

*Full Length Research Paper*

# Analysis based on sustainability reporting in case of companies listed in Tehran Stock Exchange

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Because sustainable reporting as a competitive advantage is not yet well understood, in this paper, we want to measure disclosures based on sustainability reporting for companies listed in Tehran Stock Exchange. Sustainable accounting is required to pay attention to organization performance from different views such as economic, social and environmental, and internal and external organization matter for the present and future. Principles of sustainability reporting is an approach which emphasize on creating long-term value for shareholders, taking into account the future potential opportunities and risk management in the economic, social and environmental aspect. It found that the overall level of disclosure based on sustainability reporting for companies listed in Tehran Stock Exchange is at a low level; it also observed a positive increment in trend of such disclosures over the seven years. From 2007 to 2013 growth rate of average level of disclosure is about 26%. Based on the growth rate, it can expect higher level of disclosure in future. It also requires changes in accounting standards and reporting requirements for considering the requirements of sustainability reporting in Iran.

**Key words:** Disclosures, sustainable reporting, stakeholder theory, environment.

## INTRODUCTION

In a world dominated by global challenges, in the form of globalization, population growth, climate change, resource scarcity, recognition and response to sustainability issues is trivial for the corporate environment. Stakeholders influence on sustainability reporting is understated by organizations, which focus their disclosure on customers, employees, suppliers, activists, governments and community. The engagement with stakeholders is indeed increasing in importance as companies choose to disclose information on the matter (SASB, 2013). The number of companies voluntarily producing environmental or sustainability reports has increased dramatically since Shell Canada produced one of the first environmental reports in 1991 (Maharaj and Herremans, 2008). Companies are taking a more comprehensive approach to reporting than previously seen in traditional financial reporting to shareholders. There is also a move from isolated reporting on environment or health and safety towards sustainability, including environmental, social, and economic aspect and including direct and indirect on the economy and on

society.

Günther et al. (2007) found that reporting quality was particularly low for quantitative indicators such as greenhouses missions. In relation to materiality, it was observed by KPMG in their 2008 study that many companies in "at risk" sectors such as automotive, construction and transport are lagging behind when it comes to reporting on climate change risk, one of the biggest global environmental problems (KPMG, 2008). Regarding balance, Deegan and Rankin (1996) found that Australian companies successfully prosecuted for violations of environmental regulation did not disclose this information, focusing instead on more positive aspects of their operations. Even within this overall poor quality, it has been found that there is a wide range of qualities depending on geographical location, company size and industry sector with typically larger companies in more

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polluting sectors producing better quality reports (Brammer and Pavelin, 2008; Hackston and Milne, 1996; Kolk, 2003, 2004; Kolk et al., 2001).

Corporate enterprises, as well as other types of organization, are paying closer attention to their sustainability report and for good reason. More and more stakeholders - from regulator, to suppliers and investors - are using the report in their decision making. Businesses are reading them to decide on potential partners, consumers to choose whose products and services they want to buy, and student to evaluate prospective employers. Investors and financial analysts are using sustainability reports, as they are increasingly interested in nonfinancial information, such as social, economic and environmental impacts and related risks and opportunities, to support their investment decisions (SASB, 2013).

The motivation for companies to produce sustainability reports as well as the quality and extent of reporting has been examined in the literature using several theoretical perspectives. Two widely adopted perspectives are legitimacy and accountability. The legitimacy perspective is management orientated. It supports the view that companies use sustainability reports as a legitimizing tool to demonstrate to stakeholders and to society that their activities and behaviors are within the accepted norms (Branco et al., 2008; Cuganesan et al., 2010; Deegan, 2002; Deegan et al., 2002). This perspective also supports the view that sustainability reports are used to respond to negative external pressures or events by increasing the extent of disclosure as well as the amount of positive disclosure (Deegan et al., 2002; Deegan et al., 2000; Islam and Deegan, 2010). From this perspective, sustainability reporting appears as symbolic action so that reports may not be an accurate reflection of company performance but are used to present a socially responsible image and manage public perceptions (Bansal and Clelland, 2004; Hooghiemstra, 2000; Jones, 2010; Neu et al., 1998).

