Conservatism Relationship between Financial Reporting Quality and Efficiency of Capital Investments in Tehran Stock Exchange

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ABSTRACT

The present studies investigate the relationship between financial reporting quality and efficiency of capital Investments in firms accepted at Tehran stock exchange. Statistical Society considering determined characteristics of firms accepted in Tehran exchange in 5 year period from 2006 to 2010. Also six hypotheses were designed studied with the aid of statistical tests. The results suggest that there is a positive relation between financial reporting quality level and invest efficiency level and There is not negative relation between financial reporting quality and Over-and Under-investment and also there is positive interrelationship between reporting quality with relation efficiency investment and financial reporting quality level and the one with financial reporting quality.

Keywords: Financial Reporting Quality, Investment Efficiency, Over- and Under-Investment

INTRODUCTION

Study present the relation between financial reporting quality and investment efficiency in the Tehran Stock Exchange is evaluated. It showed the determination of the relationship, firms with higher reporting and the information provided quality, will be your investment closer to the efficient frontier. As In the interest of companies to prepare and provide financial reporting quality increases. The general objectives determine and quality financial reporting, of those who have power internal or confidential information reduce, and they cannot with the informational advantage of the benefits achieved. In other words, the quality of financial reporting higher through the reduction of information asymmetry between shareholders and the internal user and lenders, the possibility of incorrect selection and moral hazard as two effects and basic result to reduce information asymmetry, If the incorrect selection, because investors infer the possibility using of finance Resources based on models inadequate and inefficient method (improper investment projects) by the management, the level demands of this group increased, subsequent risk investment and the result finance expensive company in increased and possible of investment in the projects with positive net present value for the company are excluded.

The moral hazard mainly on effect differentiated ownership entities commercial of the system of internal control and management these company and In fact, the inability of shareholders and lenders in supervision on all function manager major and quality of his work is created, causes tempted manager; hypothyroidism and low performance due to the existence of factors that pretend that he are outside control. Such costs are called agency costs, because reducing the company value, the causes of the wealth of the other parties company, others (managers) to be transferred. Agency costs causes until shareholders and lenders with manager contracts related with salary and reward them or contracts in relation with loans granted conclude and thereby to their actions limit until to problems agency reduce. In this section some of the external and internal researches conducted during the past years are reviewed.

Bushman et al. [1] have identified three possible ambiguities in earnings, of the capital market affect. First, accounting information helps investors better recognize investments good and bad that this subject estimate risk and therefore reduce the cost of capital. Second, accounting information better helps investors to distinguish good and bad managers and this subject the agency cost and the cost of capital reduces. Third, ambiguity in earnings, with a weakening associated earning accounting reported and profit economy, author an increase in information asymmetry. Such cash resource providers in their markets with higher price sales and lower prices buy are protected. This subject author, increases transaction costs and thus lead to an equity swap deal less.
Biedl et al. [2] the study relationship between accounting quality and investment in the level company find out that the quality higher of accounting information, investment efficiency by reducing information asymmetry between managers and external suppliers of capital will strengthen. They also represent that in the countries that financial securement mainly through normal transactions (capital market) are, compared with those of that financial securement more by creditors (such as banks government) is made, relation between accounting quality and more be investment efficiency.

Bite [3] the study effect of access to confidential information, and supervision on purpose the quality of accounting in economic decisions, receive that access to confidential information and supervision, sensitivity of investment to cash flow decreases and the effect of accounting quality reduces the efficiency of investment. Verdi [4] the study found that the financial reporting quality and investment efficiency, financial reporting quality higher with more investment and low investment are negatively related. He stated that the relationship between financial reporting quality and low investment in firms with financial limitation securement encounter and the relation between reporting quality and more investment in firms that have balance the major cash, is stronger. He stated that the relationship between financial reporting quality and investment in efficiency for firms that have weaker information environment, are stronger. Biedl et al. [5] also found that the reporting quality in the firms that in commercial areas inclined to more investment (low investment) with have investment negative relation (positive). In other words, the higher reporting quality than prevention of more (decrease) in investment. Kordestani and Majdi [6] study the quality characteristics of the relationship between income and the cost of common stock capital paid. The results show that quality characteristics of interest Influence on the cost of capital is common stock. Modares et al. [7] they showed that financial reporting quality is positively associated with efficiency investments. Dastgir et al. [8] found that the quality of financial reporting cause reduces the cost of capital and the increasing tendency to invest. In the study is previous volume disclosure considered as quality of financial reporting.

The overall goal is to provide new evidence regarding the signaling hypothesis of dividend by presentation of a new approach in order to test the hypotheses. Our overall goal is to investigate the relationship between financial reporting quality and investment efficiency of listed companies in Tehran stock exchange deal. Thus we have the following objectives: in phase application the objectives of this research are to provide the necessary background for understanding the relationship between financial reporting quality and investment efficiency in companies listed in Tehran stock exchange, which can identify these factors for institutions and...be useful.

