The Disclosure Effects of Contingent Liabilities and Ambiguities
On Making Decision by Users of Financial Statements

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Abstract
The main purpose of this research is to study effects of contingent liabilities disclosure on decisions made by users of financial statements. A questionnaire was randomly distributed among investment experts, stock market brokers and university professors. The study is carried out as Deductive work. This research from subject dimension classified in practical research and descriptive - survey research. The findings of the study hint that disclosure of contingent liabilities information effects on decision making. Moreover, type of contingent liabilities is important as well. On the other hand, law suits and tax liabilities are more effective than guaranteed liabilities. According to the results, contingent liabilities are among required information for those who make their investments based on accounting information. In addition, different contingent liabilities have different effects.
JEL codes: M41, D81, G10

Keywords: Contingent liabilities, information disclosure, decision making power, users of financial statements

1. Introduction
On general term, this research is conducted to evaluate effects of disclosure of contingent liabilities information and ambiguities on the head of users of financial statement for decision making. Financial statement information is useful for the users when featured with qualitative characteristics. Financial statements are prepared to convey classified and clarified information regarding financial status and flexibility of a commercial entity. Such information is useful for a wide range of financial statements users. According to the goals set by theoretical frame of financial reporting, there are two factors effective on usefulness of financial statement: relevance and reliability. Information featured with the two features is considered useful for decision making. (Statement of Financial Accounting Concepts No. 2. FASB)
To realize the above objectives, some limitations and principles –pertinent to size and presentation- are accepted by the theoretical frame. Among the principles, disclosure is one to name. An important item,
regarding the principles of disclosure, is disclosure of contingent liabilities, which is usually includes disclosure of guaranteed liabilities, law suits and tax liabilities. Moreover, since the liabilities are featured with a sort of ambiguity in "being expectable", "probability" and "possibility", failing to disclose them in financial statements, makes users to face with a type of puzzling situation. If so, the main objective for preparing financial statements - provision of reliable information- is not fulfilled. There are great numbers of studies conducted overseas regarding disclosures in financial statements. Frost (1991) showed that majority of investors' react to disclosure of contingent loss in the notes attached to financial statements, though their reaction to disclosures in the notes is not comparable to accumulated liabilities in balance sheet.

The main objective of information disclosure is to help and assist users of the information in making decision for investment and appraisal of the management performance quality. Brown & Hillegeist (2007) showed that essential for users of financial statement is disclosure of financial information. Meanwhile, preventing to reveal all information misleads users of financial statements.

The rest of the paper is organized as follows: Section 2 reviews the related literature, Section 3 is research method, Section 4 presents our hypotheses and variables, section 5 includes sample and data, Section 6 tests results, section 7 contains discussion and conclusion.

2. Literature Review

Nelson & Kinney (1997) tested Einhorn and Hogarth's ambiguity model (1985) regarding future probability of loss. They conducted some studies about ambiguity of contingent loss, its effects on accountants and users of financial statements' judgment and about contingent losses in financial statements. Applying ambiguity model for appraisal of fourth paragraph in account reports, they also investigated position of contingent liabilities and losses. Where ambiguity is defined as: the case, in which there is an underlying probability distribution but not enough to define a unique probability distribution for the data Main (1990). Their results showed that auditors and users of the information tend to adopt conservative approaches, and refer to source of reports in case of different of information. However, users of financial statements adopt more challenging approaches when faced with probability of heavy losses, and despite clear ambiguities, place less weight on referring references such as audit report.

By a research titled "why int'l organization pay high attention to the risks raised from contingent liabilities?" Burnside (2001) started his research works.

To find answer to the question, author mentioned that the answer is clear, as when contingent liabilities are under consideration, they will create several state obligations among financial costs and with high probability by assumption of probable state liabilities, losses and damages are predictable by government. The article discussed the process of granting state liabilities followed by introducing methods need to be explained based on budget for affecting financial crisis. Of course, inflation period or depreciation of money after crisis is covered by the study.