The level of sustainability information presented within the integrated reports issued by the firms that have adopted this system can be measured using the Sustainability Reporting Scorecard developed by Deloitte, and further on communicated to the users of the annual reports. Ultimately, companies are expected to improve their relationship with stakeholders - investors, regulators, customers, business partners and employees - by adopting sustainability disclosure. By distinguishing between different types of information, we provide a more fine-grained analysis of the quality of sustainability reporting and its development over time. This analysis not only takes into account the wide range of diverse aspects covered by sustainability reports, it also leads into more precise policy implications on the question whether and when there is a need for regulation to prevent the market for sustainability reporting from failing.

Overall, our argument offers a more comprehensive

understanding of the conditions under which the market for sustainability reporting is expected to fail and produces low quality disclosures. The main question of this study is how the disclosures based on sustainability reporting on companies listed in Tehran Stock Exchange are.

## REVIEW OF LITERATURE

Beddewela and Herzig (2013) examined the pressures, barriers and enablers which subsidiaries of multinational companies encounter when engaging in corporate social reporting within a developing country context. The researchers conducted in-depth interviews with eighteen managers across ten subsidiaries in Sri Lanka. The findings show that the subsidiaries are overwhelmingly driven by their need to attain internal legitimacy and conform to formal institutionalized processes for reporting on CSR which act as a barrier against publishing separate social reports in Sri Lanka. The study uncovers a tension between head office reporting requirements and demonstrating accountability for the needs of local stakeholders.

Katelijne et al. (2011: 115) argue that integrated reporting means nothing but a sustainability report adapted to the various needs of the stakeholders. They add that innovation in sustainable reporting leads in fact to integrating the sustainability information into one single integrated report. The Global Reporting Initiative has established guidelines for sustainability reporting frameworks. However, the corporate environment is merging towards integrated reporting; a new trend that in fact promotes the presentation of information related to finance and sustainability issues (Benoit and Niederman, 2010: 9).

According to the 2011 KPMG benchmarking survey (KPMG, 2011) 95% of Fortune Global 250 (G250) companies now disclose social and environmental information either in a standalone or in an integrated report compared to just 35% of G250 companies undertaking environmental reporting in 1999 (KPMG, 1999). Comparing reporting by Greek companies to the Global Reporting Initiative (GRI) reporting guidelines, Skouloudis et al. (2009) found major gaps in the comprehensiveness of reports with important indicators such as those concerning environmental performance, human rights and product responsibility being omitted.

Research on corporate responsibility and sustainability reporting (Michael, 2009: 3-8) in the area of real estate reveals that corporate reports have changed over time and have made improvement on sustainability and CSR disclosure. Michael (2009: 11) studies eight corporations from UK and Australian, by creating a matrix with the purpose of evaluation and comparison of the corporate responsibility and sustainability reports. The methodology involved characterizing each criterion from the matrix as being or not being disclosed within the analyzed reports.

These criteria were chosen by the author in accordance with the GRI Sustainability Reporting Guidelines and GRI Standard Disclosure and generally refer to: headquarter location, strategy and analysis, organizational profile, report parameters, governance, economic, environmental social and governance performance metrics. The findings of the study demonstrate the initial objective, that CSR and sustainability reporting has improved over time, the researcher underlining in the end of its paper certain limitations in the form of input data, subjectivity, human error or misinterpretation.

Empirical studies were elaborated concerning the benefits of implementing corporate social responsibility (Selvi et al., 2010: 281-290). Starting from a sample of the most profitable companies from a certain country and the ones that are socially responsible, the author uses Spearman coefficient to determine the relationship between company reputation and corporate social responsibility. The conclusions were that the relationship between the variables is a positive one. Discussions on trends towards non-financial information show that sustainability reporting registers positive evolutions, more and more companies applying for it. According to data from Fortune Global 250 during the period of 1998-2001, there is a considerable increase regarding sustainability reporting (Kolk, 2003: 279-291).

### **The Deloitte sustainability reporting scorecard**

The Deloitte Sustainability Reporting Scorecard was created with input from many angles and with the active contribution of many experienced environmental and sustainability practitioners. It was developed in an interaction process, maintained by a robust and intensive methodology of sharing and consultation. The Deloitte Sustainability Reporting Scorecard build on the experience with this former tool intensively applied to environmental reports, as well as to additional form which are used in various countries for environmental and social reports.