The scope of this research is the listed companies in Tehran stock exchange between financial years of 2008 to 2010. Since in recent years the number of the listed companies on the stock exchange has been remarkably increased and stock database system within these years has been significantly grown, using the information of 118 active listed companies in Tehran stock exchange, the research was preceded. If longer duration is considered, the number of sample companies and the sample population will be declined; and the validity of this research was to provide the necessary context for identify the relationship between financial reporting quality and investment efficiency in companies.

According to the description of proposed research, the hypotheses were developed as follows:

H1: Explain that there is a positive relationship between financial reporting quality and level investment efficiency.
H2: Explain that there is a positive relationship between financial reporting quality and investment efficiency.
H3: Explain that there is a negative relationship between financial reporting quality and low investment.
H4: Explain that there is a negative relation between financial reporting quality and more investment.
H5: Explain that there is a positive correlation between the level financial reporting quality and financial reporting quality.
H6: Explain that there is a positive correlation between investment efficiency and investment efficiency.

MATERIALS AND METHODS

The present study is systematic and applied. Generally, the purpose of an applied research is to develop the practical knowledge in a particular field. The research method and nature is of a correlation type implying the examination of the relationship between variables through regression and using past data methodology.

We use the regression model in order to test the hypotheses. Definition research variables are as follows:

1) Model financial reporting quality indicators:
This research from many previous studies, the quality of financial reporting of accruals quality is considered. Emphasis on quality of accruals previous studies awkward to that empirical evidence that shows that the ability of accruals cause to predict future cash flows is increased. Cash flows is key elements on capital budgeting and especially in this research that financial reporting applications for investigate of investment com. Dechow [9] states which accrual accounting and accrual cause report finance would like earnings accounting measure is appropriate for measuring performance. It is possible that the assumptions and estimates accounting to errors in accrual.

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Dechow [9] have pointed out that such errors could reduce the quality of accounting figures because these particular ambiguity errors caused disruption of accruals and in particular, is ambiguous and gain accrual.

1: \[ \text{Acc} = \alpha + \beta_1 \text{CFO}_{t-1} + \beta_2 \text{CFO}_t + \beta_3 \text{CFO}_{t+1} + \beta_4 \Delta \text{ST}_t + \beta_5 \text{FA} + \epsilon \text{Acc} \]

Acc: Working capital accrual
CFO: Cash flow operations
\( \Delta \text{ST} \): Changes in sales revenue
FA: fixed assets

Working capital accruals derived from the following equation: \[ \text{Acc} = (\Delta \text{CA} - \Delta \text{C}) - (\Delta \text{CL} - \Delta \text{STD}) - \text{Dep} \]

Acc: Accruals working capital
CA: current assets
C: Cash holdings
CL: current liabilities
STD: Short-term financial liabilities
Dep: Depreciation

Dechow [9] stated that working capital accruals in the model 1 should with and cash flows prior, the current and the next be explained. The errors of the regression are of working capital accruals on cash flow concept disrelation partial of accruals into cash flows. Therefore with calculating errors in of the equation Acc could the size symmetry errors as a measure of accruals quality, or the quality of financial reporting consider?

2: Model investment efficiency: in order to test the relation between financial reporting quality and investment efficiency should be a model that can determine the optimum level to determine the optimal investment. The theoretical basis for this model is based on the fact that the growth opportunities of the company to should be justify the investment company. In other words, it is expected that the regression between these two variables, growth opportunities, investments, explain otherwise, the error values, show the inefficiency of investment. In this research, investment efficiency is calculated using model 2. Equation GO also shows some criteria measures of growth opportunities:

2) \[ \text{IFA} = \beta_0 + \beta_1 \text{CFO}/\text{FA}_{t-1} + \text{GO} + \epsilon \]

GO= MTB -SRt-1
IFA: Investment fixed assets
CFO: Cash Flow operating
FA: fixed assets
GO: Growth opportunity
MTB: Market value of assets to book
SR: Sales revenue

In this model \( \epsilon \), shows the level of investment (I) is that by growth opportunities (GO) is described. The error values may be positive or negative. Error positive values, more investment and negative values, of low investment are called.

RESULTS

The first Test hypothesis: The level of financial reporting quality is positively associated with investment efficiency. In this hypothesis, the relation between financial reporting quality as the independent variable and investment performance the dependent variable is studied. The addition of firm size (logarithm of average total assets the time of the research) Standard deviation of operating cash flow of each company in the time of the research and return on average efficiency assets in the time of the research is used as control variables. Because of these variables, is used as the control variable it is that the dependent and independent variables are defined as the standard deviation data for each company. So the model for testing this hypothesis is as follows.


