

Research Article

VOLUNTARY AND COMPULSORY REPORTING ACCOUNTING AND FINANCIAL INFORMATION OF COMPANIES LISTED ON THE TEHRAN STOCK EXCHANGE ON INTERNET

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ABSTRACT

This research aims to study the voluntary and compulsory reporting accounting and financial information of companies listed on the Tehran Stock Exchange on the Internet. This is a correlation practical research study with statistical population including 95 companies in a five-year period in 2009-2013. Data were collected according to the information reported by financial statements of companies listed on the Tehran Stock Exchange, and then analyzed by Excel and SPSS. Regression, Durbin-Watson and Fisher-Hosmer tests were employed to assess hypotheses. Results revealed that there was no significant correlation between financial information disclosed on the Internet and the financial leverage. However, a significant correlation was observed between financial information disclosed on the Internet and profitability.

Keywords: *Disclosure of Information on the Internet, Voluntary Disclosure, Compulsory Disclosure, Content of Disclosed Financial Information*

INTRODUCTION

Reporting is a requirement for responsiveness. Information was first reported orally and through signs. This method was then turned into a written form and written signs were used. And when the writing system was developed, it entered a new era. No dramatic change occurred in written reporting until recently. Recent advances in Internet-based tools and the information technology entered the Internet financial and non-financial reporting into a new stage. Information technology encompasses all aspects of human life. Twenty first century is, thus, called the Internet or information age.

Having dramatically changed the information flow from producers to consumers and vice versa, Internet has facilitated access to information. It helps users receive their needed information and manipulate them to acquire more. Reporting to stakeholders, beneficiaries, etc. is one of tasks organizations and enterprises are committed to. Financial reports is an important report which is produced based on principles of accounting for extra-organizational reporting (stakeholders, creditors ...) or on management needs to intra-organizational reporting. Financial reporting is now widely carried out in many countries around the world through Internet (Karimnezhad, 2007).

As a communication tool in developing countries, Internet lead stakeholders' demands more rapidly and direct more information toward better and more effective ways. Internet globally spreads information and improves financial data and then encourages investment (Willis *et al.*, 2003). Therefore, the research studies this question that how the voluntary and compulsory Internet reporting of accounting and financial information of companies listed on the Tehran Stock Exchange can be effective?

Research Literature

Transparency is defined as the openness or approachability of enterprises (easy access to operation inside the organization), and their lucidity (clarity), sincerity and comprehensiveness. In this definition, openness and approachability means easy access to intra organizational operations and lucidity refers to the clarity of information.

Transparency constitutes of three major components: (1) financial reporting (compulsory and voluntary); (2) reporting information through media and internet; and (3) acquiring confidential information and

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sending them by financial analysts, institutional investors and people working in the company (Tajvidi, 2007).

Voluntary Disclosure

Voluntary disclosure signifies reporting information beyond legitimate obligations developed by ruling authorities. Information disclosure is a process of producing information by a company and reporting it to financial markets. Companies voluntarily disclose information when there is no compulsion imposed by ruling authorities for spreading them. They make every endeavor to gain profit of sharing extra information of transaction with market players (Madhani, 2009).

One important restriction of transparency and voluntary disclosure is to keep a good balance between profit and cost. According to theoretical notions of financial reporting, the profit achieved through information should be higher than the cost of producing and reporting. So profits and costs are assessed in a judging process, which is more important for major companies. Companies have to bear the full cost, but end users benefit from financial statements. In the next step, secondary gains and competitive advantages of disclosure are in the best interests of companies. Another question is that does the disclosure of all matters by the company lead to disclosure of specific information to other competitors? (Samadi, 2012)

Some believe that disclosure of information is not carried out totally by companies, because receiving especial information is open to doubt for managers. However, according to legal approaches, companies require themselves to spread all information having positive effect on the market function (Parsian, 2009).

Restrictions on Voluntary Disclosure and Expanding Transparency

In spite of the reasoning behind accepting higher transparency, companies do not incline to disclose all their information. Vishwanath and Kaufmann enumerated collection, processing and disclosure costs, the interest of not disclosing and the external factors phenomenon as the reasons.

Gathering, categorizing and disclosing information need effort, time and financial resources. Depending on access to these three factors, companies reveal information as a balance kept between costs and incremental benefit. On the other hand, as it is difficult to accurately measure these costs and benefits, companies disclose information less than the full level. This is while the stability and efficiency of financial markets are of the most important results of transparency in the market (Samad, 2012).

