Social and Environmental Accounting in IRAN

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ABSTRACT

The aim of this research is the study of the relationship between the elements of corporate social and environmental reporting and their annual financial reporting quality in IRAN. Since social and environmental accounting in Iran has not been used in an organized and formal form, we intend to study the effect of this type of reporting factors, i.e. to disclose human resource information, community involvements, and environmental issues on accepted firms' annual reporting quality in stock exchange in Iran. Accordingly, three hypotheses have been designed as the research hypotheses and a questionnaire was used to collect data. 235 audit firms of Iranian Association of Certified Public Accountants (IACPA) were chosen as domain of study and the time scope has been in the spring and summer of 2012.

One-sample T-test has been used to test hypotheses and provide a model for quality; also we used Mann-Whitney-Wilcoxon test to confirm its results.

Bartlett test and principal component analyze have been used to provide quality model. The results show that there is a positive and significant relationship between the disclosure of the above three components and annual reporting quality. The amount of these variables impact based on specified pattern is 0.915 for social involvements, 0.864 for environmental issues and 0.818 for human resource information disclosure.

KEYWORDS: social and environmental accounting-Annual reporting- Reporting quality- Iranian financial reporting

1. INTRODUCTION

Accounting as an audience-based knowledge has the responsibility of providing useful information for users to make judgments and informed decision. Accounting system is a process that is considered as the link between economic entities and organizations with around environment with the task entrusted to it. Around environment includes a widespread category of users having relationships with economic entities. These relationships can be either direct or indirect. The aim of common accounting is to provide useful financial information for financial users. But accounting's audience-based role and its accountability does require having a task and goal beyond financial accountability and also goes beyond the financial contacts and respondents in the reporting filed, and addresses non-financial users and audiences, too. Assuming much broader range and realm for social and environmental accounting, the common accounting is considered as the sub-category of this system of accounting. In such an environmental, managers are not only responsible but also accountable for the performance against environmental and social impacts of their activities.

(hoshtinat: 1995)

A few years have passed from social and environmental accounting plan in international filed, but this branch of accounting and reporting has not been able to find its proper place in Iranian accounting system, yet. Therefore, it is quiet necessary to make social and environmental accounting operational in order to increase information clarity and accountability task in the field of social and environmental performance in Iran. It is hoped that reporting and disclosing social and environmental activities in the form of a native model fits with cultural ties and national norms, can provide more useful information for different levels of users. Whether could disclosing social and environmental information affect financial reporting quality? Or can users of this disclosed information in the form of social and environmental accounting enter it in their decision n-making models and use it as relevant information beside traditional one? These are among ambiguities which can be different from country to country regarding the prevailing social and cultural context of decision-making scope. So this paper tries to test the usefulness of social environmental accounting information for users in Iran.

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2. REVIEW OF THE RESEARCH LITERATURE

The first time, according to Trueblood report, social accounting was considered as one of the financial reporting purposes. After that American Association of Accounting (AAA) did a study in 1974 among 695 people of its members and announced that 71 percent of the responses agree with the necessity of an accounting system for corporate social performances. Moreover, 90 percent of respondent indicated that it is essential to measure both numerical and descriptive social performance. According to researches done by Long Estert and Rosen & bloom 57 percent of investment decisions by financial analysis will be based on social factors.

Belkaoui believes that the form of corporate social reporting must fit with its activity and social issues, because the experience has shown that the kinds of expenditures and social interests have different impact on investment decision. Basically managers seek move interest and profit by limiting costs and expenses, so it is natural that they are not concerned with the kind of issues related to social costs and environmental damage compensation unless they are obliged to observe the rules regulated by law as in some countries to pay compensation. On the other hand if the company is forced to pay the environmental damage cost, it will be considered as uncontrollable costs and manager's performance will not be evaluated upon and regarding such costs. (Khoshtinat: 1995)

