INTERNET FINANCIAL REPORTING COMPARISON OF HYPERLINKS AND THE PAPER (TRADITION) FINANCIAL STATEMENT IN THE FORM OF PRESENTING THE RELATE AND UNRELATED INFORMATION AND THEIR EFFECT ON THE INVESTOR’S JUDGMENT

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Abstract
This research compared the internet financial reporting through hyperlinks and the paper tradition reporting of data. Hyperlink generally means the direct relationship of a text with documents or words or other title that by selecting them, the other early related documents are recovering and display, and set a link between a series of items which have an internal link with each other. Indeed hyperlink is a frame directing to details. Because the best factor for maximizing the sources in the capital market is a decision making factor and the data analyzing power and its rapid and timely accomplishment. Therefore internet financial reporting through hyperlinks has a special importance in this case. In the theoretical bases of research, some materials are presented about internet financial reporting and hyperlink reporting and their benefits. This research has 3 hypotheses. Which in these hypotheses precisions and time of decision making and benefit obtained information of the two methods were compared. the statistical society of the present research include 3 groups stockbrokers, financial managers of the listed companies and the professors of the management and accounting field of universities. The tools of measuring is as questionnaire. That it analyzed the data by using the statistic of t-test and software SPSS and ultimately it accepts or rejects the hypotheses.

Keyword: Internet financial reporting, Paper (tradition) reporting, Hyperlink, Stockbroker.

INTRODUCTION
The Internet has spawned a marketing revolution, providing an innovative way for communicating with and selling to consumers around the globe. Undoubtedly, the nature of the products and the customer base of a firm will affect how this e-marketing approach is being performed on the Internet (Palmer and Griffith, 1998: 46). Major characteristics of the Internet are that information can be accessed (almost) any time and everywhere, and generally at a low cost; the information is up-to-date; there are few limits on data availability; information can include dynamic presentations and multimedia; and there is the possibility of interactive information demand and supply. These developments have a significant effect on the dissemination of information and on the trading of goods, including shares, and thus on the organizational structures of how these activities are performed. They also open up new and astounding opportunities for financial disclosure that affect all interested parties, notably corporations, investors, auditors, and information intermediaries. These opportunities concern standard setters as well as regulators. Various studies show that most listed corporations now

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disclose financial information on their websites, and that the level of disclosure has increased over the last years. The Internet has probably become the primary source for users searching for corporate financial reports. Companies invest substantial resources in the development of their websites, and come up with innovative ways to present financial information (Wagenhofer, 2003: 262-263).

According to Beattie and Pratt (2003) financial reporting developed in the early twenty-first century from the traditional design of the printed annual report to the contemporary Internet Financial Reporting (IFR) aiming specifically to satisfy varying users’ needs. Financial reporting is the common tool of disclosing companies’ financial information, and it is predicted that IFR will gradually replace printed financial reporting as more companies will use IFR to provide financial information and communicate with accounting information users. In this context Oyelere et al (2003, p.38) argued that:

“Internet reporting improves users’ access to information by providing information that meet their specific needs, allowing non-sequential access to information through the use of hyperlinks, interactive and research facilities, and allowing the opportunity for providing more information than available in the annual reports”.

This improved accessibility of information results in more equitable information dissemination among stakeholders” (Al-Htaybat et al, 2011).

Internet financial reporting (“IFR”) provides companies with more flexibility as to the type of information disclosed and the presentation format of disclosures, as compared to traditional, paper-based disclosures. The content of IFR may include annual and/or quarterly reports, stock price data, press releases, analyst reports, and management discussions of operations. The presentation formats used in IFR include hyperlinks, video and audio files, processable file formats, and dynamic graphics (Kelton and Yang 2005). Thus, investors have several options regarding which Internet financial disclosures to view and the format in which to view them.

