

## STAKEHOLDERS INFLUENCE ON SUSTAINABILITY DISCLOSURES: AN EMPIRICAL INVESTIGATION

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### Abstract

*Sustainability of a business may be expressed as the capacity of an organisation to continue its operations over a long period of time and depends to a large extent on stakeholder relationships. Sustainability reporting is being used as a communication tool to highlight organisation commitment towards sustainability and enhance relationships with stakeholders. With some stakeholder groups being in a position to influence the quality of sustainability disclosures, the objective of this paper is to find if the quality of disclosures in sustainability reports is influenced by pressure from key stakeholder groups like customers, investors, employees and NGOs or environmental organisations. To achieve the objectives a dimension of quality of sustainability disclosures is extracted using Principal Component analysis (PCA) technique of factor analysis. Industrial sector, listing status and size of the organisation are used as proxy for stakeholder salience. Using step wise multiple linear regression, the study finds causal relationship between quality of disclosures and stakeholder salience. The results show that organisations operating in environmentally sensitive sector, consumer contiguous sector, financial sector, in areas where sustainability reporting is regulated, large size and listed organisations and provide high quality disclosures.*

**Keywords:** Disclosure quality (DQ); Global Reporting Initiatives (GRI); Stakeholder salience; Sustainability Reporting

### 1. Introduction

With the rising expansion sustainability is the order of the day for organisational existence (Brammer, Jackson, & Matten, 2012). Keeping this in mind along with regulatory developments and aware stakeholders, communicating the sustainability

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initiatives becomes imperative on the part of organisations (Kolk, 2008). Sustainability reporting, which is description of past achievements and future commitments attempts to address the concerns of stakeholders.

The size of the organisation as well as competing and conflicting interests of stakeholders demands prioritisation of their concerns. The ground rule for prioritisation is claim of the stakeholders and their ability to impact the business operations. This prioritisation is termed as “stakeholder salience” (Boesso & Michelon, 2010). According to Mitchell, Agle, & Wood (1997), stakeholder salience is the degree to which organisations give priority to certain categories of stakeholders because of their power of negotiation, legitimacy with the organisation or due to urgency of their needs. As salience is widely practiced, there is need to study its impact on Disclosure Quality (DQ) in a sustainability report. This paper studies influence of salient stakeholders on DQ. Taking information from GRI database, stakeholder salience is measured as proxy to organisation related information and DQ being measured using report related information.

This present study is organised into five sections. Section I deals with the introduction of the subject. Section II reviews the existing literature. Section III presents the research methods and section IV discusses detailed results of data analysis followed by conclusions and recommendations in section V.

## **2. Review of Literature**

This section is devoted to review of the existing literature to identify measures impacting disclosure quality and influence of stakeholder in sustainability reporting.

### **Disclosure Quality in a sustainability report**

Several measures of report quality have been identified in existing literature. On one hand, Leitoniene & Sapkauskiene (2015) point out relevance, reliability and comparability as measures of report’s quality, on the other hand, Habek & Wolniak (2015) find arithmetic mean of relevance of information and credibility of information as a quality measure.

The latest version, G4 of reporting framework by Global Reporting Initiatives (GRI), recommends identification and reporting of material issues and realizing principles of transparency, inclusiveness, assurance, clarity, completeness, relevance, accuracy, sustainability context, neutrality, comparability, regularity of reporting and timeliness (Baviera-Puig, Gómez-Navarro, García-Melón, & García-Martinez, 2015). Report Quality may be measured as extent to which reports refer to (or adhere to) to GRI

guidelines (Willis, 2003) and its verification by an independent third party i.e. assurance (Michelona, Pilonatob, & Riccerib, 2015).

### **Influence of Stakeholders on Disclosure Quality**

The relative importance of each dimension of sustainability varies across different organisations with stakeholders being the prime influencers (Carroll, 1999). The quality of sustainability reporting varies with change in nature of business (Liket & Maas, 2016). Stray & Ballantine (2000) and Wanderley, Lucian, Farache, & Filho (2008) designate it as inter-sectoral differences in sustainability disclosures. Firms in high risk, controversial and sinful industries like tobacco or gambling (Cai, Jo, & Pan, 2012) make high quality disclosures (Young & Marais, 2012). In different sectors like education (Fonseca, Macdonald, Dandy, & Valenti, 2011), supply chain (Tate, Ellram, & Kirchoff, 2010), mining and oil (Azapagic, 2004), tourism (Wijk & Persoon, 2006), financial services, information technology and consultancy (Jose & Saraf, 2013) scholars have found different yardsticks used to measure Disclosure Quality(DQ).