Van Suzlana in a research titled social and environmental accounting in Malaysia: Challenges and opportunities in 2002. Regarding on studies in the past is that although the number of companies doing social and environmental reporting in Malaysia developed from 25 companies in 1999 to 40 companies in 2001, it is still little growth and this does not indicate the depth of reporting by reporting companies. The factors hindering this growth as challenges in this research include: 1- lack of Legislation, 2- budget and knowledge restrictions, 3- organizational role and property rights, 4-managers' trend 5-maximizing shareholders' wealth 6-managers' knowledge of social and environmental accounting 7-company's confidentiality. This article on the other hand, knows corporate gaining's in applying social and environmental accounting as opportunities.

John Richmond and colleagues in a paper in 2003 offer two models for enterprises' social accounting: model of social investment returns and expand value-added statement model. This study seeks to establish a competitive market value for social non-market outcomes.

Brown and Fraser, in an article titled social and environmental accounting: An overview of the theoretical perspective in 2004, pointed out that in the recent years government's focus, public section policy makers, investors, environmentalists and others have been to meet corporate social accountability and social and environmental accounting. This article discusses the followings as three vast approaches in social and environmental accounting and offers a meta-analysis of the differences between these three approaches: 1-the company's 2-stakeholders of accountability 3-critical theory – based approaches.

Teresa Christina Priera Ajnew in 2009 in a research called social and environmental accounting: The case study of Portuguese cement company, examines 6 years information of 19 important accounting journals to achieve the theoretical foundations and principles, methodology, research questions and data.

The results of this study show that the studied company has been in social and environmental accountability system in advance.

Khoshtinat and Raei in 1995 have measured the impact of social accounting information on investors' decisions. The aim of this research is the study of the fact that whether or not offering accounting information to users will affect their decisions, and if it is so, to determine the extent of this effect.

Hossein Rashidi in 1998 has studied the position of social accounting in Iran. The purpose of this research has been stated to use of social accounting in companies. His hypothesis named "the importance of social issues from financial managers' point of view in oppressed and veterans foundation", has been confirmed and he concluded that regarding social accounting hypothesis confirmation in Iran from financial managers' point of view, research society has been considered important and it is possible to use social reporting in Iran.

Sajad Gholami, et al (2012) mentioned that social responsibility of organizations has been the most important elements of philosophy. So that it is important to abide by organizations within the social identity theory, Satisfaction of stakeholders outside the organization to legitimate organizations will strengthen.

Sadaf Ehsan and Ahmad Kaleem in 2012 investigated the relationship between Corporate Social Responsibility (CSR) and Financial Performance (FP) has been a very important issue and topic of great interest for researchers since from the origin of business entities. This actually motivates organizations to think broadly about their obligations towards the society in which they operate rather than just maximizing their wealth. Therefore, this study is conducted with the aim to explore the nature of relationship between CSR and FP in the context of Pakistan. Panel data of one hundred non-financial firms for the period of 2006-
2009 has been collected from manufacturing sector. These firms are listed at Karachi Stock Exchange and their data has been collected from their annual reports. Statistical tools and techniques such as Correlation and Generalized Least Square Random Effect Regression have been applied to analyze the data. Results revealed that the nature of relationship between CSR and FP is positive in case of Pakistani manufacturing firms.

3. Research Hypotheses
In this study regarding the theoretical and historical literature related to social and environmental accounting three hypotheses have been designed as follows:
1. There is positive and significant relationship between disclosing human resource information and annual reporting quality.
2. There is positive and significant relationship between disclosing community involvements information and annual reporting quality.
3. There is positive and meaningful relationship between disclosing environmental issues information and annual reporting quality.

4. The domain and scope of research
The subjective realm of this research is social and environmental accounting in Iran. Location within the study is Iranian auditing and accounting profession and specially, 235 audit firms of Iranian Association of Certified Public Accountants that at the time of research have been registered. Time scope of the research has been in the spring and summer of 2012.