Hyperlinks are commonly used by companies to present financial information to existing and potential investors. Kelton and Yang (2005) report the following: approximately 98% of their sample companies provide hyperlinks as a navigational tool within their corporate website; 48% use hyperlinks inside their annual report; 47% provide a hyperlink to EDGAR or 10K Wizard; and 30% use hyperlinks to data on a third-party website. However, the flexibility provided by hyperlinks may have detrimental cognitive effects on investors, including cognitive overload. Users must perform multiple tasks simultaneously when browsing with hyperlinks, including navigating through the system, reading, understanding, and analyzing the information, and recalling information previously viewed (Boechler, 2001).

Boechler (2001) believe that a hyperlink provides a link between a series of inter-connected items in an information system. Hyperlinks allow users to develop individual search strategies for navigation through online information, depending on users’ unique interests and goals. As compared to traditional, paper-based presentations, hyperlinks provide increased flexibility in the amount of information that can be acquired and the method in which it is acquired. Kelton and Yang (2006) report that hyperlinks are commonly used in IFR as a navigational tool. The flexibility provided by hyperlinks is associated with increases in cognitive effort. Users must perform multiple tasks simultaneously when browsing with hyperlinks, including navigating through the system, reading, understanding, and analyzing the information, and recalling information previously viewed (Conklin 1987; Boechler 2001). Simultaneous performance of these tasks leads to an increase in cognitive effort and, ultimately, cognitive overload (Conklin 1987; Kim and Hirtle 1995), which often results in cognitive problems for the user, such as navigational disorientation (Conklin 1987).
Deller et al. (1999) consider that investor relations via internet offers a variety of possibilities. The investor relations information disclosures on websites companies is increasing and growing their importance. The obligation to register in order to access the site or some information could be helpful to identify a profile demand. Other company’s disclosure the annual report in separate parts, to analyze the specifying sections are generally requested. The future investor relations function it’s usefully to define the strategy and the investment of website disclosure (Rowbottom et al., 2005). The profile of financially users is characterized by investors, creditors, accounting firms and lawyers requesting considerably more the annual report than the sustainability report or other website information, (Row bottom and Lymer, 2009).

Debrecency et al. (2001) determined three objectives for their study – identifying design attributes for IFR, ranking those attributes and undertaking a pilot test using the Web as a survey tool. Based on prior studies sixty-one attributes were identified, and the respondents suggested seven further objectives for completeness. In terms of ranking, the authors were surprised to find that participants ranked the traditional content of annual reports higher than forward-looking information, and similarly ranked traditional static attributes higher than dynamic ones. Generally, hyperlinks and other navigation aids were rated favorably, downloading files was ranked adversely. Regarding using the Web as a survey tool, the response rate was 13.2% which the authors identified as being lower than other similar projects (Debrecency et al., 2001).

Dull et al. (2003) examined the effect of different presentation formats (hyperlinked versus non-hyperlinked) on decision-makers’ judgments in terms of decisions, predictions, and the amount of information accessed. The researchers also examined the amount of time participants took to make decisions, and found that the presentation format impacted the time used to make a decision regarding assessment of small firms but not large firms.

The main purpose of this study is comparison of Internet financial reporting via a hyperlink and paper financial statements (traditional) and their effect on investors’ judgments. And sub-purposes are:

- Accuracy comparing, useful information, and financial information decision making disclosed time through a hyperlink and paper financial information (traditional)
- To help users to make decisions according to their mass and irrelevant information

RESEARCH HYPOTHESIS

- Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) decisions made with less precision
- Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) decisions made with less time
- Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) will receive less information.

METHODOLOGY

Since in the present research the comparison of Internet financial reporting via a hyperlink and paper financial statements (traditional) and their effect on investors’ judgments. The research method is descriptive – correlative.

The population of the study was all financial executives that listed in Tehran Stock Exchange and stock brokers. According to Cochran sampling, the sample size of this research was set at 100 that selected simple sampling method.
Table 1 population and sample size

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>N</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Managers</td>
<td>413</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Stock Brokers</td>
<td>104</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Professors and experts in the field of management accounting</td>
<td>63</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>580</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

To gathering of data, we used a questionnaire with 24 items. All the reliability and validity of measures has examined. Questionnaires reliability was estimated by calculating Cronbach’s Alpha; it was 0.848. To examine hypothesis we used chi square ($X^2$) and one simple t-test.

