THE STUDY OF THE INFLUENCE OF ENVIRONMENTAL OPTIONAL DISCLOSING OVER THE VALUE OF THE COMPANIES THAT HAVE BEEN ACCEPTED IN TEHRAN STOCK EXCHANGE MARKET

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Abstract
The aim of accomplishing this present research is to study the influence that quality of environmental optional disclosing has over the value of companies that have been accepted in Tehran Stock Exchange Market, to accomplish this research a time period from 1385 (2006) to 1390 (2011) will be considered. Specimen consists of 72 active companies that have been accepted in the Stock Exchange Market, were chosen by judicial sampling (screening or systematic elimination), and the tools that implemented were SPSS and Eviows computer software by which data analysis have been done and finally the relationship between variables was considered by regression analyses. On the basis of research findings, since relation between environmental optional disclosing and capital cost was verified, therefore environmental optional disclosing quality has the greatest effect over capital cost, but the relation between the quality of environmental optional disclosing don’t has any effects over cash flows. Thus, with regard to research model, since the quality of environmental optional disclosing has affect over one of the company’s value indexes, so the quality of environmental optional disclosing is an effective factor over the value of the company.

Keywords: optional disclosing quality, environmental optional disclosing, value of the company, capital cost, cash flows.

Introduction
In the present era with respect to the presence of certain environmental limits, especially in the global commerce and narrowing the field of competition, all agree on this that the managers of commercial units are under a growing pressure; they have not only to lower the operational costs but also to minimize their environmental influence that is the result of their operational activities. This leverage of pressure can be applied by groups like stock holders, government, public media, consumers, and other organizations. Thus, companies in order to lower the environmental
influences of their activities do not have any other choices that inserts the information related to environmental costs in their accounts and decisions (Abasi & Mohammadi 2010).

Moreover, these institutions of investors and the other beneficiaries due to the interest of environmental issues and the importance of costs and responsibilities related to that, pursue the disclosure of environmental information of the companies. Although, unfortunately the necessity of acceptance of extra – organizational reports about environment is justified, but there are some fundamental problems: absence of environmental reporting standards \(^1\), absence of standards for the profession of environmental confirmation, and the little number of independent accountants that the unit necessitates such jobs (Hassas Yeganeh & Azimi, 2007).

**The importance of the subject and necessity of study**

Most of the companies in order to gain social benefits turn to protect the environment and now following that to comply with investors demand for information are being more responsible to reply. All over the world environmental problems are inevitable, that now the estimated percent of United States of America’s gross national product is 3 to 5 percent for the cleansing of environment, according the law of 1980. This is done by the responsibility to compensate and comprehensive environmental response or better aspects; according to these companies in one way for the elimination of limits and in the other for obtaining commercial credits and gaining to more wealth have to consider environmental issues (Hassas Yeganeh, Azimi, 2007). Moreover, the organization of Tehran stock exchange managers and undertakers have been suggested the in the direction to decrease the absence of information symmetry and efficiency improvement of investing, adopt practical solutions and increase supervising over the quality of financial reports; thus in order to lowering the contrast of interests, necessitates institutions to disclose financial reports with respects to auditing and credit rating. Efficiency of investing or investing at the optimum level, requires that in one way consuming resources that invested more than optimum level should be prevented and in the other way, resources direction should be changed to activities that need more investing capacity (Modares & Hasar Zade, 2008).

**Study Background**

Arab Mazar Yazdi and Seyed Mohammad Talebian (2008) in investigating the quality of financial reporting, information risk and the cost of investing conclude that optional liability items over the capital cost is greater than capital cost of influence of quality of liability items that are non – optional (intrinsic) over the capital cost of companies.

Talebnia and Allameh (2004) for investigating information load of auditing about environment in financial reporting conclude that accounting reports can increase the environmental information load for the sake of users especially environment protectors to help them in decision making and also study in managing system about environment, and also encourage nonprofit units to observe environmental protection.

Hassas Yganeh and et al (2008) in a research, investigate the relation between institutional investors and the value of company. In this research they examine different outlooks like hypothesis of efficient inspection and the hypothesis of interest convergence in the case of institutional investing, the results of research show a positive relation between institutional investors and the value of the company.