### ***Environmentally Sensitive Sector (ESS)***

Industries where manufacturing processes adversely affect the environment, like mining, oil, chemicals and power generation have been traditionally associated with a high level of reporting regarding environment conservation (Sharma, 2000). They focus more on health and safety of employees so as to legitimize their actions (Bebbington, Larrinaga, & Moneva, 2008) and to alleviate the social and environmental risks linked to their activities (Unerman, 2008). Such organisations face greater pressure from environmental organisations, NGOs and media (Guenther, Hoppe, & Poser, 2006; Rauffleta, Cruzb, & Bresc, 2014; Hodge R. , 2014) and are more likely to face stringent regulatory requirements and strong stakeholder demand for elaborate disclosures (Deakin & Hobbs, 2007). They usually start preparing sustainability reports earlier than others (Kolk & Pinkse, 2010); disclose more information on almost all the indicators (Campbell, Craven, & Shrives, 2003) and use reporting as a means to answer their critics (Tschopp, 2005). Traditionally heavy and polluting industries like mining, automotive, oil and gas have been the leaders in sustainability reporting (KPMG, 2015). Thus, using organisations in environmentally sensitive sectors as a proxy for community, media and NGOs as the salient stakeholders, first hypothesis is:

H<sub>1</sub>: Organisations operating in highly environmental sensitive sector, as compared to other organisations prepare sustainability reports of a higher quality.

### ***Consumer Contiguous Sector (CCS)***

Consumers who have a negative image of a firm are likely to have negative evaluations of its products, whereas, consumers with a positive image of firm are likely to positively evaluate the products of the firm (Dawkins & Lewis, 2003). Reporting practices may be decided with consumers in focus and are a means to manage the media (Haddock-Fraser & Fraser, 2008). Consumers may reward the socially responsible behaviour of the organisation by collective purchasing of its products which is referred as “carrot mob participation” (Hutter, Hoffmann, & Mai, 2015). Thus organisations in consumer contiguous sectors direct their sustainability communication towards their consumers and may be obliged to make concrete changes in their sustainability initiatives under their influence (Devinney, Auger, Eckhardt, & Birtchnell, 2006). Using organisations in consumer contiguous sectors as a proxy for consumers as the salient stakeholders, second hypothesis is:

H<sub>2</sub>: Organisations operating in consumer contiguous sector as compared to other organisations prepare sustainability reports of a higher quality.

### ***Financial Sector (FS)***

Organisations in the financial sectors usually face higher pressure from the shareholders and investors to prepare quality disclosures. While making long term investment decisions, experienced investors look for sustainability related disclosures (Holm & Rikhardsson, 2008). Investors use their voting rights at the annual meetings to give the desired direction to sustainability initiatives (O'Rourke, 2003). Besides shareholder activism, there is a rise in socially responsible investing, whereby, the investors screen the funds on the basis of organisation's social reputation (Berry & Junkus, 2013). Using organisations in financial services as proxy for investors and shareholders as salient stakeholders, third hypothesis is:

H<sub>3</sub>: Organisations operating in financial services sector face high pressure from investors and shareholders prepare sustainability reports of a higher quality as compared to other organisations