**RESULTS**

In this paper we have three main hypotheses. The statistical way of analysis of hypotheses is two ways, $H_1$ is acceptance of hypothesis and $H_0$ is rejecting of hypothesis. In other words, it means that $H_1$ has positive meaning and $H_0$ has negative meaning.

**Hypothesis 1.** Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) decisions made with less precision.

A chi square ($X^2$) statistic is used to investigate whether distributions of categorical variables differ from one another. Basically categorical variable yield data in the categories and numerical variables yield data in numerical form. The chi square analysis result between variables is shown in table 2.

Table 2: Results of chi square for Hypothesis 1.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>x</th>
<th>df</th>
<th>$\chi^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>130</td>
<td>28</td>
<td>41.33</td>
<td>$H_0$</td>
</tr>
</tbody>
</table>

According to table 2 results the $\chi^2 = 41.33$ with 28 degree of freedom. From the chi-squared table, the probability obtaining a statistic of this magnitude or larger when there is no association is < 0.05. In other words, the probability of obtaining discrepancies between observed and expected counts of this magnitude is < 0.05. The observed numbers were so different from the expected. So we used t-test.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>mean</th>
<th>SD</th>
<th>Confidence interval</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>precision</td>
<td>100</td>
<td>3.58</td>
<td>0.0504</td>
<td>3.498</td>
<td>11.55</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The t is 11.55 and p-value 0.000. It means the users that see the hyperlinked financial information towards them that observe paper financial information (traditional) do not decisions made with less precision. We accept $H_0$.

**Hypothesis 2.** Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) decisions made with less time

A chi square ($X^2$) statistic is used to investigate whether distributions of categorical variables differ from one another. Basically categorical variable yield data in the categories and numerical variables yield data in numerical form. The chi square analysis result between variables is shown in table 3.

Table 3: Results of chi square for Hypothesis 2.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>x</th>
<th>df</th>
<th>$\chi^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second</td>
<td>123</td>
<td>28</td>
<td>41.33</td>
<td>$H_0$</td>
</tr>
</tbody>
</table>

According to table 3 results the $\chi^2 = 41.33$ with 28 degree of freedom. From the chi-squared table, the probability obtaining a statistic of this magnitude or larger when there is no association is < 0.05. In other words, the probability of obtaining discrepancies between observed and expected counts of this magnitude is < 0.05. The observed numbers were not so different from the expected. So we used t-test.
The t is 12.44 and p-value 0.000. It means the users that see the hyperlinked financial information towards them that observe paper financial information (traditional) decisions made with less precision. We accept H1.

**Hypothesis 3.** *Users that see the hyperlinked financial information towards them that observe paper financial information (traditional) will receive less information.*

A chi square ($\chi^2$) statistic is used to investigate whether distributions of categorical variables differ from one another. Basically categorical variable yield data in the categories and numerical variables yield data in numerical form. The chi square analysis result between variables is shown in table 4.

**Table 4:** Results of chi square for Hypothesis 3.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>x</th>
<th>df</th>
<th>$\chi^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>107</td>
<td>28</td>
<td>41.33</td>
<td>$H_0$</td>
</tr>
</tbody>
</table>

According to table 4 results the $\chi^2 = 41.33$ with 28 degree of freedom. From the chi-squared table, the probability obtaining a statistic of this magnitude or larger when there is no association is < 0.05. In other words, the probability of obtaining discrepancies between observed and expected counts of this magnitude is < 0.05. The observed numbers were so different from the expected. So we used t-test.

The t is 16.36 and p-value 0.000. It means the users that see the hyperlinked financial information towards them that observe paper financial information (traditional) will not receive less information. We accept $H_0$.

**References**