Lacy (2003) used Einhorn and Hogarth's ambiguity model (1985) in a research and concluded that facing with ambiguity about contingent liabilities users of financial statement act differently from auditors. When contingent liabilities are the criteria for decision making, validity of financial statements and reliability of information, conveyed through, need to be ascertained and they also need to rely on the information in financial statements to large extents. Such decision are somewhat based on ambiguity of contingent liabilities. The researcher also predicted in their work that from financial statements users' viewpoint, delayed events disclosed in balance sheet have less ambiguity, more reliable and valid compared to probable events only mention in the notes attached to the statements.
In the research, he asked participants (accountants and users of financial statements) to estimate required reliability for contingent loss in the fourth paragraph of auditor report. Answers were scored in scale with 21 points (+10 to -10). The researcher predicted that both groups may respond conservatively to ambiguities, and proved to be true. Furthermore, participants were asked to consider a scenario of a lawsuit, which implied inspectors of a company have announced contingent loss possibility between 15% to 55%. Probabilities figures were adopted so, to estimate effects of probabilities at middle or end of audit reports in the range of "completely reasonable". In addition, contingent loss was needed to be mentioned in auditors’ judgment regarding determination and survey of audit reports sources.

Considering low probability, final results showed that, auditors and users of financial statements tended to adopt conservative approach regarding the ambiguities, as if the risk of probabilities or contingent loss was actually going to happen in near future.

Although the researchers expected intense reaction from both groups, auditors was faster to overreact to financial statement, as where auditors fail to mention sources of contingent losses in their reports, customer’s relation will be endangered. In conformity with this hypothesis, results showed that along with "completely reasonable" range, auditors and accountants remained neutral regarding ambiguity, where users of financial statements adopted conservative approaches regarding the ambiguities.

Brown & Hillegeist (2007) discussed how quality of disclosure affects on information asymmetry. It is noticeable though, that these authors believed in a negative relation between general quality of disclosure in financial statements and average level of information asymmetry, mainly resulted from negative effects between quality of disclosure and frequency of information.

Surveying field data from investing companies, Millicent Chang et al (2008) argued for direct correlation between efficiency of an investor relations program and quality of information disclosure. They used some checklists to assess a firm’s internet-based investor-relations practices to find the relation between quality of information disclosure and asymmetry in information. Companies with higher disclosure quality characteristics foster market capitalization by carrying out more transaction and participating shareholders through their investor-relation activities. Practical results by (Healy, Hutton & Palepu 1999; Heflin, Shaw & Wild 2005; Brown & Hillegeist 2007) over samples which used spread metric proxy to appraise information asymmetry implies that a negative relation exists between disclosure level and asymmetry of information.

3. Research Method

Descriptive and deductive statistical techniques were used for data analyzing and testing hypotheses. In deductive section, the study used deductive statistical methods such as Wilcoxon, Mc Nemar, Kruskal Vallis to test the hypotheses.

Library method was used to find background to the subject (referring to libraries and searching the Internet for publications, theses and book published in Iran and other countries). Having required background to the study, field studies carried out for data gathering.

3.1 Statistic Society

Experts in investment companies, brokers and university professors of accounting, management and economy (totally 135 participants) constituted the statistic society as listed in (Table 1).

3.2 Statistic sample volume

According Cochran’s formula sample volume of the research was obtained as follows:
Published by Asian Society of Business and Commerce Research

\[
n = \frac{N \cdot t^2 \cdot p \cdot q}{N \cdot d^2 + t^2 \cdot p \cdot q}
\]  

(1)

Where N is statistic sample volume (N = 135); d is accuracy of probability (d = 0/045); t is accuracy rate (t = 1/96); p is probability of realization of trait (p=0/5); q is probability of not realization of trait (q = 0/5).

Statistic sample under consideration obtained by Cochran sampling formula comprised of 105 participants including investment companies experts, stock market brokers and university professors elected randomly from the society. The participants were provided with the questionnaire to fill out. The research was carried out in 2010-2011.

