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An Association Between Firms' Characteristics and Voluntary Disclosure Extent of Financial and Nonfinancial Information on Annual Reports of Board of Directors in Iran

Mahdi Filsaraei[1], Alireza Azarberahman[2, *]

[1]Department of Accounting, Bojnourd Branch, Islamic Azad University, Bojnourd, Iran
[2]Department of Commerce, Aligarh Muslim University, Aligarh, India

Abstract

In this study, the relationship between firms' characteristics and voluntary disclosure extent on annual board of director's reports of listed firms in the Tehran Stock Exchange (TSE) has been examined. Since usually the disclosure of information during different period remains unchanged, just the board of directors' reports of one financial year has been considered. The statistical population of the research consists of the firms listed in Tehran stock exchange (TSE) that a sample of 254 firms was selected. To test hypotheses, some statistical methods were used such as one-way variance (ANOVA) and multiple regression. The results of the study show that there is a significant difference in the extent of voluntary disclosure of financial and non-financial information between firms in different industries. It was also found that there is a significant positive relationship between a firm's size and the extent of voluntary disclosure of information in manufacturing firms, and in fact the larger the size of the firm cause to more disclose of voluntary information. It was also argued that there is not any significant relationship between the size of auditing firms and the extent of voluntary disclosure. Moreover, the statistical results did not show any significant relationship between the profitability and the debt ratio and the extent of voluntary disclosure.

Keywords

Voluntary Disclosure, Financial Information, Non-financial Information, Board of Directors' Report

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1. Introduction

Most of experts believe that firms voluntarily disclose all of the information that essential for the function of optimization of the capital market. Accordingly, absence of disclose of some information is because of either accounted as irrelevant for investors or received from other sources. Some other researchers claim that the evidence shows firms will not tend to disclose extra information if they are not obliged by the accounting profession or regulatory institutions.

The main reason to emphasize on voluntarily disclosing and clarifying is that these two are the infrastructures to protecting of shareholders' benefits. The approaches of complete disclosure along with the transparency in financial reporting can cause confident and secure conditions, and increase the assurance about supporting the investors' benefits. Researches have shown also that the voluntary disclosure has a positive impact on the firm's performance and affects preserving the interests of shareholders and beneficiary individuals. On the other words, the lack of the information clearance and ambiguity in reporting may lead to suspiciousness and immoral behaviours along decreasing the firm's value (Madhani, 2009).

* Corresponding author
E-mail address: a_berahman@yahoo.com (A. Azarberahman)

The information disclosure in annual reports of companies has been an interesting topic considered by researchers in both of developed and developing countries. The information is prepared by various methods and is published in different channels. Except of basic financial statements and appendix notes, there are also other resources such as reports of board of directors, the reports of the firms' annual general meeting, and etc. that can be used by investors and other users in order to predict the firms' future performance. However, investors and financial analysts are desirous of information that can measure managers' long-term capabilities along efficient and effective management of economical entities. A part of this information is financial and other part that has been less considered in Iran is non-financial. This research looks for specifying that to what extent do manufacturing firms listed in TSE are willing to disclose financial and non-financial information voluntarily, and that the disclosure extent of financial and non-financial information are influenced by which factors. Also considering the lack of a codified index of voluntary disclosure in order to be applied by users in TSE, this study aims at providing some indices for this purpose by using available information in Iran and prepared indices in other countries. These indices will be related to both financial and non-financial items.

2. Research Objectives

The objectives of this study include (1) The evaluation of the voluntary disclosure extent of financial and non-financial information in the firms listed in TSE; and (2) The assessment of firms' internal characteristics which affect the voluntary disclosure extent of financial and non-financial information in the firms listed in TSE.

3. Review of the Literature

Botosan (1997) conducted a study titled "the relationship between the voluntary disclosure extent and the cost of equity capital". In this study, in order to measure the voluntary disclosure extent, he used the firm's annual reports and ranking by the firm's investment manager and the institute of investment management and research (AIMIR) and concluded that when increasing the voluntary disclosure in the annual reports, the cost of equity capital decreases.