Compulsory Disclosure

There is no clear and explicit answer to this question that “why are disclosure rules required?” Some have raised the theory of outcome that managers are sufficiently motivated to voluntarily disclose information, so such rules are not necessarily needed. Some other, though, believe that the current regulation are not effective in achieving favorable social goals. They consider lack of unbiased and unequal processing and reporting economic events and information as reasons of the inefficiency of disclosure rules.

Since the early twentieth century, accounting scholars and experts have tried to develop a general theory for accounting. They mostly believed that if it is possible to agree on fundamental concepts and present a theoretical framework for financial reporting, accounting principles and methods would be simply understandable for all. Accordingly, it is necessary to develop a theoretical framework for accounting standards. Professional bodies have specified goals in different countries as follows:

- The American Institute of Certified Public Accountants (AICPA) released its APB4 in 1970 and TRUEBLOOD report in 1978, resulting in the theoretical FASB Concept.
- The Institute of Chartered Accountants in England and Wales
- The Canadian Institute of Chartered Accountants
- The International Accounting Standards Committee (IASC) in 1991

Some other countries such as Iran have started to define financial reporting and present a theoretical framework in recent years.

Accounting ruling authorities mostly develop general and inclusive purposes. They rarely justify rules and legislation. Put it differently, there is no reason for the necessity of imposing rules. Statements relating to accounting goals and procedures usually start with this introduction that investors and creditors practice

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financial information to make economic decisions. It is then assumed that compulsively producing such information would improve allocation of resources (Saghafi, 1992).

Even if we accept the effectiveness of information as an assumption, this does not necessarily signify the fact that the disclosure of information should be compulsory. Bread, home, art, book, and, in many countries, higher education estimate the basic needs of consumers, but the amount, the time of provision and presenting such goods and services have not been considered by general authorities as compulsive. The reasoning behind the obligatory of such rules and legislation is not inclusive enough. Why other important information, for example about physicians', Lawyers', and stock agents' performance should not be confirmed or disclosed like the financial information of companies? Are they efficient for public? There is not, thus, a logical correlation between the effectiveness of information and the obligatory of legislating rules for compulsively disclosing financial information. The effectiveness of information for legislating disclosure rules is an essential but not sufficient condition. There is a gap in the above reasoning that even if the effectiveness of financial information for users is a certain assumption, it does not justify the obligatory of general and rule-based disclosure.

FASB regularly states that selecting the fundamental principles and comprehensive procedures of financial information disclosure should be based on a criterion satisfies public interests. But what is this criterion? Certainly, the effectiveness of benchmark information, existing in an environment with a lot of users and various tastes and goals, is an insufficient criterion, because the effectiveness of information depends on the unique characteristics of users and their decision-making environments. Information, which is helpful for some users, may be unrelated and misleading for others. Accordingly, what criterion should be selected by legislators that meet public interest? How can we evaluate and define the social outcome of accounting rules? Even in empirical experiences based on stock exchange which are widely used by researchers, we can arrive at strong assumptions by a process of deduction. It is not though clear if other research methods, such as laboratory research, are more successful or not?

Although many accounting standards have been published, none of them presents a clear and explicit answer to some fundamental questions. There is no logical and convincing answer for questions such as what are the social outcomes of accounting? Inequality in capital market, resulting from asymmetry of information, brings undesirable social outcomes, including high cost transactions, weak market, low liquidity and generally low-value transactions. To ease such undesirable outcome, an equity-based accounting procedure should be formed to present a justification for disclosing financial information. According to the definition of fairness (equality), accounting policy-makers can reach a clearer standard for public interests. In addition, the effectiveness of accounting procedures and their social outcomes can be studied and evaluated (Saghafi, 1992).

Reasons for Reluctance to Disclose Information by Joint-stock Companies

1. Disclosing additional information is in favor of competitors and do serious harm to stakeholders;
2. By totally disclosing information, labor unions gain more benefit in negotiations over wage; and
3. As many of investors cannot perceive accounting policies and techniques, a complete disclosure causes misleading;
4. There are other sources that provide information with less cost than providing them through financial statement of profit institutes; and
5. There is lack of information about users' needs.

Research Hypotheses

1. There is a significant correlation between disclosure of financial information on internet and financial leverage.
2. There is a significant correlation between disclosure of financial information on internet and productivity.