4. Hypotheses and Variables

- H₁: Disclosure of contingent liabilities affects decisions made by users of financial statements.
- H₂: Decisions about contingent liabilities are made based on ambiguities in contingent liabilities.
- H₃: Different users of financial statements have different viewpoints to disclosure of contingent liabilities.

Independent variable: Contingent liabilities are independent variable, which participants make decision based on its disclosure or nondisclosure.

Dependent variable: Decision making ability of users of accounting information is dependent variable of the study.

5. Sample and Data

Results from general information of 74 respondents showed that:

1- Office: stock market brokers, experts of investment companies and students professors comprised 8.37%, 4.32% and 7.29% of respondents respectively.

2- Education level: four point one percent of respondents had associates’ degree, 2.39% bachelors’ degree, 8.46% Masters’ degree and 8.10% PhD. Field of study: four point fifty-one percent of respondent had a degree in accounting, 4.28 in management, 9.14% economics and 4.5% other fields.

3- Field of study: four point fifty-one percent of respondent had a degree in accounting, 4.28 in management, 9.14% economics and 4.5% other fields.

4- Professional experience: three point twenty percent of participants had more than 20 years of professional experience, 9.14% between 15 to 20 years, 2.16% between 10 to 15 years, 3.24% between 10 to 5 years and 3.24% less than 5 years.

6. Results

6.1 Result of first hypothesis

H₁: disclosure of contingent liabilities has effects on decision making of financial statements users. Two tests are used to test the hypothesis, and questions of first stage (before disclosure) and second stage (after disclosure) are compared correspondently. Noticeable is that the results were obtained with 95% probability.

First test- Mc Nemar’s Test: There is no significant relation between considering a company as safe or unsafe place for investment by investors before and after of contingent liabilities disclosure.
There is a significant relation between considering a company as safe or unsafe place for investment by investors before and after of contingent liabilities disclosure.

Result of McNemar showed significant differences between decisions made by users of financial statements before and after information disclosure. In other words, disclosure of contingent liabilities of company affects decision made by the users of financial statements. So that, at first about 91.9% agreed with the investment, while after the disclosure 23% supported the idea of investment and 77% rejected the idea. *(Table 2-1 & 2-2)*

Second Test- Wilcoxon’s Test: Disclosure of contingent liabilities has no effects on of financial statements users’ judgment regarding status of a company for investment.

Result of Wilcoxon’s Test showed that disclosure of contingent liabilities of company affect decency of investment in a company. It means that contingent liability disclosure affects on tendency for investment by the users of financial statement. So that, after disclosure of contingent liabilities, tendency to make an investment declines significantly (Average tendency for making an investment before and after disclosure are 3.82 and 2.52 respectively). Therefore the first hypothesis is confirmed. *(Table 3)*

6.2 Result of Second Hypothesis Test

H$_2$: decisions about contingent liabilities are made based on ambiguities about contingent liabilities. Scores from the three groups were compared to survey effectiveness of ambiguities in disclosed contingent liabilities on decision made by each one the three groups (table 4). At this stage, ANOVA corresponding tests including Kruskal wallis (H) were applied.

Ambiguity about disclosed contingent liabilities has no effect on decisions made by financial statement users.

H$_0$: $\mu_1 = \mu_2 = \mu_3$

Ambiguity about disclosed contingent liabilities affects on decisions made by financial statement users.

H$_1$: At least there is different tendency between two groups

Results of the test showed that ambiguities about disclosed contingent liabilities are effective on decision made by different groups of financial statement users. The second hypothesis is therefore confirmed. *(Table 4)*

6.3 Result of third hypothesis test

H$_3$: different groups of financial statements users have different views regarding disclosure of contingent liabilities. A comparison was made between scores for each group to surveys different effects of such disclosure on decision made by each groups (table 5). At this stage, ANOVA corresponding tests including Kruskal wallis (H) were applied.

Different types of disclosed contingent liabilities do not have different effects on decisions made by financial statement users.

H$_0$: $\mu_1 = \mu_2 = \mu_3$
Different types of disclosed contingent liabilities have different effects on decisions made by financial statement users.