Fakhar and Fallah Mohammadi (2009) examine the effect of information disclosing quality over the liquidation ability of shares of the companies that are accepted in the Tehran stock exchange. In this research, the scale of disclosing that established and measured by a check list on the basis of optional disclosing and necessary standards of standards of auditing organization. The

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\(^1\) : Standards of Environment Report
findings of the research indicates that the reverse and meaningful relation exist between information disclosing and the index of liquidation ability of the shares. The results of Allameh research (2004) indicate that financial environmental function reporting can increase information load for users from financial point of view. Furthermore, encourages companies to consider environmental protection regulations. In investigating the effect of size of the company over the capital cost of the companies that have been accepted in Tehran stock exchange market Nasirpour (2000) concluded that there is no meaningful relation between the size of the company and its capital cost in the accepted in Tehran stock exchange market.

Botosan in (1997) has conducted a research under the title of the relation between optional disclosing level and the capital cost of rights of stock owners. In this research he in order to measure the level of optional disclosing of companies’ annual reports and grading by the institution of investing managing and use a study that by using optional disclosing in annual reports, decreases the capital cost of stock owners’ right.

Marlen and et al. (2008) have conducted a research under the title of relation between the qualities of environmental disclosing over the value of the company. By innovative index he has engaged to the annual report of various companies and concluded that there is a negative relationship between capital cost over the value of company and the quality of optional disclosing for operational companies sensitive to environment, and also there is a positive relationship between future cash flows over the value of the company and the quality of optional disclosing for industrial companies that are not sensitive to environment.

Brown and Hillegeist (2004) also believe that the quality of optional disclosing can affect the level of absence information symmetry and accordingly liquidation ability and capital cost in two ways, as well there is a reverse relation between the quality of optional disclosing and the amount of trades that can reach to confidential information. The results indicate that companies with better disclosing quality have lower capital cost.

Hill (2001) study the influence of optional disclosing over expected capital cost and stated that the quality of disclosing like stock owners rights capital cost is subjective and deduce that there is a negative relationship between the quality of disclosing and the expected cost of owners’ rights.

Chu and et al. also believe disclosure of environmental and social information of the company is a tool for management in order to face political and social pressure.

Gitzman and Ireland (2005) after studying the relation between disclosing and London stock exchange market companies’ capital cost concluded that there is a negative relation between disclosing and capital cost. But, this relation is meaningful just for companies that are adopting presumptuous accounting policy.

Zhang and Ding (2006) study the capital cost of companies that are active in China capital market, findings indicate that there is a reverse relation between disclosing and capital cost.

The result of Edo et al. research, show that until the moment that the disclosing of information of environmental function is non-obligation and voluntarily, companies for reporting use different procedures. Furthermore, the amount of environmental disclosure of companies is in fluctuation. In the way that large companies in comparison with small companies, do not present more information about their environmental function or at least partially report the information.

**Primary hypothesis**
The quality of environmental optional disclosing affects the value of the company.

**Derivative hypotheses**

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2: Marlen Plumle, Darrell Mrown and Mcott Marshal
The quality of environmental optional disclosing affects capital cost.
The quality of environmental optional disclosing cash flows.

**Research method**
Research method in this study is descriptive – surveying. Research in its very essence, includes describing natural or manmade phenomena (Burg & Gal, 2004), descriptive research includes a approach set that their goals are describing conditions or phenomena, in order to recognizing present conditions or helping the decision making procedure (Sarmad, Bazargan and Hejazi, 2005), descriptive research for the purpose of systematic explanation, incidents happen identical and subtle with interesting subjects. Present study in point of view of Iran’s environmental experts’ perspectives is descriptive.

**Fisher’s hypotheses testing by Pearson’s regression**

**Pearson’s correlation coefficient**
Correlation coefficient shows the intensity and also the sort of relationship (direct or reverse). This coefficient is between 1 and – 1, and in the case of absence the relationship between two variables is equal to zero. This test with respect to following hypotheses examines the relationship between two variables.
The method of judgment about the existence or non – existence of relationship is done on the basis of obtained meaningfully level. Thus, if the testing’s “sig” is smaller than 0/05 the hypothesis of $H_0$ is rejected, and there is a meaningful relationship between two variables.