<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficients</th>
<th>T Statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficients fixed</td>
<td>0.182</td>
<td>0.808</td>
<td>0.421</td>
</tr>
<tr>
<td>Quality reporting level</td>
<td>0.082</td>
<td>1.276</td>
<td>0.204</td>
</tr>
<tr>
<td>Average return assets</td>
<td>0.058</td>
<td>0.315</td>
<td>0.753</td>
</tr>
<tr>
<td>Standard deviation operating cash flows</td>
<td>-1.274</td>
<td>-7.019</td>
<td>0.000</td>
</tr>
<tr>
<td>Size company</td>
<td>-0.037</td>
<td>-2.224</td>
<td>0.028</td>
</tr>
<tr>
<td>Statistics model</td>
<td>Significance level F</td>
<td>Adjusted coefficient determination</td>
<td>Statistics - D – Watson</td>
</tr>
<tr>
<td>14/505</td>
<td>0.000</td>
<td>0.316</td>
<td>1.737</td>
</tr>
</tbody>
</table>

The results of the regression model based on investment efficiency level and the quality of financial reporting level, there is a significant relationship between investment efficiency level and the quality of financial reporting level in the level 0.05 is rejected (P>0.05). More accurately the effect of quality reporting level on investment efficiency level equal the positive value of 0.082 has been estimated, but the effect is not significant.

**The Second Test hypothesis:** Financial reporting quality is positively related to investment efficiency.

In this hypothesis, the relation between financial reporting quality as the independent variable and efficiency of investment as the dependent variable investigate. For this purpose, the regression equation includes financial reporting quality and an investment efficiency model variable is a Period use as independent variables. Also, Size Company is defined as the logarithm of total assets as a control variable will be used. In other words, the regression model used is as follows:

IE: Investment Efficiency  
FQ: Financial Quality  
ROA: Return on Assets  
SIZE: Size Company.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficients</th>
<th>T Statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficients fixed</td>
<td>0.407</td>
<td>1.307</td>
<td>0.192</td>
</tr>
<tr>
<td>Quality reporting</td>
<td>0.084</td>
<td>1.687</td>
<td>0.093</td>
</tr>
<tr>
<td>return assets</td>
<td>0.261</td>
<td>1.193</td>
<td>0.234</td>
</tr>
<tr>
<td>Size company</td>
<td>-0.088</td>
<td>-3.802</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Statistics model  
Statistics F  
Significance level F  
Adjusted coefficient determination  
Statistics - D –Watson

5.506  
0.001  
0.045  
1.803

The outputs achieved between financial reporting quality and investment efficiency, the 1/0, there is a significant relationship (t = 0.084, P <0.1). Sign of regression coefficient suggests that higher quality financial reporting, the investment performance in the next period is (I) and the research hypothesis is not rejected face.

According to the estimates of other coefficients, the regression model between financial reporting quality prior investment efficiency, asset returns and the size of the company is established:

**The Third Test hypothesis:** Financial reporting quality is negatively associated with low investment.

In this hypothesis, the relationship between the qualities of financial reporting prior period as the independent variable with the least investment (negative remains negative investment efficiency model) as the dependent variable is investigated. So like the previous hypothesis, consider the following regression model:

Under: Low investment  
FQ: financial Quality  
ROA: Return on Assets  
SIZE: Size Company.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficients</th>
<th>T Statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficients fixed</td>
<td>0.566</td>
<td>1.251</td>
<td>0.213</td>
</tr>
<tr>
<td>Quality reporting</td>
<td>-0.029</td>
<td>-0.410</td>
<td>0.683</td>
</tr>
<tr>
<td>return assets</td>
<td>0.162</td>
<td>0.555</td>
<td>0.580</td>
</tr>
<tr>
<td>Size company</td>
<td>-0.203</td>
<td>6.480</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Statistics model  
Statistics F  
Significance level F  
Adjusted coefficient determination  
Statistics - D –Watson

7.270  
0.001  
0.110  
1.756

The results described above show that there is a negative relation between financial reporting quality and low investment. Regression coefficient sign is negative because the quality of financial reporting is negative. However, the achieved significance level, cannot accept that this relationship the level of 0.05 is significant (P>0.05). Therefore the research hypothesis that there is a negative relation between financial reporting quality and low investment is rejected.
The Fourth Test hypothesis: Financial reporting quality with is negatively related to more investment

In this hypothesis, the relationship between the qualities of financial reporting prior period as the independent variable with more investment (investment remains positive efficiency model) as the dependent variable is investigated. So like the previous hypothesis, consider the following regression model:

Over: over investment
FQ: financial Quality
ROA: Return on Assets
SIZE: Size Company.

