Evaluating the Impact of Institutional Investors on the Relationship between Over Investment and Performance of Listed Companies in the Tehran Stock Exchange

Samaneh Ahmad Poor ¹, Karim Rezvani Raz ²
¹. Department of Accounting, Persian Gulf International Branch, Islamic Azad university, Khorramshahr, Iran
². Department of Accounting, Persian Gulf International Branch, Islamic Azad university, Khorramshahr, Iran

Abstract

Managers tend to invest inexpressibly in projects to increase their profit, whether the project is profitable or not because the main desire and objective of managers are using resources for personal gain. Therefore, over investment reduces company performance and shareholder value. In this research, the impact of institutional investors on the relationship between over investment and performance of listed companies in the Tehran Stock Exchange was evaluated. In this regard, the collected data for 136 companies listed on the Tehran Stock Exchange during the years 2008-2014 were studied. The required data for hypotheses testing were extracted from Tadbir Pardaz software. In addition, financial statements of companies were derived. After preparing data in Excel software, hypothesis testing and analysis were performed by SPSS statistical software. The results of hypothesis testing showed that over investment and institutional ownership have respectively negative and positive significant relationships with the performance of companies listed on the Tehran Stock Exchange, but institutional ownership has not a significant impact on the relationship between over investment and the performance of companies listed on the Tehran Stock Exchange.

Keywords: over investment, institutional investors, company performance.
Introduction
Preserving and developing the economic potential of any society in the future depends on its today's investment. Investment is the driving force of economic and social development. Besides the scarcity of financial resources in every community, leading these limited resources in the direction that leads to the highest efficiency is an issue that requires efficient management. This important issue is impossible without performance evaluation and having an indicator for proper performance measurement.
In this study, the main purpose is to investigate the impact of institutional investors on the relationship between over investment and the performance of companies listed on the Tehran Stock Exchange. The importance of this issue is that it shows the type of ownership to managers, investors, and other decision-makers due to its role in management control and monitoring and lowering agency costs, which must be considered in investment and financial decisions.

Theoretical Foundations and research literature
Liu and Berdin (2012) have conducted a research entitled institutional investors, over investment, and company performance. In this research, the data from Chinese companies during 2003 to 2008 are used. The results show that there is a significant negative relationship between institutional ownership and over investment.
Chen et al. (2012) evaluated the impact of shareholding on the company investment: Evidence from China's listed companies. The researchers in this study examined the sensitivity of investment to access local financial resources in the form of maximizing the value of investments.
Christian (2013) in a paper examined the complexities of trade and investments by the company's major shareholders. They expressed greater ownership of securities owned by the bondholders leads to more complex investments.
Ali Nejad and Bahraini (2014) investigated the impact of institutional investors and ownership concentration on investment opportunities in companies listed in Tehran's Stock Exchange. The results of data analysis show that institutional investment has a significant impact on investment opportunities. In addition, the results of the second test hypotheses regarding the impact of ownership concentration on investment opportunities indicate that this impact is significant.
Bozorgi and Zabihi (2015) studied the impact of shareholders on the company's investment in Tehran's Stock Exchange. In this study, the structure of shareholders is the independent variable and the dependent variable is over investment. The results of the analysis showed that all three indicators of shareholder structure i.e. state shareholders, institutional investors, and domestic shareholders have a significant impact on the company investment and all three hypotheses were confirmed.

Research Hypotheses
Hypothesis 1: there is a significant relationship between over investment and performance of listed companies in the Tehran Stock Exchange.
Hypothesis 2: there is a significant relationship between institutional ownership and performance of listed companies in the Tehran Stock Exchange.
Hypothesis 3: institutional ownership has a significant impact on the relationship between over investment and performance of listed companies in the Tehran Stock Exchange.
Research Methodology
The present research is descriptive, which applies statistical tests to describe the relationship between variables. It is also applied in terms of research objective. Since this research seeks to find the impact of institutional investors on the relationship between over investment and performance of listed companies in the Tehran Stock Exchange, thus it is a correlational research in terms of methodology and nature. In a correlational research, the main purpose is determining the relationship between two or more quantitative (measurable) variables. And if there, how much is it? A correlational research assesses a number of variables that are thought to be associated with a major complex variable. On the other hand, the present study is an ex post facto study, which is based on analysis of past data (financial statements).

Research hypotheses test model
The multivariate regression model will be used to test the hypotheses.