### **Size of the organisation**

MNEs and large organisations come in limelight due to higher social impact and the scale of operations and therefore need investors' confidence (Legendre & Coderre, 2013). Such organisations need to get their reports audited (Fernández-Feijóo-Souto, Romero, & Blanco, 2012) and consequently have higher sustainability ratings (Reverte, 2009). The legislation also makes reporting mandatory for large organisations (Laurinkevičiūtė & Stasiškienė, 2011). Studies have shown positive influence of size of

the organisation on disclosure quality in sustainability reports (Lorenzo, Alvarez, & Sanchez, 2009). Small firms are less likely to take up social and environmental projects and report thereon due to limitations of resources, inadequate knowledge and low media visibility (Orth & Kohl, 2013). MNEs and large organisations usually have more employees who are organised, represented by a trade union and are usually more salient (Leea, Kimb, Lee, & Lia, 2012). Employees are the crucial audiences of reporting (Spence, 2009). In order to study the influence of employees on disclosure quality, size of the organisation is used as a proxy for salience of employees. Thus, our fourth hypothesis is:

H<sub>4</sub>: MNEs and large sized organisations face high pressure from employees to prepare sustainability reports of a high quality.

### **Region related regulatory framework (RRRF)**

Studies have pointed that reports of certain regions as more elaborate, primarily reasoned by regulatory requirements. In South Africa it is mandatory to publish a sustainability report on “report or explain” basis (Dhingra, Singh, & Magu, 2014). In India also it is regulated (Singh & Verma, 2014). Interestingly, the reports select the issues based on the regulatory preferences in the concerned geographical region. For example, reports from Asian countries like China, Japan and Taiwan emphasize more on green production, whereas, European countries focus more on packaging waste management because of directives of European Government. The spotlight of German reports is sustainability projects and use of renewable energy because of “Energiewende” movement which encourages use of alternative energy sources. Reports of North America emphasize on environment sustainability and supply chain (Szekely & Brocke, 2017). Using Region related regulatory framework as a proxy for salience of regulators and government, our fifth hypothesis is:

H<sub>5</sub>: Disclosure Quality is influenced by region related regulatory framework

### **Listing status**

Since stakeholder protection is more prominent in organisations listed on the stock exchange, such organisations are more likely to behave responsibly towards society and environment to prepare quality reports (Jackson & Apostolakou, 2010). The organisations that fail to submit sustainability report may be penalized by stakeholders in the form of decreased market return (Amer, 2015). Sustainability disclosures are a means to reduce information asymmetry between the managers and stakeholders (Cormier, Ledoux, & Magnan, 2011).

H<sub>6</sub>: Listed organisations are under greater stakeholders influence to prepare high quality

sustainability reports than other organisations

### **3. Research Methods**

This section gives an overview of the method used in this study including source of data, description of the data, coding process and statistical procedures. The method used in the study is an extension of the work by Fernandez-Feijoo, Romero, & Ruiz (2014) and Vukic (2015).

#### ***Data***

The study takes secondary data from GRI database. GRI is a not for profit organisation with the aim of promoting economic, social and environmental sustainability across the globe by providing reporting framework. It also supports organisations in adapting sustainability initiatives (Corporate Register.com, 2013). Its reporting framework is considered to be most popular for standalone sustainability reporting (KPMG, 2015).

The given database has organisation and report related information. Organisation related information is used as proxy for stakeholder salience which is independent variables. Report related information in the database is used to extract a dimension of disclosure quality using factor analysis which is used as dependent variable. Using sequential multiple regression, this study measures the influence of salient stakeholders on disclosure quality.

#### ***Data cleaning***

Data for a period of 3 years; 2015 to 2017 were used in the study. Out of the 4405 observations in the database, only 2447 could be used as missing part of data of 1958 observations were beyond statistical maneuverability. A preliminary analysis was done on 2447 observations and case wise diagnostics reported 7 observations as outliers. These observations were also omitted and final analysis was done on 2440 observations.

#### ***Sample description***

#### ***Independent variables: Organisation related information used as proxy of stakeholder salience***

The organisation related information obtained from database relates to industrial sectors (classified into 38 industrial sectors), size, listing status and region. Referring to industry classification benchmark by FTSE4Good indices, the organisations are classified into Environmentally Sensitive Sector (ESS), Consumer Contiguous Sector (CCS), and Financial Sector (FS) (Jackson & Apostolakou, 2010). Categorizing stakeholders into five broad categories; community, NGOs and media; customers; employees; regulators

and shareholders and investors, this study uses organisation related information as a proxy for stakeholder salience. Industries in Environmentally Sensitive Sector (ESS) are being used as proxy for community, media and NGOs salience; industries in Consumer Contiguous Sector (CCS) for consumers as salient stakeholders; industries in Financial Sector (FS) and listing status are used as proxy for investors and shareholder salience; size of the organisation is used as proxy for employee salience and Region Related Regulatory Framework (RRRF) is used as proxy for salience from regulatory authorities (Fernandez-Feijoo, Romero, & Ruiz, 2014).