5. Research methodology and data collection tools
This research is descriptive-survey and is considered as explorative-correlative research.

In this study, library method has been used to collect information about the subject literature and research history in the forms of books study, scholarly articles, theses and dissertations, and websites search. Besides filed method has been used to collect information required to perform research and test hypotheses, a questionnaire was used to collect required data to test the hypotheses. To this purpose, regarding subjective literature and conducted researches, a questionnaire including general and professional questions related to disclosable cases in social and environmental accounting based on likert five choices scales (very much - much- average- little, very little) has been designed and used. 235 questionnaires were distributed and 152 of them were collected and were used for the study.

6. Hypotheses test
First hypothesis:

\[ H_0 : \text{there is not a positive and meaningful relationship between human resource information disclosure and annual reporting quality.} \]
\[ H_1 : \text{there is a positive and significant relationship between human resource information disclosure and annual reporting quality.} \]

KS test showed that the variables distribution was normal, so one-sample T test was used. In this test alpha was considered as equal to 0.05 and since the significance level was equal to 0.000, so \( H_0 \) is rejected and statistical hypothesis is not rejected.

Second hypothesis:

\[ H_0 : \text{there is not significant and positive relationship between disclosing community involvements information and quality of annual reporting.} \]
\[ H_1 : \text{there is positive and significant relationship between disclosing community involvements information and quality of annual reporting.} \]

KS test showed that the variables distribution was normal, so one-sample T test was used. In this test alpha was considered as equal to 0.05 and since the significance level was equal to 0.000, so \( H_0 \) is rejected and statistical hypothesis is not rejected.

Third Hypothesis

\[ H_0 : \text{there is not positive and significant relationship between disclosing environmental issues information and quality of annual reporting.} \]
\[ H_1 : \text{there is positive and significant relationship between disclosing environmental issues information and quality of annual reporting.} \]

KS test showed that the distribution of variables was normal, so one-sample T test was used. In this test alpha was considered as equal to 0.05 and since the significance level was equal to 0.000, so \( H_0 \) is rejected and statistical hypothesis is not rejected.
The results of hypothesis testing are summarized in Table 1.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Number</th>
<th>Mean</th>
<th>SD</th>
<th>Test Value=3</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>T</td>
<td>DF</td>
</tr>
<tr>
<td>First</td>
<td>152</td>
<td>3.4634</td>
<td>0.67366</td>
<td>151</td>
<td>0.00</td>
</tr>
<tr>
<td>Second</td>
<td>152</td>
<td>3.3330</td>
<td>0.67928</td>
<td>151</td>
<td>0.00</td>
</tr>
<tr>
<td>Third</td>
<td>152</td>
<td>0.6079</td>
<td>0.83371</td>
<td>151</td>
<td>0.00</td>
</tr>
</tbody>
</table>

To achieve a reasonable assurance of hypothesis testing, we tested these hypotheses with a non-parametric method. To this purpose, Mann-Whitney – Wilcoxon test was used. The results from this test are consistent with the results of One-sample T-test for all three research hypotheses. (Table 2).

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Group</th>
<th>Number</th>
<th>Ratings</th>
<th>Average</th>
<th>Mann-Whitney-Wilcoxon statistic</th>
<th>Sig</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>Agree</td>
<td>113</td>
<td>96</td>
<td>780</td>
<td>0.00</td>
<td></td>
<td>Not rejected</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>39</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>Agree</td>
<td>45</td>
<td>105</td>
<td>1653</td>
<td>0.00</td>
<td></td>
<td>Not rejected</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>57</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>Agree</td>
<td>117</td>
<td>94</td>
<td>630</td>
<td>0.00</td>
<td></td>
<td>Not rejected</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>35</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. Pattern mining

In order to derive an appropriate pattern for variables of human resource information, community involvements information, and environmental issues information, the method of principal component analysis has been used. Using KMO index and Bartlett test it was shown that variables are appropriate to principal components analysis.

