Study the Relationship between the Quality of Financial Reporting and Investment Efficiency in Tehran Stock Market

Mostafa Naseri and Ali Habibi

Department of Accounting and Management, kahnooj Branch, Islamic Azad University, kerman, Iran.

**Abstract**

The quality of financial reporting is one of the issues which are assigned most of the recent financial management and accounting research to itself. Information asymmetry among managers & investors caused some problems which are called capital rationing, when managers abuse the private information; investors avoid investment. Also agency problems and manager’s utilitarianism cause investors sensitivity as well as difficulty in providing funds for projects with positive net present value. Accounting information can aid the efficiency (investment productivity) in two ways 1: facilitate the risk and information asymmetry 2: facilitate the company’s control mechanism in order to abide utilitarism incentives of managers and protecting the minor investors’ benefits and creditors. The purpose of this study is to study the relationship between the quality of financial reporting and investment efficiency and evaluating this relation in companies with different sizes. In this study investment yield is defined as the deviation from expected investment and it is measured by investment regression on growth opportunities’ function. The results showed that there is an inverse and significant relation between the quality of financial reporting and investment efficiency. The results also represent that company size has an effect on relationship between investment efficiency and the quality of financial reporting.

**Introduction**

Process of allocation of capital resources is under the effect of various institutions including stock market. Resources are lead to profitable activities through capital markets. Now, if the reporting system to market does not perform properly and the pricing is misleading cannot expect that cash flows and saving direct to profitable activities. The time prices can be measured and evaluated correctly that related information spreaded in the market completely. Standard Panel of financial accounting believes that investors and creditors, decisions and using of information are more wider than any other user of financial statements and as the result their decisions has a significant effect on allocation of economic resources for any country. Accounting information, one of the most important inputs data OD variety of investor’s decision making models for choosing among different options. Providing the related information is considered as one of the most important duty of accountants.

In this study the relationship between the quality of financial reporting and investment efficiency of registered companies in Tehran Stock Market.

2. Review of previous researches:

Myers, S.C. and N.S. Majluf [4] represented a model which shows the asymmetry information between company and investors cause under-capitalization. They showed when the manager’s act in the interest of present shareholders and company is in need of providing funds for projects with positive net present value; even managers may evade providing funds through publishing lower priced bonds with the fund of forgoing investment opportunities.

Lambert et al [2], found that agency problem can effect on investment efficiency and also in case the investors predict that managers can abuse the resources, can cause an increase in cost of providing funds.

Morgado, M., Pinado, J., [5] in study the relationship between the company and the investment, in order to examine the hypotheses of under or over capitalizing, found that, there is an optimum level of investment. The companies which invest lesser that this optimum level will be suffer from under-capitalization and those which are investing more than this optimum level will suffer from over-capitalization. And also showed those
companies which have more investment opportunities in comparison with other companies are keeping their investment near the optimum level.

Richardson [7], in study of relationship between financial leverage and issue of over capitalization of managers and mechanisms of barrier of company sovereignty, receiving by every dollar of unrestrained cash flows, on average in companies do $0.44 over capitalization.

Lyandres E., Zhdanov, A., [3] in study the relationship between financial leverage and over capitalization found that there is no statistically significant relationship among financial leverage and over capitalization. Thereto, they showed that those companies which provide funds by equity securities have lesser tendency to increase the investment and even have tendency to reduce the investment in comparison with those companies which provide their funds by debt securities.

Biddle et al [1] found that the higher accounting quality will be straightening the investment efficiency by reducing the information asymmetry between the managers and external capital suppliers. They also expressed that in countries where financing is mainly done through transactions in normal conditions (capital market), the relationship between quality of accounting and investment efficiency will be higher in comparison with those where providing funds will mainly be done through creditors (for instance privet banks).

3. Methodology & hypotheses:
3.1. Methodology:
In any research, the nature, goals and domain must be determined in order to achieve reality by using the authentic rules, tools and methods. Research process is a process in which a researcher tries to examine his hypothesis by scientific and system process of input data. This study is a correlation and regression type. In this type of study the relation between variables are analyzed based on the aims of study. These researches have one dependent variable and one or more independent variables which the rate of effect of independent variables on dependent variable will be examined the regression examinations.

Based on this, some of the registered organization at Tehran Stock Market has been chosen and their related data between 21 March 2006 to 21 March 2012 are collected and the relation among them will be analyzed.

3.2. Hypotheses:
- There is a negative and significant relationship between the quality of financial reporting and under-capitalization.
- There is a negative and significant relationship between the quality of financial reporting and over-capitalization.
- The relationship among the quality of financial reporting and over-capitalization is due to the size of company.
- The relationship among the quality of financial reporting and under-capitalization is due to the size of the company.