Thus, organisation related information is used as proxy for stakeholder salience and are used as independent variables. The report related information are used to extract a factor for DQ and subsequently used as dependent variable.

**Table 1: Description of independent variables**

Independent variables	Components	Number (%)
Environmentally Sensitive Sector (ESS)	Industries in energy, water, waste management, automotive, construction and real estate, mining, forest and paper, logistics, agriculture and transportation	927(38)
	Others	1513(62)
Consumer Contiguous Sector (CCS)	Industries in energy, water, food and beverages, healthcare, textiles and apparel, financial services, retail, education, tourism, commercial services, toys, computer and other hardware, household and other personal products, consumer durables, equipments, media and telecommunications, nonprofit and services	958(39.2)
	Others	1483(60.8)
Financial sector (FS)	Industries in automotive, aviation, chemicals, computers, conglomerates, construction and construction materials, consumer durables, energy and energy utilities, financial services, healthcare, household and personal products, media, metals products, real estate, retailers, technology hardware, telecommunications, textiles and apparel and toys.	1626(66.6)
	Others	815(33.4)
Size	Small and medium enterprises	225(9.2)
	Large	1452(59.5)
	Multinational enterprises	764 (31.3)
Listing status	Listed	1610(66)
	Non Listed	831(34)
Region Related Regulatory Framework (RRRF)	Africa	51(2.1)
	Europe	954(39.1)
	Asia	771(31.6)
	Latin America and the Caribbean	318(13)

	Northern America	287(11.8)
	Oceania	60(2.5)

***Dependent Variable: Using report related information to measure Disclosure Quality (DQ)***

On the basis of existing literature, three characteristics of DQ of a sustainability report are identified. By applying factor analysis using Principal Component Analysis (PCA) on these three characteristics, one dimension of DQ is extracted which is used as dependent variable.

1. **Level of adherence to GRI:** GRI provides guidelines and format for shaping the sustainability reports and improving the usefulness and quality of information. GRI guidelines on sustainability disclosures have the potential to significantly improve the disclosure quality, its usefulness for the stakeholders and its impact on the organisation (Willis, 2003). The reporting organisation may refer to GRI with different levels of stringency. Information may be disclosed on all the elements some of them while preparing the report. Accordingly, the reporters declare an application level of “In Accordance – Comprehensive” or “In Accordance - Core” in decreasing order of the coverage (Christofi, Christofi, & Sisaye, 2012).
2. **Assurance of report and reference to assurance standards:** Assurance refers to getting the sustainability report verified by an independent third party; the assurer, to provide confidence to stakeholders regarding the authenticity of the report Manetti & Toccafondi (2012); The External Assurance of Sustainability Reporting (2013). Besides checking the quality and accuracy of the information, independent assurance demonstrates one’s commitment to corporate responsibility (Hodge, Subramaniam, & Stewart, 2009). It reflects that the reporting company has gone the extra mile that helps bridge the credibility gap in sustainability reports (Manetti & Toccafondi, 2012). It makes reports more trustworthy and improves stakeholder confidence in the information provided (Fernández-Feijóo-Souto, Romero, & Blanco, 2012). Assurance Standards provide a basis for assuring the sustainability report by specifying guidelines for the underlying systems and processes along with recommendations for improvements in the report quality. Assurers may refer to Accountability’s AA1000 standards, IFAC’s International Standard on Assurance Engagements (ISA 100) or GRI guidelines for assurance (Hamadeen, 2007).
3. **Web link to the report:** Disclosures may be in the form of web based reports or hard copy reports, standalone sustainability reports or some sections

in annual reports (Gray, 2006). A transition from web 1.0 to web 2.0, use of social media, option of social book marking, RSS feeds, interactive feedback mechanism or giving an option to readers to rate the content may enhance the quality of disclosures. Providing a web link to the report enables the readers to browse and read the content easily (Ashbaugh, Johnstone, & Warfield, 1999).

