypothesis of the study regarding the rate of return on equity (ROE) of firms has significant difference indifferent ownership structures, with a 95% confidence is accepted. Tukey test to compare pairs of ownership structure are presented in Table 4.

Table 4
Tukey test for the rate of return on equity (ROE)

<table>
<thead>
<tr>
<th>Code</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>16.100</td>
</tr>
<tr>
<td>Private ownership</td>
<td>67</td>
<td>16.237</td>
</tr>
<tr>
<td>Institutional ownership</td>
<td>409</td>
<td>3.970</td>
</tr>
<tr>
<td>State ownership</td>
<td>25</td>
<td>41.069</td>
</tr>
</tbody>
</table>

The results of above table show that the rate of return on equity of family and private ownership companies have significant difference with state ownership companies, but Institutional companies have no significant differences with any other companies. Also in this table has been shown that state ownership with an average of 41.069 had the high strata of return on equity, and then after that the institutional, private and family ownership are respectively.

4.4. Test of Third Hypothesis:

To examine the above hypothesis like the two previous hypotheses, with the help of a box diagram, out line observations are identified and their effect are removed. During three steps, out line observations are removed and again Kolomogrov–Smirnov test is performed. Because the p-value is greater than 0.05, the ratio of market value to book value is normal after eliminating observations, so to compare the ratio of market value to book value of firms in the four types of company ownership, one-way analysis of variance is used that the results are shown in the table below.

Table 5
Summary of analysis of variance result

<table>
<thead>
<tr>
<th></th>
<th>The sum of squares</th>
<th>The degree of freedom</th>
<th>The mean of the sum of squares</th>
<th>F-statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>140.98</td>
<td>3</td>
<td>46.99</td>
<td>19.004</td>
<td>0.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>1172.16</td>
<td>474</td>
<td>2.47</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The total</td>
<td>1313.15</td>
<td>477</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ANOVA’s table results indicate that considering that the significance level is 0.00 and less than 0.05 of the \( p \)-value <0.05), there are a significant difference among the ratio of market value to book value of firms in different ownership structures. Then Tukey's test has been used to compare pairs of companies in the ownership structures.

The following table, both groups located in a column do not differ significantly. Also shown in this table is that the state ownership with an average of 4.153 percent, had the highest ratio of market value to book value, and then after that institutional, private and family the ownership is respectively.

**Table 6**

<table>
<thead>
<tr>
<th>Code</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Private ownership</td>
<td>64</td>
<td>2.127</td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>2.360</td>
</tr>
<tr>
<td>Institutional ownership</td>
<td>384</td>
<td>3.618</td>
</tr>
<tr>
<td>State ownership</td>
<td>25</td>
<td>3.618</td>
</tr>
</tbody>
</table>

**4.5. Test of Fourth Hypothesis:**

To examine this hypothesis, like the previous hypothesis, with the help of a box diagram, outlying observations are identified and their effect are removed. During five Steps, outlying observations have been removed and again Kolomogrov-Smirnov test has been done. Given that the significant level is 0.00 and less than 0.05, therefore the normality assumption of the market value is rejected with 95% confidence, so non parametric Kruskal-Wallis test is used to the fourth hypothesis test.

**Table 7**

<table>
<thead>
<tr>
<th>Market value added</th>
<th>Variable</th>
<th>N</th>
<th>The average of rating</th>
<th>Test statistic</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private ownership</td>
<td>62</td>
<td>107.19</td>
<td>50.34</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>State ownership</td>
<td>13</td>
<td>187.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family ownership</td>
<td>5</td>
<td>196.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Institutional ownership</td>
<td>325</td>
<td>222</td>
<td>50.34</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The result of above table show that the test statistic is calculated \( \chi^2_{0.999, df=3} = 50.34 \) and it is more than the corresponding statistic in chi-squared table, therefore, considering that the significance level is less than 0.05 ( \( p \)-value<0.05), the null assumption is rejected. According to the collected data and rejecting the null assumption, the fourth research hypothesis...
regarding the market value added (MVA) of firms differs significantly in different ownership structures, it is accepted with 95% confidence.

Table 8

Duncan test for Market Value Added (MVA)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Subset for alpha = 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Private ownership</td>
<td>62</td>
<td>342372.45</td>
</tr>
<tr>
<td>Family ownership</td>
<td>5</td>
<td>581915.80</td>
</tr>
<tr>
<td>State ownership</td>
<td>13</td>
<td>632244.46</td>
</tr>
<tr>
<td>Institutional</td>
<td>325</td>
<td>888219.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>581915.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>632244.46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>888219.99</td>
</tr>
</tbody>
</table>

According to the results acquired of the performed hypothesis at the level of 95%, it is deduced that in dices of the performance evaluation have significant difference together in various ownership structures. Also in this table has been shown that companies of institutional ownership with average of 888219.99 million rials have the high set market value added, and then after that companies with the state, family and private ownership are respectively.

5. Conclusion

According to the results obtained from the research hypotheses, it can be concluded that the performance evaluation indices are significantly different among different ownership structures. It means that corporate performance is influenced by ownership structure. Generally speaking, four performance criteria including return on equity, return on asset, market to book value and market value added ratios are the highest in public and institutional ownership. Specially, results show that firms with public ownership have a better performance based on three criteria, whereas market value added is high in institutional ownership structure. In summary, it can be stated that firms with public and institutional ownership performs better than private and public firms. The results can be related to monopoly power of these firms, easier access to financial market, management politic power, and various rents and so on.
6. References