1. Statistical Population & sampling:
If the things or phenomenon in respect to one or some common quality consider in one place, we will say that one statistical population has been emerged. In other words, all the element which belong to a specified group are statistical population.

In this research in order to examine the hypotheses of research, the audited and classified financial reports of registered organizations in Tehran Stock Market has been used. The reason for choosing this statistical population is that Tehran Stock Market has nearly a comprehensive information on companies position and their financial and economic process and can be said, it is the only information reference which by using it can access to the financial information resources of companies and study the research methods.

2. Analyzing of data:
The descriptive analysis measures the central tendency and dispersion of data. In order to analyze the data, at first, the statistical descriptive of data should be measured.
In table 1.1 central and dispersion indexes has been shown
Statistic description of accrual components variable are shown as independent variables of measuring model of quality od financial reporting that companies’ sample under study mostly have a negative accrual components. As the mean of these items are low and eke it totally shows that the quality of profit in sample companies are high and the reported profit is close to the cash flows. Mean, maximum and minimum values of related variables of fluctuation in sales show that the changes are mostly negative. Because the calculated man is less than one and has a large internal from maximum data. Between the variables related to the model of evaluating the quality of financial reporting. The greatest standards deviation belongs to the assets and machinery data. It may be due to the existence of different industries in our study sample.
Table 1.1: The results of analyzing the descriptive data.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>Number</th>
<th>TACC/ TA_{t-1}</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACC</td>
<td>13.30</td>
<td>1.09</td>
<td>-15.83</td>
<td>580</td>
<td></td>
</tr>
<tr>
<td>TACC/TA_{t-1}</td>
<td>0.0000074</td>
<td>0.0000051</td>
<td>0.000867</td>
<td>580</td>
<td></td>
</tr>
</tbody>
</table>

The results of analyzing the descriptive data related to the measurement of quality of financial reporting model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Max</th>
<th>Min</th>
<th>Number</th>
<th>TACC/ TA_{t-1}</th>
</tr>
</thead>
<tbody>
<tr>
<td>TACC</td>
<td>1.58</td>
<td>0.192</td>
<td>17.43</td>
<td>580</td>
<td></td>
</tr>
<tr>
<td>TACC/TA_{t-1}</td>
<td>1.83</td>
<td>0.161</td>
<td>0.72</td>
<td>580</td>
<td></td>
</tr>
</tbody>
</table>

The results of analyzing the descriptive data related to the measurement of investment efficiency model.

Table 2-1: Results of study the model of under –capitalization.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>The size of coefficient</th>
<th>Statistical t</th>
<th>Level of significant (P-value)</th>
<th>The results of statistical analysis for independent coefficient variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>-0.027</td>
<td>-1.985</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td>P-value</td>
<td>Statistical F</td>
<td>R²</td>
<td>Watson’s long-sighted statistical analysis for models</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results of evaluating the under-capitalization variable for testing the first hypothesis indicates the utility and significant of the model coefficient of significant of this model is 0.683 which indicates a high and significant relationship.

Table 3.1: The results from evaluating the model of over-capitalization.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>The size of coefficient</th>
<th>Statistical t</th>
<th>Level of significant (P-value)</th>
<th>The results of statistical analysis for independent coefficient variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>-0.98</td>
<td>-1.753</td>
<td>0.143</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>Statistical F</td>
<td>P-value</td>
<td>Watson’s long-sighted statistical analysis for models</td>
<td>0.191</td>
</tr>
</tbody>
</table>

The results of descriptive analysis related to the measurement model of investment efficiency shows that sample companies, in terms of investing in fixed assets are in different levels. This subject to the high standard deviations of investment variable is clear. Also, statistical descriptive of other variables in this model, confirms the previous information being low or negative rate of growth of sale revenue of sample companies.

The results of descriptive analysis related to the model of evaluating the hypotheses consist of statistical descriptive for main variable of study. Based on the results of investment efficiency variable which represents the investment efficiency of sample companies; includes the negative and positive figures that based on our model of research, positive figures represent over-capitalization and negative figures represent under-capitalization.

3. Testing The Hypotheses and Interpret Results:

First hypothesis:
H0: There is no negative and significant relationship among quality of financial reporting and under-capitalization.
H1: There is a negative and significant relationship among quality of financial reporting and under-capitalization.
Second Hypothesis:
H0: There is a negative and significant relationship between quality of financial reporting and over-capitalization.
H1: There is no negative and significant relationship between quality of financial reporting and over-capitalization.