Haniffa and Cooke (2000) suggested that the relationship between various factors in the environment influences the trends of corporate disclosure. Culture can be one of the important factors which some studies could not test this variable as a disclosure determinant factor experimentally. Cultural values can be considered as a whole at the highest level of the organization (for example, the board of directors according to disclosure as a function of corporate governance) or at the level of people (according to personality). This paper examines the problem of whether the corporate governance and personal characteristics as well as the special properties of the corporate can be as possible determinants of voluntary disclosure in Malaysia or not. The results show the potential importance of two variables of the corporate governance (*i.e.* chairman of the board who is an outside manager and the ratio of members of the family in the board of directors). It was found that a special variable (*i.e.* the ratio of native managers in the board of directors) is important and effective.

Lundholm and Myers (2002) considered that does the information extra disclosure influences the current stock price. Their findings showed that in the corporate that perform relative informative and useful disclosure, the current stock output reflects the news of future profits more.

In a study, Lakhal (2003) examined the relationship between the cases of the voluntary disclosure of profits performed by the managers of French corporate and all the combined properties of corporate governance. In order to assess the study hypotheses, the Logic two-part model has been used. The results indicate a significant negative relationship between the cases of voluntary disclosure of profit and the focus of ownership and also between the useful voluntary disclosure and the unit's leadership structure. Also, the corporate which provide the cases of profit voluntary disclosure, have more tendency toward having institutional ownership and offer their managers the plans regarding the option for buying stock. These results imply that the French corporate structure of corporate governance should support new requirements to improve market's clarification and transparency.

Field et. al, (2005) considered the relationship between disclosure and the risk of lawsuits. The results showed that disclosure has a kind of preventive and inhibitory impact on the risk of lawsuits.

Alsaeed (2006), assessing the corporate of Saudi Arabia, understood that there is a significant positive relationship between the corporate size and the level of information disclosure, and the debt ratio, the ownership distribution, the number of membership years in the exchange, the profit margin, the kind of industry and the kind of auditor do not have any significant influence in difference between various levels.

Matoussi and Chakroun (2007) studied the relationship between a combination of the board of directors, the focus of ownership, and the voluntary disclosure in annual reports. This study used the data panel method for Tunisia corporate from 2003 to 2005. The results showed that the voluntary disclosure extent is increasing during the time. Also the results indicated that the leadership independence and structure of board of directors and the corporate family control will not lead to more voluntary disclosure. Thus, the board of director's size does not have any influence on the voluntary disclosure level. However, management ownership and the appropriate quality of corporate governance are as factors which stimulate corporate to voluntary disclosure.

The study of Mohammed Hossain (2008) is an empirical research on the level of both voluntary and obligatory disclosure of stock banking corporate of India. 184 items were selected among which 101 items had obligatory and 81 items had voluntary disclosure. The study showed that in obligatory disclosure of items, the average score (grade) was 88, while the average score for voluntary disclosure was 25. Findings show that the size, profitability, combination of board of directors, and market's control (order) variables are significant and other variables such as lifetime, the complexity of commercial affairs, and the properties available in explaining disclosure level are not significant. The results also indicate the Indian banks have a considerable conformity to the laws related to obligatory disclosure.

Abe and Chung (2009) examined the determinants of voluntary information disclosure of corporate. Regarding the set of unique information about corporate profit predictions, the empirical analysis of the influence of corporate ownership, board of directors, and capital structure on information disclosure was performed. The findings of this study are in accordance with the hypothesis that the action of mutual control of two corporate by each other (*i.e.* cross-holding), reinforces the managers' opportunist behaviour. Results show that the ratio of borrowing positively correlates with the information alternation; it means when the corporate borrows money from financial institutes, the manager tends to disclose more alternative information. However, a borrowing more than at least efficient borrowing reduces the manager's motivation to disclose.