Deloitte touché Tohmatsu in the world is already successfully using a Corporate Environmental Report Scorecard that was originally developed in 1995 and reviewed in 1997. This is a scorecard particularly developed for environmental reports which is still valid and highly useful for this specific purpose. It is best used for and based on communication needs for corporation whose major impact lie within the company's own operations. The Deloitte Sustainability Reporting Scorecard build on the experience with this former tool intensively applied to environmental reports, as well as to additional form which are used in various countries for environmental and social reports. The most valid input forms the vast experience that was developed throughout Deloitte Touche Tohmatsu global practice in manifold client engagements on reporting.

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was developed throughout Deloitte Touche Tohmatsu global practice in manifold client engagements on reporting (SASB, 2013). The scorecard tool provides detailed information and guidance for evaluating reports with respect to each of 30 criteria. Such information - explanation, characteristics, and examples is most valuable to better understand reporting practices and development trends.

Each of the 30 criteria of the Deloitte Sustainability Reporting Scorecard is worth a score between 0 and 4 points corresponding to a level of fulfillment between "no mention" or "very insufficient" and "pace-setting creative approach" or "outstanding". Scoring should be conservative. We believe that conservative scoring encourages learning and improvement. The score of 4 points is reserved for truly extraordinary/innovative disclosure and explanation. The theoretical overall total of 120 score or 100% would refer to a rather unrealistic maximum for ideal reporting of complete satisfaction.

## **METHODOLOGY**

### **Data collection**

Population of the study was all industrial companies listed in Tehran stock Exchange. There were 264 companies operating under 25 different industry categories. A sample of 153 companies representing the most engaged industries were selected for the purpose of research. Data were collected through content analysis. Annual Board of Directors reports of the sample were used as the data source. The rear advantages and disadvantages of using content analysis as a mean of measuring disclosures are based on sustainability reporting. However in Iran context, it is impossible to use other means of measures like, corporate reputation indicators, data produced by measurement entities or pollution indicators. Therefore, despite of its own drawbacks, it was found to have significant advantages of content analysis as a technique for measuring the level of disclosures based on sustainability reporting.

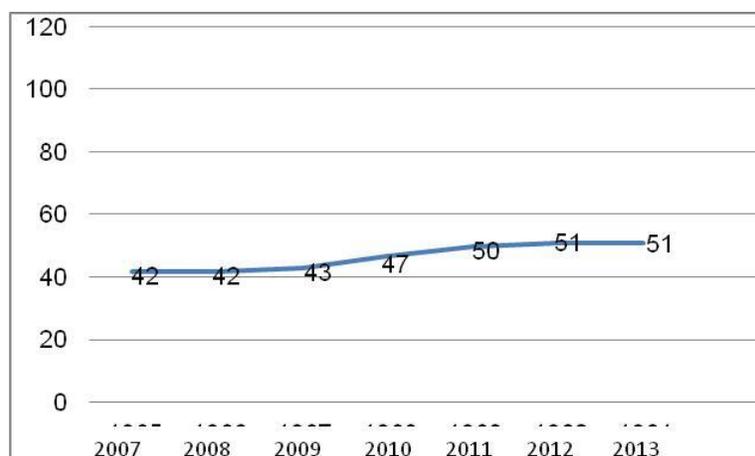
### **Data analysis**

Data were collected for 7 years period commencing from 2007 to 2013 (Table 1). These annual data were used to find the trend of the sustainability reporting disclosure. It is found that the overall level of disclosures based on sustainability reporting index was at a low level. With regard to the whole sustainability reporting index, the average level disclosure was only 42 in 2007 and 2008, 43 in 2009, 47 in 2010, 50 in 2011, 51 in 2012 and 2013, which in the case of sustainability reporting index, all of them were unsatisfactory (Figure 1).