The results for over-capitalization model in above table shows that the mentioned model could not obtained the primary condition of regression. Because the significant level of acceptable error level is over (α=0.05). And it shows the study model could not explain the changing correlation between variables, the sign of calculated coefficient shows that type of relationship between independent and dependent variables in this model is similar to the previous ones. It means there is a reverse relationship among quality of financial reporting and over-capitalization. But having statistical significant relationship was not confirmed. Totally due to the obtained evidences and results from the studied model for the hypothesis can conclude that between investment efficiency and over-capitalization, there is a reverse relationship. But its statistically significant has not been proved. Thus in %95 confidence levels, the second hypothesis is rejected.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>The size of coefficient</th>
<th>Statistical t</th>
<th>Significant level (P-value)</th>
<th>The results of statistical analysis for independent coefficient variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>-0.027</td>
<td>-1.982</td>
<td>0.029</td>
<td></td>
</tr>
<tr>
<td>LogAssets</td>
<td>0.018</td>
<td>5.891</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>P-value</td>
<td>Statistical F</td>
<td>R²</td>
<td>Watson’s long-sighted statistical</td>
<td>The results of statistical analysis for models</td>
</tr>
<tr>
<td>0.000</td>
<td>23.06</td>
<td>0.683</td>
<td>1.884</td>
<td></td>
</tr>
</tbody>
</table>

Third Hypothesis:
H0: The relationship between the quality of financial reporting and under-capitalization is not affected by the size of the company.
H1: The relationship between the quality of financial reporting and under-capitalization is affected by the size of the company.

The estimated coefficient for both statistical independent and control variable are statistically significant. This coefficient for quality of financial reporting variable is negative, which is due to the reverse relationship between these two variables and under-capitalization.

This result is consistent with the general model of the study. In fact it can be admitted that with downturn in quality of financial reporting, the negative rate of deviation from desired investigation (under-capitalization) has been increased, the relationship between the size of the company and under-capitalization is positive. This shows that the larger companies have more investment inefficiencies.

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>The size of coefficient</th>
<th>Statistical t</th>
<th>Significant level (P-value)</th>
<th>The results of statistical analysis for independent coefficient variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ</td>
<td>-6.39</td>
<td>-1.753</td>
<td>0.065</td>
<td></td>
</tr>
<tr>
<td>LogAssets</td>
<td>0.782</td>
<td>1.72</td>
<td>0.143</td>
<td></td>
</tr>
<tr>
<td>P-value</td>
<td>Statistical F</td>
<td>R²</td>
<td>Watson’s long-sighted statistical</td>
<td>The results of statistical analysis for models</td>
</tr>
<tr>
<td>0.112</td>
<td>3.12</td>
<td>0.191</td>
<td>0.078</td>
<td></td>
</tr>
</tbody>
</table>

Forth Hypothesis:
H0: The relationship between the quality of financial reporting and over-capitalization are not affected by the size of the company.
H1: The relationship between the quality of financial reporting and over-capitalization are affected by the size of the company.

The results of over-capitalization model presented in the table show that this model could not obtain the primary condition of regression. Because the significant level of it is more than the error level of the test (α=0.05). It shows the studied model could not properly explain the coefficient between the variables, the sign of the estimated coefficient shows that the type of relationship between independent and dependent variables in this model is similar to the previous study. It means that there is a reverse relationship between the quality of financial reporting and over-capitalization but having the significance has not been proved .the positive correlated with the size of the company in the model has been shown, totally, according to the gained evidences and results from the studied model for testing the hypotheses can conclude that there is a significant and reverse relationship between the quality of financial reporting and investment efficiency. Thus in %95 confidence level can accept the forth hypothesis.
4. **Conclusion:**

In this research proved that there is a reverse relationship between the quality of financial reporting (which is one of the elements of reducing the information asymmetry in agency problems) and over and under capitalization.

In this research have confirmed that the quality of financial reporting can affect the decision making of the investors related to the providing funds for companies.

5. **Suggestions:**

Based on the results obtained from testing the hypotheses, there are some practical suggestions for provident research, suggestions are as follows:

In practical domain suggest that the stock companies in order to provide their necessary funds: which are normally relies on outside resources, avoid the presenting the directed financial reports. Transparency in financial information and practices will cause the creditors accredit and will cause reduce in cost of capital.

In domain of research suggesting to researchers that the effect of other effective variables on investors decision making such as dividend policy, indexes of firms performance and operating cash flows on over and under capitalization to be studied. Also, suggest that this research to be done by separating the various industries in the stock market in order to determine the effect of the industry on investment efficiency.

**REFERENCES**