Zourarakis (2009) examined the intellectual capital voluntary disclosure of English corporate and gathered some evidence about the correlation of corporate governance with disclosing intellectual capital. Unexpectedly, the results showed that English corporates disclose more information regarding their human capital. On the other hand, ownership structure, size, and industry are important factors in explanation in trends of disclosing intellectual capital which is expected.

Hrasky (2012) analyzed using graphs and figures in corporate stable reports. This research was performed in 200 major Australian companies in the year 2007. Results are indicative of corporate which have less stability, look for symbolic legitimacy; while the stable corporate convey more axis, effects, and real achievements. In stable reports, more graphs, figures, and economic-social and environmental information are provided.

Adam et.al, (2014) in a study analyzed the influence of profit management and the voluntary disclosure level on the cost of equity capital, and in their analysis they used production corporate accepted in Indonesian stock exchange in the year 2009 to 2010. The results showed that the independent variable called profit management influenced the cost of equity capital as significantly and negatively. But the second hypothesis of the study rejected because the disclosure level does not have any significant relation and does not affect the cost of capital. The control variable indicated beta stock had a significant positive on the cost of capital, while the corporate size did not show any significant impact.

In a paper, Wen et.al, (2015) considered the relationship between the alternatives of corporate governance and the quality of prospective information in Chinese capital market and concluded that the voluntary corporate governance has a significant positive relationship to disclosing exact predictions of sales figures. Also, the corporate having voluntary corporate governance, most likely provide more exact non-financial information.

4. Research Methodology

This research is an applied research, and its design is descriptive, which is done by the method of post-event (past information). For the purpose of the study the one-way variance (ANOVA); Pearson correlation; paired independent t-test and multiple regression analyses, are applied to examine the hypotheses. To perform research, disclosure index had been codified by the using of study on other countries researches, regulations of exchange organization and accounting principles and guidelines. Then non-weight index method had been used to scoring the extent of voluntary disclosure. Disclosure index items have been compared to information disclosed on board of director's report, if the item is disclosed, score 1 otherwise zero.

4.1. Independent Variables

Type of industry

Size: log of total sales.

Debt ratio: total debt divided by total assets.

Profitability: the ratio of net profit to all assets.

Auditing size: auditing organization is big and otherwise is considered as small.

4.2. Dependent Variable

In this research, financial and non-financial information disclosure extent scale is considered as dependent variable. This scale is used to measure of extent of information disclosed via financial statements and board of directors' reports. Scales include of all voluntary items of board of directors' report. For this purpose, studies of other countries had been used beside to regulations of exchange organization and accounting principles and guidelines. Then non-weight index method had been used to scoring the extent of voluntary disclosure. Disclosure index items have been compared to information disclosed on board of director's report, if the item is disclosed, score 1 otherwise zero. Finally disclosure index had been defined through division of archived score to total score. After gathering historical data and processing them, descriptive and inferential analysis had been performed using statistical tests. There are 31 items to measure disclosure of financial and non-financial information as bellow:

Table 1. Voluntary disclosure index items.

No.	items	No.	items
1.	Firm history	17.	Capital cost trend during previous years
2.	Name of individual members of board of directors	18.	Profitability ratios
3.	Board of directors members	19.	Leverage ratios
4.	Organizational manager names	20.	Liquidity ratios
5.	Shareholder	21.	Sold units of basic product
6.	Company strategies and effects	22.	Price of units of basic product
7.	Company main markets	23.	Number of staffs
8.	Sales estimation	24.	Explanation about revenue change
9.	Sold goods price	25.	Explanation about changes of cost of goods sold
10.	Operational profit estimation	26.	Explanation about gross profit change
11.	Net profit estimation	27.	Explanation about change of administration costs
12.	Performed works to achieve goal	28.	Explanation about change of financial costs
13.	Related information to various goods	29.	Explanation about change of interest of bank
14.	Previous year's sale trend	30.	Executive and non-executive manager's information
15.	Operational profit trend during previous years	31.	Related information about future projects
16.	Financial cost trend during previous years		

4.3. Research Hypotheses

Hypothesis 1: There is a significant difference in the voluntary disclosure extent of financial and non-financial information in the manufacturing firms in different industries.