This is approved by KMO index calculation of %676 correlation matrix was used for Bartlett's test. In this test, hypotheses were defined as follows:

\( H_0: \) correlation matrix is a matrix of the same.

\( H_1: \) correlation matrix is not a matrix of the same. (Identity matrix)

The significance level of Bartlett's test is 0.00 that is lower than \( \alpha = 0.05 \) and it is shown that variables are suitable for principal component analysis.

After you have determined that variables are appropriate to principal components analysis, case analysis was performed, and the results (table 3) were:

<table>
<thead>
<tr>
<th>Principal components</th>
<th>Eigen values</th>
<th>Percentage of variance</th>
<th>Cumulative variance percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.255</td>
<td>75.157</td>
<td>75.157</td>
</tr>
<tr>
<td>2</td>
<td>0.496</td>
<td>16.527</td>
<td>91.684</td>
</tr>
<tr>
<td>3</td>
<td>0.249</td>
<td>8.316</td>
<td>100</td>
</tr>
</tbody>
</table>
In the above table, the Eigen values are known. This table specifies components which their Eigen values are greater than one, and will remain in principal component analysis. Components that have Eigen value less than one are excluded from the analysis. Extracted components are those which their variances are low. As it can be seen in the table, only the first Eigen value of the first principal component is greater than one and it is used to determine the model. Also the first component explains a percentage of 75.157 variables variation (variance).

Figure 1- extraction of principal components

The first principal component coefficients are presented in the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource information</td>
<td>0.818</td>
</tr>
<tr>
<td>Community involvements and contributions info</td>
<td>0.915</td>
</tr>
<tr>
<td>Environmental issues information</td>
<td>0.864</td>
</tr>
</tbody>
</table>

If we show human resource information variable with \( X_1 \), community involvements and contributions information variable with \( X_2 \), and environmental issues information variable with \( X_3 \), the principal component can be written as the following model:

\[ Y = 0.818X_1 + 0.915X_2 + 0.864X_3 \]

8. Conclusions

According to the results of testing hypotheses posed in this study, the following Conclusions can be made:

Regarding the first hypotheses that there is a positive and significant relationship between the disclosure of human resource information and annual reporting quality, since the T-test with a significant level of 0.000 is smaller than an alpha level of 0.05, so the hypotheses is not rejected. On the other hand, comparative results of testing this hypothesis using Mann–Whitney–Wilcoxon test indicates a failure to reject this hypothesis, i.e., there is significant positive relationship between the disclosure of human resource information and annual reporting quality according to the responses of the respondents and conducted tests.

In relation to the second hypothesis that there is a positive and significant relationship between the disclosure of community involvements information and annual reporting quality, since the T-test with a significance level of 0.000 is smaller than an alpha level of 0.05, so this hypothesis is not rejected, on the other hand, comparative results of testing this hypothesis with Mann–Whitney–Wilcoxon non-parametric test indicates a failure to reject this hypothesis, too. i.e., there is a significant positive relationship between the disclosure of community involvements information and annual reporting quality based on the responses of the respondents and conducted tests.

Finally, regarding the third hypothesis that there is a significant and positive relationship between the disclosure of environmental issues information and annual reporting quality, since the T-test with a significance level of 0.000 is smaller than an alpha level of 0.05, so the hypothesis is not rejected, and its comparative results with Mann–Whitney–Wilcoxon non-parametric test indicates a failure to reject this hypothesis, therefore there is significant positive relationship between the disclosure of environmental issues information and annual reporting quality. The obtained results of principal components analysis have
been presented in the form of a pattern that its parameters coefficients indicate the impact of social and environmental information disclosure on the decisions of these information users in Iran.

It seems, unlike the general idea in Iran, information disclosure in the form of social and environmental accounting and reporting can create understandable information for users’ informed decision-making models and improve the quality of financial reporting in Iran.

REFERENCES