MATERIALS AND METHODS

As data, used in this research, are real and historic, the research can be categorized as ex post facto study. In such research studies, the researcher studies the probable reasons as to the dependent variable. This is a

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retrospective research study aiming to find the probable effect from the probable causes (Sarman *et al.*, 2007).

This is of semi-empirical research kinds using ex post facto approach. This means that the researcher retrospectively studies the subject. Furthermore, it is impossible to manipulate independent variables (Namazi, 2010).

Given works carried out in this regard and the achievements of stock exchange in recent decade, encompassing improvement of informing stakeholders and the transparency of market and lack of a reliable source of information to have access to the information of unlisted companies, the statistical population of companies listed on the Tehran Stock Exchange was selected as an alternative for the statistical populations in present studies. Therefore, the selected statistical sample include companied with following features and conditions:

1. Listed on the Tehran Stock Exchange before 2013;
2. Having website;
3. With time periods of 29 March, 2009, 2010, 2011, 2012, and 2013 without any change in financial period;
4. The required information being accessible in available resources; and
5. Enterprises, leasing companies, banks and insurance companies should have been eliminated from the companies list.

According to above conditions, 95 companies were selected as sample.

In this research, the required information was gathered by field methods and notes released by listed companies and their websites. Data were then entered in Excel as information banks and processed. They were then analyzed in SPSS and the research variables. Kolmogorov-Smirnov test was used to study the normality of data. The correlation of variables was tested by Pearson correlation coefficient.

Data Analysis

First Hypothesis

First hypothesis checks the correlation between the content of financial information disclosed on the Internet and financial leverage. To test the hypothesis, it turns into statistical hypotheses: H_1 (indicator of claim) and H_0 (indicator of the opposite).

H_0 : there is no significant correlation between the content of financial information disclosed on the Internet and the financial leverage.

H_1 : there is a significant correlation between the content of financial information disclosed on the Internet and the financial leverage.

ρH_0 : 0 (opposite claim)

H_1 : $\rho \neq 0$ (Claim)

The regression model was employed to test the first hypothesis.

$$Lev_{i,t} = \beta_0 + \beta_1 DIOL_{i,t} + \sum \beta_2 P_{i,t} + \varepsilon_{i,t}$$

$Lev_{i,t}$: The financial leverage of company i in period t;

$DIOL_{i,t}$: The content of disclosed financial information of companies i in period t;

$\sum \beta_2 P_{i,t}$: It is a dummy variable for company i in period t; if the company is active in the related industry, it takes number 1, otherwise number 0

β_0 : Constant coefficient

$\varepsilon_{i,t}$: Coefficient of error

Accordingly, the following table presents the constant value and the coefficient of independent variable in regression equation.

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Table 1: Results of regression test

Significance Level	t	Standardized Coefficients Beta	Non-Standardized Coefficients		Model
			Standard Error	B	
0.00	4.916		0.175	0.859	Constant Value
0.002	-1.290	-0.133	0.003	-0.003	Content of Disclosed Financial Information

Above table shows that the significance level of regression coefficient for the content of disclosed financial information is above 0.05. This reveals that the regression coefficient for these variables is zero.

Table 2: The results of Pearson correlation test

Variable	Financial Leverage
The content of disclosed financial information	Correlation Significance Level Sample Volume
	0.133 0.200 95

According to above table, as to the significant level of 0.200 and the confidence level at 0.95 percent, it can be claimed that H_1 is rejected and the opposite is confirmed. This means that H_0 is verified. As a result, there is no significant correlation between the content of financial information disclosed on the Internet and the financial leverage.

Linear regression test, Durbin-Watson, and Fisher-Hosmer tests were adopted to study the correlation between the content of financial information disclosed on the Internet and the financial leverage. Results have been presented in the following tables.

Table 3: The results of Durbin-Watson, and Hosmer tests

Significance Level	Hosmer Chi Square	Durbin-Watson	Standard Deviation	R_a^2	R^2	R	Model
0.046	10.845	2.124	0.27068	0.007	0.018	0.133	Content of Disclosed Financial Information

Table 4: The results of Fisher test

Significance Level	F	Mean Square	Degree of Freedom	Sum of Square	of model
	0.122	1	0.122		Changes of dependent variable explained by independent variable
0.200	1.665	0.073	93	6.814	Changes of dependent variable not explained by independent variable
			94	6.936	Sum

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As the level of significance is under 0.05 and the Durbin-Watson statistic (2.124) is between 1.5 and 2.5, the hypothesis of any correlation between errors is not rejected and we can use regression. But the above table shows that the estimated significance is 0.200. So significance level is above 0.05. Considering $F = 1.65$ in the confidence level at 0.95, it can be claimed that H_1 is rejected and the opposite is confirmed. This means that H_0 is verified. As a result, there is no significant correlation between the content of financial information disclosed on the Internet and the financial leverage.