Hypothesis 2: There is a significant positive relationship between the firm's size and the voluntary disclosure extent of financial and non-financial information in the manufacturing firms.

Hypothesis 3: There is a significant positive relationship between the debt ratio and the voluntary disclosure extent of financial and non-financial information in the manufacturing firms.

Hypothesis 4: There is a significant positive relationship between profitability and the voluntary disclosure extent of financial and non-financial information in the manufacturing firms.

Hypothesis 5: There is a significant positive relationship between the voluntary disclosure extent of financial and non-financial information in the manufacturing firms and the size of the auditing firms.

4.4. Evaluation of Normality of Dependent Variable

Before determination of type of test, variable normality should be confirmed. Table 2 show normality results to financial and non-financial information disclosure test beside to Kolmogorov-Smirnov test.

It is worth nothing that null hypothesis in Kolmogorov-Smirnov test is based on variable normality. So if P-value is more than 0.05, variable normality hypothesis would be confirmed.

Table 2. Kolmogorov-Smirnov test for research variables.

Variable	Kolmogorov-Smirnov statistic	P-value	Result
Financial and nonfinancial information disclosure extent	1.114	0.167	Normal

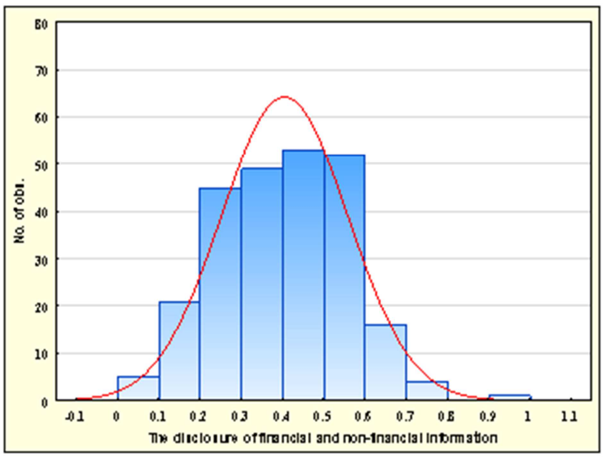

Figure 1. Financial and nonfinancial information disclosure extent histogram.

Based on results of table 2, P-value is more than 0.05 (*i.e.,* 0.167) therefore, variable normality is confirmed. It is shown also in figure 1.

4.5. Research Hypothesis

First hypothesis is that there is a significant difference in the voluntary disclosure extent of financial and non-financial information in the manufacturing firms in different industries. Studied manufacturing firms are active in fourteen industries. So to evaluate mentioned difference, one-way variance test (ANONA), had been used and statistical hypothesis test is defined as bellow:

H_0: there is not a significant difference in the voluntary disclosure extent of financial and non-financial information in the manufacturing firms in different industries.

H_1 : there is a significant difference in the voluntary disclosure extent of financial and non-financial information in the manufacturing firms in different industries.

$H_0: \mu_{1=}\ \mu_{2=}\mu_{3=\cdots=}\mu_{14}$

$H_1: \mu_{i\neq}\ \mu_{j\ ;}\ \exists_{i,j=1,2\ldots 14}$

Where μ_i is average of calculated scores for voluntary disclosure of financial and non-financial information extent for individual industries. Important descriptive analyses and ANOVA test results have been provided in table 3.

Table 3. ANOVA test for first research hypothesis.