Although the overall level of disclosure is at a low level, it also observed a positive increment in trend of such disclosures over the seven years. But this growth is very

**Table 1.** Sustainability reporting score for average of 7 years within 2007 to 2013 on various industry sectors.

Rank	Industry Sector	Score for average of 7 years (of 120)	Population	Sample
1	Mining of coal	79	1	1
2	Oil products, coke and nuclear fuel	62	6	5
3	Mining of metal ores	58	9	7
4	Fabricated metal products	58	5	3
5	Cement, lime and plaster	57	30	11
6	Paper Products	56	2	2
7	Pharma	52	27	23
8	Machinery and equipment	51	12	5
9	Sugar	50	12	3
10	Leather tanning and footwear	49	1	1
11	Computer and related activities	48	5	2
12	Other non-metallic mineral products	48	11	3
13	Manufacture of automotive	47	31	28
14	Tile	47	10	2
15	Manufacture of basic metals	45	21	14
16	Radio, television and communication equipment	41	2	1
17	Electrical machinery and apparatus	39	8	4
18	Rubber and plastics products	39	6	6
19	Chemical	38	33	12
20	Other mining and quarrying	34	1	1
21	Transport, storage and communications	33	6	2
22	Food and Beverage	33	20	12
23	Textiles	26	3	3
24	Publishing, printing and propagating	24	1	1
24	Wood Products	8	1	1
<b>Total</b>			<b>264</b>	<b>153</b>

**Figure 1.** Trend in level of disclosure.

attractive. From 2007 to 2013, growth rate of average level of disclosure is about 26%. Based on the growth rate, it can expect higher level of disclosure in future.

#### Normality test data- Kolmogorov-Smirnov Test

In order to determine the type of test used to test the

**Table 2.** Kolmogorov-Smirnov Test.

Variable	Mean	
N	154	
Normal Parameters <sup>a</sup>	Mean	44.7123
	Std. Deviation	1.922141
Most Extreme Differences	Absolute	0.050
	Positive	0.050
	Negative	-0.039
Kolmogorov-Smirnov Z	0.619	
Asymp. Sig. (2-tailed)	0.837	

<sup>a</sup> - Test distribution is normal.

**Table 3.** Descriptive statistics for sustainability reporting.

Variable	N	Mean	Std. Deviation	Std. Error Mean
Mean	154	44.7123	19.22141	1.54891

**Table 4.** T-test for sustainability reporting.

Variable	Test Value = 60					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence interval of the difference	
					Lower	Upper
Mean	-9.870	153	0.000	-15.28766	-18.3477	-12.2277

hypothesis, First through Kolmogrov-Smirnov (KS) test, normal or abnormal data were tested. And then based on the results of this test, appropriate parametric or non-parametric statistical methods for the test was used. So the hypothesis is as follows:

**H-0:** Data distribution is normal.

**H-1:** Data distribution is not normal.

According to the results in Table 2 with respect to the significance level (Sig=0.837) which is calculated for sustainability reporting score, null hypothesis was accepted and the alternative hypothesis was rejected. So the normal distribution assumption is confirmed and parametric statistical tests can be used.

### Single-sample t-test

The data are normal and Single-sample t-test can be used to test the following hypotheses:

**H-0:** The score of disclosures based on sustainability

reporting for companies listed in Tehran Stock Exchange is more than average.

**H-1:** The score of disclosures based on sustainability reporting for companies listed in Tehran Stock Exchange is not more than average.

According to the results in Tables 3 and 4 with respect to the significance level (Sig=0.000) which is calculated for sustainability reporting score, null hypothesis was rejected and the alternative hypothesis was accepted. So the normal distribution assumption is confirmed and parametric statistical tests can be used. Also the average of score of sustainability reporting is 44.7 and the standard deviation is 19.22.

### Conclusion

Stakeholders' demands for sustainability information have grown more exacting than ever before. Business enterprises are asked for information on their vision, values and principles, the management system and action they have in place to support these, their objectives

and their past and current performance in comparison to their peers and their targets. They are asked to provide sufficient information on all those issues that stakeholders have identified as being important to them and which have an impact on society, the economy and on the environment.

Conceptual framework of the Sustainability Accounting Standard Board (SASB, 2013) said the purpose of sustainability accounting is to evaluate the environmental, social and governance performance of companies through an account of their management of various forms of non-financial capital associated with sustainability - environmental, human and social - and corporate governance issues, which they rely upon for sustained, long-term value creation. Ultimately, the goal of sustainability accounting and disclosure is to inform development of an integrated business strategy for corporate management and assess sustainability risks and opportunities inherent to investment decisions. Sustainability accounting and disclosure is intended as a complement to financial accounting, such that financial information and sustainability information can be evaluated side by side and provide a complete view of a corporation's performance and value creation, both financial and non-financial, and across all forms of capital.