Model (1)

Model (2)

Model (3)

\[ Q_{\text{Tobin}_{it}} = \alpha_0 + \alpha_1 (\text{Over} - \text{investment} \times \text{Institutional})_{it} + \alpha_2 \text{Size}_{it} + \alpha_3 \text{FCF}_{it} + \alpha_4 \text{ROE}_{it} + \alpha_5 \text{PRO}_{it} + \mu_{it} \]

In which,
- Q-Tobin= Q Tobin's ratio for performance evaluation
- Over-investment
- Institutional
- Size
- FCF= Free cash flow
- ROE= Return on equity
- PRO= profit

Statistical population:
136 companies between the years 2008-2014 of the companies listed in the Tehran Stock Exchange comprise the research population, and the considered hypotheses regarding this population have been studied and tested.

Hypotheses Testing
Testing hypothesis 1
Hypothesis one: there is a significant relationship between over investment and performance of listed companies in the Tehran Stock Exchange.
In this hypothesis, the dependent variable is company performance and over investment is the independent variable. Coefficients’ significance test is what the researcher searches. It T-test statistic is related to determine the significance of coefficients. The results of the research model and t-statistics of the first hypothesis are shown in Table (4-4). The table implies that the t-statistic and p-value for the first hypothesis variable i.e. over investment is respectively -3.756
and 0.000. Given that the level of error for this study is 0.05, thus over investment has a significant relationship with company performance and the first hypothesis (H1) is confirmed at 95% confidence level. Independent variable coefficient means the over investment is more than the negative level. This means that whatever the company over investment is greater the performance of companies listed on the Tehran Stock Exchange becomes weaker.

Table 4-4. Regression test results of the third model of the research

<table>
<thead>
<tr>
<th>Statistics</th>
<th>B</th>
<th>t</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>2.395</td>
<td>0.023</td>
</tr>
<tr>
<td>In. Over</td>
<td>0.122</td>
<td>-3.756</td>
<td>0.000</td>
</tr>
<tr>
<td>Size</td>
<td>2.059</td>
<td>1.829</td>
<td>0.048</td>
</tr>
<tr>
<td>FCF</td>
<td>0.039</td>
<td>0.933</td>
<td>0.351</td>
</tr>
<tr>
<td>ROE</td>
<td>0.049</td>
<td>2.498</td>
<td>0.034</td>
</tr>
<tr>
<td>PRO</td>
<td>0.095</td>
<td>2.224</td>
<td>0.026</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>6.181</td>
<td></td>
</tr>
<tr>
<td>Significance level</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watson camera</td>
<td></td>
<td>1.720</td>
<td></td>
</tr>
</tbody>
</table>

As reflected in Table (4-4), regression F-statistic is significant at 95% confidence level. Therefore, the model is significant and the control and independent variable have the ability to explain the independent variable. In addition, the coefficient of determination in the test was 0.33. This value shows that 33 percent of the dependent variable, i.e. company performance is the result of independent and control variables in the model and other 67 percent of changes are caused by other factors.

Testing hypothesis 2
Hypothesis two: there is a significant relationship between institutional ownership and performance of listed companies in the Tehran Stock Exchange.

In this hypothesis, the dependent variable is company performance and institutional ownership is the independent variable. Coefficients’ significance test is what the researcher searches. It T-test statistic is related to determine the significance of coefficients. The results of the research model and t-statistics of the second hypothesis are shown in Table (4-5). The results of this table show that the t-statistic and p-value for the second hypothesis variable i.e. institutional ownership is respectively 2.524 and 0.028. Thus, institutional ownership has a significant relationship with company performance and the second hypothesis (H1) is confirmed at 95% confidence level. Independent variable coefficient means the institutional ownership is positive. This means that
whatever the company institutional investors are greater the performance of companies listed on the Tehran Stock Exchange becomes improves.

Table 4-5. Regression test results of the third model of the research

<table>
<thead>
<tr>
<th>Statistics</th>
<th>B</th>
<th>t</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>2.432</td>
<td>0.022</td>
</tr>
<tr>
<td>In. Over</td>
<td>0.049</td>
<td>2.524</td>
<td>0.028</td>
</tr>
<tr>
<td>Size</td>
<td>0.060</td>
<td>2.848</td>
<td>0.045</td>
</tr>
<tr>
<td>FCF</td>
<td>0.038</td>
<td>0.911</td>
<td>0.362</td>
</tr>
<tr>
<td>ROE</td>
<td>0.059</td>
<td>2.774</td>
<td>0.046</td>
</tr>
<tr>
<td>PRO</td>
<td>0.109</td>
<td>2.556</td>
<td>0.011</td>
</tr>
</tbody>
</table>

As given in Table (4-5), regression F-statistic is significant at 95% confidence level. Therefore, the research model is totally significant and the control and independent variable have the ability to explain the independent variable. In addition, the coefficient of determination in the test was 0.32. This value shows that 32 percent of the dependent variable, i.e. company performance is the result of independent and control variables in the model and other 67 percent of changes are caused by other factors.