Industries	Descriptive indices			Statistic value	Degree of freedom	P-vale
	Sample Volume	Median	Standard deviation			
Mining industry	12	0.45	0.13	3.643	13 & 240	0.000
Food industry	29	0.41	0.14			
Wood and Cardboard industry	5	0.34	0.17			
Auto industry	35	0.48	0.15			
Audio and video industry	4	0.22	0.04			
Metal manufacturing industry	8	0.41	0.17			
Non-metal mineral products industry	50	0.36	0.14			
Petroleum and nuclear fuel products	4	0.31	0.10			
Basic metal industry	23	0.45	0.19			
Plastics industry	9	0.28	0.18			
Machinery and equipments industry	18	0.39	0.15			
Electronic machinery industry	7	0.34	0.10			
Textile industry	4	0.15	0.12			
Chemical industry	46	0.42	0.11			

According to results shown in table 3 and based on P-value (*i.e.,* 0.000) with significant level of $\alpha = 0.05$, we can say P-value=0.000<α = 0.05 and null hypothesis would be rejected. Therefore with 95% confidence we can say "*there is difference among disclosure level of financial and non-financial information extent among active manufacturing firms in various industries*".

4.6. Research Model Fitness

To test second to fifth hypotheses, fitting the model should be completed based on multiple regression and least squares of the errors. The related decision would be made to accept or reject hypotheses based on the model. The research model is as bellow:

$$\mathrm{Inf} = \beta_0 + \beta_1\mathrm{Size} + \beta_2\mathrm{Lia} + \beta_3\mathrm{Pro} + \beta_4\mathrm{Aud} + \varepsilon_{ij}$$

Where,

Inf = voluntary disclosure of information;

Size = size of the firm

Lia = Debt ratio

Pro = profitability

Aud = auditing size

The above model is meaningful or meaningless based on bellow hypotheses:

$H_0 : \beta_i = \beta_j = 0$

$H_1 : \beta_i \neq \beta_j\ \forall\ i \neq j$

H_0: effect of control and independent variables on dependent variable is not significant.

H_1: effect of control and independent variables on dependent variable is significant.

The research model is fitted through Ordinary Least Square (OLS) method and its results shown in table 4.

According to table 4, F-value is 5.081 and P-value is 0.001 that is lower than 0.05 (significant level). Therefore, null hypotension would be rejected in 0.05 level and with 95% confidence; we can say fitted regression model based on OLS is significant.

Table 4. OLS findings based on research model (dependent variable: quality of information voluntary disclosure).

Variable	Parameter Estimation	Standard Deviation	t-value statistic	P-value	Partial correlation coefficient	Multicolinearity statistics	
						VIF	Tolerance
Constant	0.033	0.086	0.382	0.703			
firm size	0.026	0.007	3.726	0.000	0.23	1.24	0.80
Debt ratio	0.01	0.028	0.364	0.716	0.02	1.33	0.75
profitability	-0.011	0.067	-0.162	0.871	-0.01	1.39	0.72
Auditing size	0.019	0.025	0.789	0.431	0.05	1.19	0.84
R^2	0.07						
Durbin–Watson statistic	1.78						
F-value statistic	5.081						
P-value	0.001						

4.7. Second Research Hypothesis

As t-value of firm size is 3.726 and corresponding P-value is equal to 0.000 that is lower than 0.05, second hypothesis would be accepted with 95% confidence, i.e., *there is significant and positive relation between firm size and voluntary disclosure of financial and non- financial information in manufacturing firms*. Partial correlation coefficient is also 0.23 corresponding to firm size that shows positive relation between firm size and information voluntary disclosure. Therefore increase of firm size, would be increased up to 23% of voluntary disclosure extent.

4.8. Third Research Hypothesis

Table 4 findings show t-value of debt ratio is 0.364 and P-value is 0.716 that greater than 0.05. Therefore with 95% confidence, third hypothesis would be rejected. Then, there is no positive and significant relation between debt ratio and voluntary disclosure of financial and non- financial information among firms.