H₁: At least there is different tendency between two groups.

The test showed that type of disclosed contingent liability dose not effect on decision made by users of financial statement. The third hypothesis is rejected as type of contingent liability is equally effective on decision made by the three groups. (Table 5)

7. Discussion and Conclusion

Although contingent liabilities are not definite facts, they are as effective as information disclosed in financial statements over decisions made by users of financial statements. Thus, they may change financial future of a company, where type of liabilities is considerable and found to be definite for the coming fiscal period and the company under consideration is in poor liquidity condition. The standards emphasizes on complete disclosure of information. On the other hand, where users of such information do not have correct understanding of importance of the information, disclosure of information is of no use. Therefore, the users of such information need to be taken into account in financial reporting. It is possible to target information to right users by knowing their knowledge and required information.

Results of this study showed that contingent liabilities information is required for users of financial information. In addition, it was found that different types of contingent liabilities have different effects. Not only users of financial information as final decision makers pays attention to contingent liabilities information, but type and value of such liabilities is under consideration as well. Despite high profitability, contingent liabilities are also effective on investors’ decisions.

As illustrated, different groups of financial information users such as stock market brokers, investment experts, and university professors have different priorities and interests for making investment in a company based on its financial status. However, disclosure of any contingent liabilities affects their decision making in the same way.
References
<table>
<thead>
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<th>Groups</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Experts in investment companies</td>
<td>42</td>
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<tr>
<td>Brokers</td>
<td>49</td>
</tr>
<tr>
<td>University professors</td>
<td>44</td>
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</table>

**Table 1:** Statistic Society based on groups

<table>
<thead>
<tr>
<th>Index</th>
<th>Number</th>
<th>X²</th>
<th>Significance level</th>
</tr>
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<tbody>
<tr>
<td>Value</td>
<td>74</td>
<td>45.45</td>
<td>* 0.000</td>
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</table>

* Significant level: P-value < 0.05

**Table 2-1:** Mc Nemar’s Test

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<tr>
<th>state</th>
<th>No</th>
<th></th>
<th>Yes</th>
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<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Before</td>
<td>6</td>
<td>8.1</td>
<td>68</td>
<td>91.9</td>
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<tr>
<td>After</td>
<td>57</td>
<td>77</td>
<td>17</td>
<td>23</td>
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</table>

**Table 2-2:** Frequency of responses in before and after disclosure states
Table 3: Wilcoxon’s Test

<table>
<thead>
<tr>
<th>Variable index</th>
<th>Disclosure</th>
<th>Number</th>
<th>Average</th>
<th>Wilcoxon’s</th>
<th>Probability</th>
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<tr>
<td>Tendency to invest</td>
<td>Before</td>
<td>74</td>
<td>3.82</td>
<td>-6.827</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>74</td>
<td>2.52</td>
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Table 4: Kruskal Wallis’s Test

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<th>Index</th>
<th>Office</th>
<th>N</th>
<th>Mean Rank</th>
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</thead>
<tbody>
<tr>
<td>Effect of ambiguity about contingent liabilities on decision making</td>
<td>Broker</td>
<td>28</td>
<td>29.71</td>
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<td></td>
<td>Investment expert</td>
<td>24</td>
<td>39.41</td>
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<tr>
<td></td>
<td>University professor</td>
<td>22</td>
<td>45.30</td>
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</tbody>
</table>

X² = 8.051  df = 2  Sig = 0.018

Table 5: Kruskal Wallis’s Test

<table>
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<th>Office</th>
<th>N</th>
<th>Mean Rank</th>
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</thead>
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<tr>
<td>Effect of types of disclosed liabilities on decision made by investors</td>
<td>Broker</td>
<td>28</td>
<td>45.36</td>
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<td></td>
<td>Investment expert</td>
<td>24</td>
<td>31.37</td>
</tr>
<tr>
<td></td>
<td>University professor</td>
<td>22</td>
<td>39.05</td>
</tr>
</tbody>
</table>

X² = 0.214  df = 2  Sig = 0.889