Second Hypothesis

Second hypothesis studies the correlation between the content of financial information disclosed on the Internet and productivity. To test the hypothesis, it turns into statistical hypotheses: H_1 (indicator of claim) and H_0 (indicator of the opposite).

H_0 : there is no significant correlation between the content of financial information disclosed on the Internet and productivity.

H_1 : there is a significant correlation between the content of financial information disclosed on the Internet and productivity.

ρH_0 : 0 (opposite claim)

H_1 : $\rho \neq 0$ (Claim)

The following regression model was employed to test the second hypothesis.

$$ROE_{i,t} = \beta_0 + \beta_1 DIOL_{i,t} + \sum \beta_2 P_{i,t} + \varepsilon_{i,t}$$

$ROE_{i,t}$: Stakeholders' return in company i in period t;

$DIOL_{i,t}$: The content of disclosed financial information of companies i in period t;

$\sum \beta_2 P_{i,t}$: It is a dummy variable for company i in period t; if the company is active in the related industry, it takes number 1, otherwise number 0

β_0 : Constant coefficient

$\varepsilon_{i,t}$: Coefficient of error

Accordingly, the following table presents the constant value and the coefficient of independent variable in the regression equation.

Table 5: The results of regression test

Significance Level	t	Standardized Coefficients Beta	Non-Standardized Coefficients		Model
			Standard Error	B	
0.00	3.417		29.246	99.942	Constant Value
0.00	4.253	0.404	0.436	2.853	Content of Disclosed Financial Information

Above table shows that the significance level of regression coefficient for the content of disclosed financial information is under 0.05.

This reveals that the constant value and regression coefficient for these variables is opposite zero. Accordingly the regression equation is as follows:

$$y = 99.942 + 2.853 s + \varepsilon$$

s = the content of disclosed financial information

y = Productivity

ε = Coefficient of Error

Results have been tested by Pearson correlation test. The following table presents the results.

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Table 6: The results of Pearson correlation test

Variable	Financial Leverage
The content of disclosed financial information	0.604
Correlation	0.000
Significance Level	95
Sample Volume	

According to above table, as to the correlation between disclosed information and productivity estimated at 0.604, the significant level of 0.000 and the confidence level at 0.95 percent, it can be claimed that H_0 is rejected and the opposite is confirmed. This means that H_1 is verified. As a result, there is a significant correlation between the content of financial information disclosed on the Internet and the financial leverage.

Linear regression test, Durbin-Watson, and Fisher-Hosmer tests were adopted to study the correlation between the content of financial information disclosed on the Internet and productivity. Results have been presented in the following tables.

Table 7: The results of Durbin-Watson, and Hosmer tests

Significance Level	Hosmer Chi Square	Durbin-Watson	Standard Deviation	R_a^2	R^2	R	Model
0.03	6.912	2.062	45.28816	0.154	0.163	0.404	Content of Disclosed Financial Information

Table 8: The results of Fisher test

Significance Level	F	Mean Square	Degree of Freedom	Sum of Square	model
		37102.729	1	37102.72	Changes of dependent variable explained by independent variable
0.00	17.090	2051.017	93	190744.59	Changes of dependent variable not explained by independent variable
			94	227847.321	Sum

As the level of significance is under 0.05 and the Durbin-Watson statistic (2.062) is between 1.5 and 2.5, the hypothesis of any correlation between errors is not rejected and we can use regression. But the above table shows that the estimated significance is 0.000. So significance level is under 0.05. Considering $F = 17.090$ in the confidence level at 0.95, it can be claimed that H_0 is rejected and the opposite is confirmed. This means that H_1 is verified. As a result, there is no significant correlation between the content of financial information disclosed on the Internet and productivity.

RESULTS AND DISCUSSION

First Hypothesis

Results of H_1 disclosed that there was no significant correlation between voluntary disclosure and financial leverage. Companies with higher financial leverage were expected to disclose more information to reduce their cost of representativeness and asymmetry of information with creditors. Research results revealed that there was no effective supervision or demands from creditors and suppliers to disclose more information. According to Zarvzaski (1996), another probable reason is that companies which are in debts are more inclined to disclose their confidential information to insure creditors of their strategy adopted to

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improve company's performance. Information is not revealed necessarily in financial statements. Our research results do not agree with results obtained by Alsaeed (2003), Alshomari (2008) and Ferguson *et al.*, (2002), and Braberg *et al.*, (2009)(i.e. positive correlation).