4.9. Fourth Research Hypothesis

According to table 4, related t-value to profitability is – 0.162 and P-value is 0.871 that is greater than 0.05. Therefore with 95% confidence, fourth hypothesis would be rejected so, there is no significant and positive relation between profitability and voluntary disclosure of financial and non-financial information in manufacturing firms.

4.10. Fifth Research Hypothesis

According to table 4 related t-value to auditing size is 0.789 and P-value is 0.431 that is greater than 0.05. Therefore, with 15% confidence, fifth hypothesis would be rejected. There is no positive and significant relation between auditing size and voluntary disclosure of financial and non-financial information in manufacturing firms.

These findings would be accepted if basic regression hypotheses are confirmed. Therefore we evaluate said hypotheses in continue.

Lack of autocorrelation of error sentences: one of the basic hypotheses of regression is lack of autocorrelation in error sentences. To evaluate Durbin-Watson statistic is used. If the value is between 1.5 and 2.5, there is no autocorrelation. According to said value (*i.e.,* 1.78), there is no auto-correlation.

Lack of multicollinearity among variables: collinear coefficients are defined to independent variable in model. Lack of multicollinearity is other basic regression hypotheses. To evaluate it, tolerance and VIF statistics would be evaluated. Tolerance statistic is between zero and 1. If tolerance statistic is greater than 0.5, there is no multicollinearity according to the model. Tolerance statistic would be defending to all independent variables as greater thon 0.5. Therefore, there is no multicollinearity. If VIF statistic is lower than 2, lack of multicollinearity would be confirmed. According to model all values are lower than 2 and lack of multicollinearity would be confirmed among dependent variables of model.

Error sentence normality: the other hypothesis is error sentence normality. To test hypothesis normal probability graph would be drawn. If all points are around 45 degree line, error sentences are normal. In figure 2, normal probability graph and error sentence histogram has been provided that show error sentence normality.

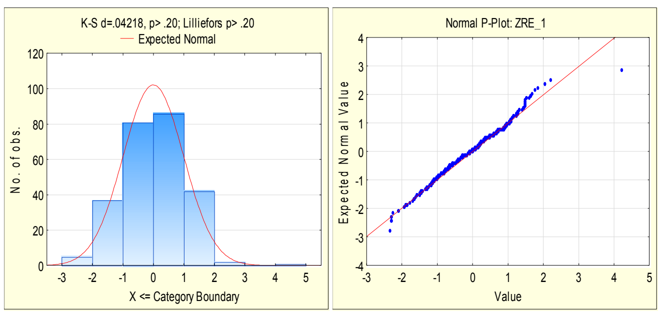

Figure 2. Normal probability graph and residuals sentence histogram.

Fixed error variance: the other basic hypothesis is fixed error variance. Drawing fitted value graph compared to model residuals, we evaluate if there is no specific trend, error variance is fixed. Related graph is provided in figure 3. As you see, all points are dispersed uniformly around zero line and there is no specific trend. Therefore, fixed error variance hypothesis would be confirmed.

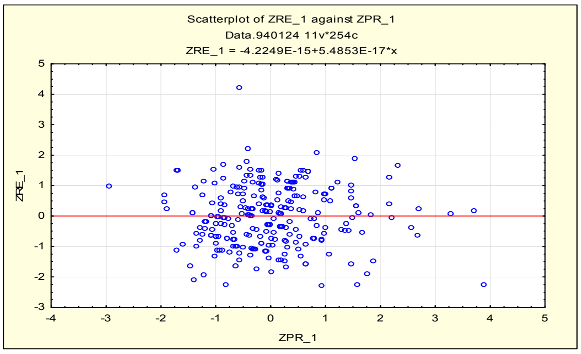

Figure 3. Fitted values graph compared to error sentences in research model.