**The correlation coefficient numerical value judgment method**

<table>
<thead>
<tr>
<th>Judgment method</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct correlation – weak</td>
<td>0 — 0.25</td>
</tr>
<tr>
<td>Direct correlation – relatively strong</td>
<td>0.25 — 0.5</td>
</tr>
<tr>
<td>Direct correlation – intense</td>
<td>0.5 — 0.75</td>
</tr>
<tr>
<td>Direct correlation – very intense</td>
<td>0.75 — 1</td>
</tr>
<tr>
<td>No correlation</td>
<td>0</td>
</tr>
<tr>
<td>Reverse correlation – weak</td>
<td>0 — -0.25</td>
</tr>
<tr>
<td>Reverse correlation – relatively intense</td>
<td>-0.25 — -0.5</td>
</tr>
<tr>
<td>Reverse correlation – intense</td>
<td>-0.5 — -0.75</td>
</tr>
<tr>
<td>Reverse correlation – very intense</td>
<td>-0.75 — -1</td>
</tr>
</tbody>
</table>

**Hypotheses test**

**First hypothesis test:** quality of environmental optional disclosing affects the capital cost.

**Correlation coefficient output between** quality of environmental optional disclosing and capital cost.

<table>
<thead>
<tr>
<th>Examined variables</th>
<th>sample number</th>
<th>Correlation coefficient</th>
<th>Two sided (sig)</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of disclosing and capital cost</td>
<td>432</td>
<td>-0.096</td>
<td>0.04</td>
<td>Hypothesis acceptance $H_1$</td>
</tr>
</tbody>
</table>

According to table (9); as it can be observed, sig test Pearson’s correlation coefficient between quality of disclosure and capital cost is equal to (0/04) that is smaller than value of (0/05). Thus assumption of zero ($H_0$) based upon the absence of relation of two variables of environmental disclosing quality, and the capital cost is not accepted. Therefore, there is a meaningful
relationship between the two variables of quality of environmental optional disclosing and capital cost. In the way that by increasing the quality of optional environmental disclosing, the capital cost decreases and vice versa, since the sign correlation coefficient is negative.

First hypothesis test: quality of environmental optional disclosing affects the cash flows.

**Correlation coefficient output between** quality of environmental optional disclosing and cash flow.

<table>
<thead>
<tr>
<th>Examined variables</th>
<th>Sample number</th>
<th>Correlation coefficient</th>
<th>Two sided (sig)</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of disclosing and cash flow</td>
<td>432</td>
<td>-0.01</td>
<td>0.7</td>
<td>Rejection of hypothesis H₁</td>
</tr>
</tbody>
</table>

According to table (10); as it can be observed, sig test Pearson’s correlation coefficient between quality of disclosure and cash flow is equal to (0.04) that is greater than value of (0.05). Thus assumption of zero (H₀) based upon the absence of relation of two variables of environmental disclosing quality, and the cash flow is accepted. Therefore there is not a meaningful relationship between two variables of obligation items and bankruptcy risk.

**Hypotheses test by fit regression model**

In order to fit regression models with respect to the sort of data there is two kind of fit. If data are of panel kind, panel regressions are used and, if the data are of merge kind Polya’s regression or OLS is used. The basis of recognition of this fit is Limmer’s F – test.

**Test results of meaningful constant influence in the face of minimum gathered squares for disclosing quality and capital cost**

<table>
<thead>
<tr>
<th>The value of F - Test statistic</th>
<th>Degree of freedom</th>
<th>The quantity of Probability value (PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.23</td>
<td>(71 and 351)</td>
<td>0.062</td>
</tr>
</tbody>
</table>

Therefore, in this section, the first hypothesis of regression by monetary (merge) method or OLS becomes a test.

**Fit model between disclosing quality and capital cost**

The results of model estimation by merge regression method (dependent variable: capital cost) shows that:

With regard to table, the meaningfully level of independent variable of disclosing quality is equal to 0.006, and these values are smaller than 0.05. Therefore, mentioned variables affect capital cost. The model appointment coefficient is equal to 0.08. It means that 8 percent of dependent variable, variations expressed by variable of disclosing quality. Also statistic index of Durbin –
Watson is equal to 1.67 because this value placed in an interval of 1.5 to 2, so we conclude that the resulted errors of the model are not correlated. The results of model estimation by (PooL) model dependent variable: independent variable and capital cost: disclosing quality