Second Hypothesis

According to results, a significance correlation was observed between productivity and voluntarily disclosed information. Companies with high productivity are projected to present more information to distinct themselves of other companies. Put it differently, Internet reporting increases with productivity. Our research results do not agree with results obtained by Chave and Gary (2002), Wang *et al.*, (2008), Mahdavi pour *et al.*, (2005), Hossein *et al.*, (2009) and Hossein and Hamami (2009) (i.e. negative correlation).

Suggestions

Regarding factors and variables affecting the level of disclosure, it is suggested that financial analysts and actors in capital market note these variables at the time of decision-making and applying financial reports to make economic decisions. Consider the effect of these factors. Some suggests following practical recommendation:

1. Because there is no correlation between financial leverage and the level of disclosure, banks, credit organizations and leading suppliers of companies resources are suggested not to perform based on Internet disclosures in order to offer credit to company and supply their financial resources;
2. According to the second hypothesis (i.e. correlation between the transparency of Internet information and productivity), managers are suggested to improve the quality of disclosure in order to reach higher productivity; and
3. According to the second hypothesis (i.e. correlation between the transparency of Internet information and productivity), in order to reach higher productivity, managers are suggested to select companies for investment that have high quality disclosure.

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REFERENCES

- Alseed K (2006)**. The association between firm-specific characteristics and disclosure: The case of Saudi Arabia. *Journal of American Academy of Business*, Cambridge **7**(1) 310-321.
- Al-Shammari B (2008)**. Voluntary disclosure in Kuwait corporate annual reports. *Review of Business Research* **1**(2) 10-30.
- Broberg P, Tagesson T and Collin S (2009)**. What explains variation in voluntary in voluntary disclosure? A study of the annual reports of corporations listed on the Stockholm Stock Exchange.
- Chau GK and Gray SJ (2002)**. Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. *The International Journal Account* **37**(5)247265.
- Ferguson MJ, Lam KC and Lee MG (2002)**. Voluntary disclosure by state –owned enterprises listed on the stock exchange of Hong Kong. *Journal of International Financial Management and Accounting* **13**(2) 125-152.
- Hossian H and Hammami H (2009)**. Voluntary disclosure in the reports of an emerging country: The case of Qatar. *Advances in International Accounting* **17** 227-250.
- Hossian M, Ahmed K and Godfrey JM (2005)**. Investment opportunity set and voluntary disclosure of prospective information: a simultaneous equations approach. *Journal of Business Finance and Accounting* **32**(5,6) 87-907.
- Karimnezhad S (2007)**. Internet financial reporting. *Journal of Accountant* **182**(5) 2.
- Madhani MP (2009)**. Role of voluntary Disclosure and Transparency in Financial Reporting. *The Accounting World* **5**(2) 63-66.

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MahdaviPour A, MusaviShiri M and Karimi RA (2007). Factors affecting financial information disclosure on Internet, and websites of companies listed on Tehran Stock Exchange. *Journal of Accounting Research* 2(5)142-161.

Parsaeian A (2009). *Accounting Theory*, third edition (Termeh Press).

Saghafi A (1992). Theoretical principles for accounting standards for non-profit units. *Journal of Accounting Investigations* 1(1) 56-60.

Samadi Largani M and Arad H (2012). The role of voluntary disclosure and transparency of financial reporting. *Journal of Hesabres* 57(8)1-11.

Sarmad Z, Bazargan A and Hejazi H (2005). *Research Methodology in Behavioral Sciences*, Tehran (Aghah Press) 11 177.

Tajvidi E (2007). Compulsion to disclose information for transparency of capital market, Etemad Newspaper 1523

Wang KOS and Clibrone MC (2008). Determinants and consequences of voluntary disclosure in an emerging market: Evidence from China. *Journal of International Accounting, Auditing and Taxating* 17 14-30.

Willis M, Tesniere B and Jonse A (2003). Corporate communications for the 21st century. a white paper discussing the impact of internet technologies on business reporting, price water house Coopers, New York, NY, Available: www.pwcglobal.com/xbrl.

Zarzeski M (1996). T. Spontaneous harmonization effects of culture and market forces on accounting disclosure practice. *Accounting Horizons* 10(2) 18-37.