Table 4. The result of the above model is given in the following table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Regression coefficients</th>
<th>T Statistics</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>coefficients fixed</td>
<td>-1.410</td>
<td>-3.156</td>
<td>0.002</td>
</tr>
<tr>
<td>Quality reporting</td>
<td>-0.072</td>
<td>-0.984</td>
<td>0.326</td>
</tr>
<tr>
<td>Return assets</td>
<td>-0.807</td>
<td>-2.449</td>
<td>0.015</td>
</tr>
<tr>
<td>Size company</td>
<td>0.169</td>
<td>5.080</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The results described above show that there is a negative relationship between the quality of financial reporting, and more investment. Because regression coefficient sign is negative related the quality of financial reporting. However, the achieved significance level, cannot accept that this relationship in the level of 0/05 is significant (P> 0.05). Therefore the research hypothesis that there is a negative relation between financial reporting quality and over investment is rejected.

The Fifth Test hypothesis:
"The level of financial reporting quality is positively correlated with the quality of financial reporting."

In this hypothesis, the correlation between the quality of financial reporting and the level will be tested with the Pearson correlation coefficient. For this purpose, the calculation of the quality of financial reporting with financial reporting quality index model, negative the standard deviation of each of the companies in the sample are calculated. Next The Pearson correlation coefficient between the quality of financial reporting and it level the dissociation of the year, will be tested. The results of these tests are given in the table below. It is the quality of financial reporting for model years 2007, 2008 and 2009 have been fitted, so the test can only be done in these years.

Table 5. Results test of Pearson correlation coefficient for investigation relation between the quality of financial reporting and the level

<table>
<thead>
<tr>
<th>Quality of reporting</th>
<th>Quality of reporting</th>
<th>Quality of reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2008</td>
<td>2009</td>
</tr>
<tr>
<td>Quality reporting</td>
<td>0.446</td>
<td>0.270</td>
</tr>
<tr>
<td>Significance level</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Total number observation</td>
<td>118</td>
<td>118</td>
</tr>
</tbody>
</table>

Based on the results of the test the Pearson correlation coefficient between the quality of financial reporting and it level in different years of research, there is a significant positive correlation (P<0.05). This result suggests that those company that in financial reporting quality index model with error values smaller (larger) or a way of reporting quality is higher (lower) are the fluctuations smaller (larger) are in values error. Therefore, the research hypothesis that there is a positive correlation between the quality of financial reporting and the level of rejection is encountered.

The Sixth Test hypothesis: Investment efficiency level is positively correlated with investment efficiency.

In this hypothesis, the correlation between efficiency and the level of investment, it will be tested by Pearson correlation coefficient. For this purpose, next the calculations of investment efficiency, with of the investment efficiency using the model, negative the standard deviation of each of the companies in the sample are calculated. The Pearson correlation coefficient between efficiency and the level of investment in the separation year will be tested.

Based on the results obtain of the Pearson correlation coefficient between efficiency and the level of investment in different years of research, there is a significant positive correlation (P <0.05). Therefore, the research hypothesis that there is a positive correlation between investment efficiency and the level of investment with rejection is encountered.
According to the results of the first hypothesis, the third and fourth of which were rejected, a suggestion at companies adjustment contracts through reducing information asymmetry between company managers and shareholders are conclude. This cause reducing the cost of equity capital and the cost of supervision shareholders on managers and improving the selection of project to invest. According to the results of the second hypothesis, five and six that with the were rejected, suggesting Tehran Stock Exchange to create incentive policies and legal obligations of companies to disclose complete and accurate and timely information to users and enhance the legal penalties violations for increase quality reporting. The study are limitations as follows, some of which may have an important effect on the validity of the study include:

In this study, significant relationships between measures of growth opportunities and change in fixed assets, total assets of the company and the assets in current company that of each are investment, not found. So the investment efficiency of the companies in this study was limited to long-term investment. The second limitation of this study was to use only one indicator of the quality of financial reporting. However, the authors believe it is time accruals on the balance sheet and the profit and loss has significant effects, using the accruals quality measure that Biedl, Hilary and Verdi have it used, is a good alternative for the quality of financial reporting. Subjects relation quality of financial reporting, including issues are important that scientific findings at accounting standards board can be helped activists in our capital markets, provide appropriate context for research future. Some of the research topics that could later be considered in the Iranian capital market, as follows:

- The relationship between information asymmetry and investment efficiency.
- The relationship between investment efficiency and agency problems.

REFERENCES


Table 6. The results of these tests are given in the table below. It is the efficiency model of financial investments for the years 2006-2010 have been fitted, so this test can only be done in these years.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency Investments</td>
<td>0.391</td>
<td>0.436</td>
<td>0.441</td>
<td>0.336</td>
<td>0.234</td>
</tr>
<tr>
<td>Significance level</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.005</td>
</tr>
<tr>
<td>Total number observations</td>
<td>118</td>
<td>118</td>
<td>118</td>
<td>118</td>
<td>118</td>
</tr>
</tbody>
</table>

DISCUSSION