4.11. Research Findings

First hypothesis test results show difference among voluntary information disclosure among various industries. We can say that with 95% confidence that there is significant difference among voluntary disclosure of financial and non-financial information in active companies in various industries. Research findings are in conformance to Zourarakis research (2009). But it is in contradicted to Alsaeed research (2006).

Findings of second hypothesis test (firm size) show difference among firm size and voluntary disclosure of financial and non-financial information in productive companies.

In fact there is significant and positive relation between firm size and voluntary disclosure of financial and non-financial in form of manufacturing companies. These findings are in conformity to research of Alsaeed (2006), Mohamed Hossain (2008), and Zourarakis (2009).

Findings of third hypothesis test (debt ratio) show there is no significant and positive relation between debt ratio and voluntary disclosure of financial and non–financial information in manufacturing companies.

Fourth hypothesis test findings (profitability) show there is no positive and significant relation between company profitability and voluntary disclosure of information.

Fifth research hypothesis would be rejected (auditing size). There is no positive and significant relation between auditing size and voluntary disclosure of financial and non-financial information in productive companies.

References

[1] Abe, Naohito and Chung, Yessica. C. Y. (2009). Voluntary information disclosure and corporate governance: the empirical evidence on earnings forecasts, Hitotsubashi Journal of Economics 50 (2009), pp. 165-180.

[2] Adam, Mohamad and Mukhtaruddin, Mukhtaruddin and Putri, Rizki Amelia (2014). Earning Management, Level of Voluntary Disclosure and Cost of Equity Capital: Empirical Study on LQ-45 Index Manufacturing Companies Listed in Indonesia. GSTF Journal on Business Review, 3 (3). pp. 8-16. ISSN 2010-4804

[3] Alsaeed, K. (2006). The association between firm-specific characteristics and disclosure: The case of Saudi Arabia. Journal of American Academy of Business, Cambridge, 7(1), PP 310-321.

[4] Botosan C. A (1997). Disclosure level & the cost of capital. The Accounting Review; 72(3), PP 323-34.

[5] Field, L., Lowry, M. and Shu, S., (2005). Does disclosure deter or trigger litigation? Journal of Accounting and Economics, 39, PP 487-507.

[6] Haniffa, Ros and Cooke, Terry (2000). Culture, corporate governance and disclosure in Malaysian corporations, Presented at the Asian AAA World Conference in Singapore, 28-30 August 2000, https://business-school.exeter.ac.uk/documents/papers/accounting/2000/0007.pdf.

[7] Hrasky, S. (2012). Visual disclosure strategies adopted by more and less sustainability-driven companies. Accounting Forum, Vol. 36, No. 3, pp. 154-165.

[8] Lakhal, Faten (2003). Earning voluntary disclosures and corporate governance: Evidence from France, EFMA 2004 Basel Meetings Paper. Available at SSRN: http://ssrn.com/abstract=500283

[9] Lundholm, R. and L. Myers (2002). Bringing the future forward: The effect of disclosure on the return earnings relation. Journal of Accounting Research. 40(3), PP 809.

[10] Madhani M. Pankaj (2009). Role of voluntary disclosure & transparency in financial reporting. The Accounting World. PP 63-66.

[11] Matoussi, Hamadi and Chakroun, Raida (2007). Board composition, ownership structure and voluntary disclosure in annual reports: evidence from Tunisia, http://www.researchgate.net/profile/Hamadi_Matoussi/publication.

[12] Mohammed Hossain, (2008). The Extent of Disclosure in Annual Reports of Banking Companies: The Case of India, European Journal of Scientific Research, ISSN1450-216XVol.23No.4 (2008), pp. 659-680.

[13] Wen Qu, Mong Shan Ee, Li Liu , Victoria Wise , Peter Carey , (2015). Corporate governance and quality of forward-looking information: evidence from the Chinese stock market. Asian Review of Accounting, Vol. 23: 1, pp42-63.

[14] Zourarakis, Nikolaos S. (2009). Voluntary Disclosure: Evidence from UK, Erasmus University, 2009.