The Deloitte Sustainability Scorecard is meant to provide guidelines on the content of reports regarding the sustainability information disclosure. Thus, in the absence of a general current framework, the scorecard can be used for developing best sustainability practices and to create sustainability reports that should integrate within annual reports.

In Iran, the overall level of disclosure is at a low level. It also observed a positive increment in the trend of such disclosures over the seven years; but because of the changing business environment from government companies to privatization, corporation should not pay attention only to shareholders whom are from governmental organization. Financial reporting standards should be modified and improved. Widespread disclosures are required. Companies have effect on the economy, society, environment, and future generations. However, disclosed information should be included in all these concerns, and the community should know what and how the companies operate.

## REFERENCES

- Bansal P, Clelland I (2004). Talking trash: Legitimacy, impression management and unsystematic risk in the context of the natural environment. *Acad. Manage. J.*, 47: 93–103.
- Beddewela E, Herzig C (2013). Corporate Social Reporting by MNCs' subsidiaries in Sri Lanka. *Account. Forum*, 37(3).
- Benoît C, Vickery-Niederman G (2010). Social Sustainability Assessment Literature Review, Measurement Science, White Paper.
- Cuganesan S, Guthrie J, Ward L (2010). Examining CSR disclosure strategies within the Australian food and beverage industry. *Account. Forum*, 34: 169–183.
- Deegan C (2002). Introduction: The legitimising effect of social and environmental disclosures a theoretical foundation. *Account. Aud. Account-ability J.*, 15: 282–311.
- Deegan C, Rankin M, Tobin J (2002). An examination of the corporate social and environmental disclosures of BHP from 1983–1997: A test of legitimacy theory. *Account. Aud. Account-ability J.*, 15: 312–343.
- Deegan C, Rankin M, Voght P (2000). Firms' disclosure reactions to major social incidents: Australian evidence. *Account. Forum*, 24: 101–130.
- Hooghiemstra R (2000). Corporate communication and impression management – New perspectives why companies engage in corporate social reporting. *J. Bus. Ethics*, 27: 55–68.
- Islam MA, Deegan C (2010). Media pressures and corporate disclosure of social responsibility performance information: A study of two global clothing and sports retail companies. *Account. Bus. Res.*, 40: 131–148.
- Jones MJ (2010). Accounting for the environment: Towards a theoretical perspective for environmental accounting and reporting. *Account. Forum*, 34: 123–138.
- Katelijne VV, Wijnand B, Johanna K, Jutta K (2011). The State of Play in Sustainability Reporting in the European Union, 2011.
- Kolk A (2003). "Trends in sustainability reporting by the Fortune Global 250", *Bus. Strat. Environ.*, 12(5): 279–291.
- Kolk A, Walhain S, van de Wateringen S (2001). Environmental reporting by the Fortune Global 250: Exploring the Influence of Nationality and Sector. *Bus. Strat. Environ.*, 10: 15–28.
- KPMG (1999). KPMG International Survey of Environmental Reporting 1999. De Meern: KPMG.
- KPMG (2008). KPMG International Survey of Corporate Responsibility Reporting 2008. Amsterdam: KPMG.
- KPMG (2011). KPMG International Survey of Corporate Responsibility Reporting 2011. Amsterdam: KPMG.
- Maharaj R, Herremans IM (2008). Shell Canada: Over a Decade of Sustainable Development Reporting Experience. *Corporate Governance*, 8, 235–247.
- Michael J (2009). Best Practice CS&R Reporting in the Real Estate Industry, Global MBA Graduate, Ryerson University Toronto.
- Neu D, Warsame H, Pedwell K (1998). Managing public impressions: Environmental disclosures in annual reports. *Account. Organ. Soc.*, 23: 265–282.
- Selvi Y, Wagner E, Türel A, (2010). Corporate Social Responsibility in the time of financial crisis: Evidence from Turkey, *Annales Universitatis Iulianae Series*

Oeconomica, 12(1): 281-290.

Skouloudis A, Evangelins K, Kourmoussis F (2009).  
Development of an evaluation methodology for triple  
bottom line reports using international standards on  
reporting. Environ. Manage., 44: 298–311.

Sustainability Accounting Standard Board-SASB (2013).  
Conceptual framework Sustainability Accounting  
Standard Board.