Testing hypothesis 3
Hypothesis three: institutional ownership has a significant impact on the relationship between over investment and performance of listed companies in the Tehran Stock Exchange.
In this hypothesis, the dependent variable is company performance and institutional ownership in over investment is the independent variable. Coefficients’ significance test is what the researcher searches. It T-test statistic is related to determine the significance of coefficients. The results of the research model and t-statistics of the third hypothesis are given in Table (4-6). The results of this table indicate that the t-statistic and p-value for the third hypothesis variable i.e. institutional ownership in over investment is respectively -1.872 and 0.057. Given that the level of error for this study is 0.05, thus, institutional ownership does not have a significant impact on the relationship between over investment and company performance and the third hypothesis (H1) is rejected at 95% confidence level. This means that institutional investors do not play any role in the relationship between over investment and company performance of listed companies in the Tehran Stock Exchange.
Table 4-6. Regression test results of the third model of the research

<table>
<thead>
<tr>
<th>Statistics</th>
<th>B</th>
<th>t</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-</td>
<td>2.418</td>
<td>0.036</td>
</tr>
<tr>
<td>In. Over</td>
<td>-0.059</td>
<td>-1.872</td>
<td>0.057</td>
</tr>
<tr>
<td>Size</td>
<td>0.059</td>
<td>2.839</td>
<td>0.046</td>
</tr>
<tr>
<td>FCF</td>
<td>0.945</td>
<td>0.040</td>
<td>0.345</td>
</tr>
<tr>
<td>ROE</td>
<td>0.058</td>
<td>2.742</td>
<td>0.042</td>
</tr>
<tr>
<td>PRO</td>
<td>2.534</td>
<td>0.108</td>
<td>0.011</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>3.994</td>
<td></td>
</tr>
<tr>
<td>Significance level</td>
<td>0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Watson camera 1.758

The coefficient of determination 0.300

As can be seen in Table (4-6), F-statistic is significant at 95% confidence level. Therefore, the research model is totally significant and the control and independent variable have the ability to explain the independent variable.

Conclusion

The results of the first hypothesis
The purpose of the first hypothesis was to evaluate the relationship between over investment and performance of companies listed on the Tehran Stock Exchange. One of the reasons for over investment is the incentives and purposes of managers. While the main purpose of shareholders is to maximize their wealth through maximizing the value of the company. Usually, pursuing such a purpose by managers is neglected. Thus, shareholders become skeptical towards the optimal use of their capital and wealth by managers.

The results of this hypothesis are consistent with the results of Liu and Berdin (2012), Chen et al (2013), Tehrani and Hesarzadeh (2009) and Saghafi et al (2011).

The results of the second hypothesis
The purpose of the second hypothesis was to evaluate the relationship between institutional ownership and performance of companies listed on the Tehran Stock Exchange. As was investigated, there is a significant positive relationship between institutional ownership and company performance. This means that whatever the company institutional investors are greater the performance of companies listed on the Tehran Stock Exchange becomes improves.
There are different views regarding the impact of institutional investors on companies' performance. According to this attitude, institutional investors are conversant shareholders who have comparative advantages in collecting and processing information. Generally, the conducted studies confirm this hypothesis. As a result of this argument, a positive relationship between institutional ownership and company performance was predictable. The results of this hypothesis are consistent with the results of Liu and Berdin (2012), Tsai and Guo (2007), Graham and Bhattacharya (2007), Shleifer and Vishni (1986), Mag (1998), Bozorgi and Zabihi (2015), Ali Nejad and Bahraini (2014), Nikbakht and Rahmani Nia (2010).

The results of the third hypothesis
The purpose of the third hypothesis was to evaluate the impact of institutional ownership on the relationship between over investment and performance of companies listed on the Tehran Stock Exchange. As was investigated, institutional ownership has not a significant impact on the relationship between over investment and performance of companies listed on the Tehran Stock Exchange. This means that institutional ownership has not any role on the relationship between over investment and performance of companies listed on the Tehran Stock Exchange and it does not reduce the negative relationship between over investment and company performance. The results of this hypothesis are consistent with the results of Liu and Berdin (2012), Chen et al (2013).
References
3. Tehrani, Reza and Hesarzadeh, Reza (2009), the impact of free cash flows and financial constraint on over investment and low investment, Accounting Research, 3, 67-50.