<table>
<thead>
<tr>
<th>Result in model</th>
<th>Test statistic</th>
<th>T – statistic</th>
<th>Standard deviation</th>
<th>Variables</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>affects</td>
<td>Smaller than 0.05</td>
<td>-1.91603</td>
<td>4</td>
<td>0.276219</td>
<td>-0.529245</td>
</tr>
<tr>
<td>Doesn’t affect</td>
<td>Greater than 0.05</td>
<td>2.66665</td>
<td>4</td>
<td>5.889426</td>
<td>15.70506</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Errors in model are not correlated</td>
<td></td>
<td>1.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 percent of capital cost variations expressed by independent meaningful variables</td>
<td></td>
<td>3.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linearity of the model is confirmed</td>
<td></td>
<td>0.006</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The analysis of the table:

Expectation sign of the coefficients and meaningfully of single coefficients and generality of regression indicate the suitability of fitted regression.

1- Increasing or decreasing the variable of disclosing quality does not have any effect over capital cost because meaningfully level for this variable with T – Statistic is equal to -1.91, 0.006 is obtained that is smaller than 0.05. In other word for every unit of optional disclosing quality, capital cost on the average decreases to around 0.5.

Survey test between the disclosing quality and cash flow

Limer’s F – test between disclosing quality and cash flow

Constant effects meaningfully test results against the minimum summed squares disclosing quality and cash flow

<table>
<thead>
<tr>
<th>The value of F - test statistic</th>
<th>Degree of freedom</th>
<th>The quantity of Probability value (PV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.99</td>
<td>(71 and 357)</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Therefore the second hypothesis by regression in merge method becomes a test.
Fit model between disclosing quality and cash flow

The estimation results by merge regression method (dependent variable: cash flow) shows that with respect to the table the level of meaningfully of independent variable (KEFSHA) is 0.68, and these values are greater than 0.05. Therefore, the mentioned variables affect cash flow.

The results of estimation by (PooL) method, dependent variable: cash flow and dependent variables, disclosing quality

<table>
<thead>
<tr>
<th>Result in model</th>
<th>In comparison with 0.05</th>
<th>Test meaningfully level</th>
<th>T – statistic</th>
<th>Standard deviation</th>
<th>Variables coefficients</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doesn’t affect</td>
<td>Greater than 0.05</td>
<td>0.6843</td>
<td>0.40681</td>
<td>0.01132</td>
<td>-0.004607</td>
<td>KEFSHA</td>
</tr>
<tr>
<td>Affects</td>
<td>Smaller than 0.05</td>
<td>0.0073</td>
<td>2.69527</td>
<td>0.72424</td>
<td>1.952042</td>
<td>C</td>
</tr>
</tbody>
</table>

Errors are not correlated in the model 2.04

0.003 percent of cash flow variations expressed by independent meaningful variables 0.16

The linearity of the model is confirmed 0.068

The analysis of the table:

Increasing or decreasing of variable of the disclosing quality do not have any effect over cash flow because the level of meaningfully for this variable with T – statistic is equal to -0.4, then 0.68 is obtained that is greater than 0.05.

Principal model test

At the general condition with respect to above models, the environmental optional disclosing quality affects the value of the company because one of the measurement indexes of the company’s value have a meaningful relationship with optional disclosing quality.

The Results of the Study

In the general condition show that, optional environmental disclosing quality affects the company’s value because optional environmental disclosing quality affects one of the measurement indexes of company’s value. According to Marlen et al. previous studies’ (2008), by using innovative index, study the annual report of various companies and have concluded that there is a negative relationship between capital cost of the company over company’s value and optional disclosing quality for operational companies sensitive to environment, and there is a positive relationship between future cash flows over company’s value and optional disclosing quality for industrial companies non – sensitive to environment. Researcher in future researches should pursue policies that can identify the
effects of factors over establishment of relationship between environmental function and financial function and present that information to the market’s activist. The findings of this study can help accountancy information producers in presenting accountancy information producer for all of the environmental organizations, forestry, production and market companies, and improve recovery procedure and environmental protection.

**Farsi bibliography**

1- Abbasi, Ebrahim. ,Mohammadi, Reza. ,1389 (2010). Examination of the amount of financial reporting, environmental function of the companies that have been expected in Tehran stock exchange market. Master of art thesis, Islamic Azad University, Tehran north branch, Tehran.


**English Bibliography**

8-Marlen Plumle and Darrell Mrown and Mcott Marshal(2008),The Impact of Voluntary Environmental Disclosure Quality onFirm alue(May).