**Table 2: Sample description of components of Dependent variable: Disclosure Quality (DQ)**

Components of DQ	Categories	Number (%)
Level of adherence to GRI	In Accordance – Comprehensive	311(12.7)
	In Accordance – Core	1767(72.4)
	Undeclared	363(14.9)
Assurance of report and reference to assurance standards	Yes	790(32.4)
	No	1651(67.6)
Web link to the report	Yes	56(2.3)
	No	2384(97.7)

### *Years of reporting/ reporting frequency*

The quality of sustainability disclosures evolves and improves with time due to reasons like better understanding of the issues, increase in regulatory environment and mimetic competitive pressure (Tregidga & Milne, 2006). All the variables are expressed as a percentage of years reported to total period under study.

### *The hypothesized model*

Disclosure Quality (DQ) = f (Influence of salient stakeholders)

Disclosure Quality (DQ) =  $\alpha_0 + \alpha_1$  ESS (proxy for community and media salience) +  $\alpha_2$  CCS (proxy for consumer salience) +  $\alpha_3$  financial sector (proxy for investor salience) +  $\alpha_4$  listing status (proxy for investor salience) +  $\alpha_5$  size (proxy for employee salience) +  $\alpha_6$  RRRF (proxy for salience of government and regulators) + error ( $\alpha$ )

### *Statistical procedures*

To find causal relationship between dependent variable and independent variables, Step wise Multiple Regression analysis is applied on data using SPSS 21. In regression analysis,  $R^2$  is a measure of model fit that explains the regression's explanatory power.

It explains the variability in the dependent variable explained by the independent variable. The Beta coefficients (Standardised coefficients) indicate the strength of relationship i.e., how strongly the independent variable influences the dependent variable. Positive (or negative) beta coefficient value shows the increase (or decrease) in dependent variable due to one unit increase (or decrease) in independent variable. Significant beta values for each model show that the values of partial correlation and unstandardized slope are also significant. The P-value indicates the level of at which results are statistically significant. Usually, a P-value of 5 percent or less shows that the results are significant.

### ***Testing for assumptions for sequential multiple linear regression analysis***

Assumptions of linearity, normality, absence of Multicollinearity and Heteroscedasticity are tested before further analysis. On a sample size of 2440 observations, linearity between the independent and dependent variables are tested using scatter plots. The normality of dependent variable is checked graphically. To ensure that the data is free from Multicollinearity, all four criteria are checked in each of the proposed model. For all the variables, Pearson's coefficient of correlation is below 0.8, Tolerance Level ( $1-R^2$ ) is more than 0.20, Variance Inflation Factor is less than 5 and Condition Index value is below 30. Auto correlation occurs when observations show a repeated pattern over a period of time or errors in regression model follow a pattern. A Durbin Watson value of 1.357 (between 1.5 and 2.5) shows that residuals are independent and the data is free from problem of auto correlation. Homoscedasticity or homogeneity of variance means all variables have the same finite variance. It is checked using scatter plot to see that the error terms along the regression line are equal (Mason & Perreault, 1991).

### ***Using Factor Analysis to extract a dimension of DQ***

We find a measure of report quality based on the above categorical variables expressed as a percentage of years reported to total number of years under study (percentage type of the report, percentage adherence level, percentage external assurance, percentage reference to assurance standard and percentage web link) by applying factor analysis using Principal Component Analysis on SPSS 21. The factor scores thus obtained are used as a measure of DQ quality in a sustainability report. The component matrix in Table 3 shows the amount of variance accounted for by each variable in the resultant factor score.

**Table 3: Component Matrix**

S No.	Variables	Component 1
1	Percentage GRI adherence level ratio	0.832
2	Percentage reference to assurance standard ratio	0.771
3	Percentage web link	0.837

The factor extracted explains 66.250% of the total variance. It is significant with Kaiser-Meyer-Oklín measure of sample adequacy of 0.678 and Bartlett’s Test of Sphericity showing approximate Chi –square value of 1694.191 and p value .0.

**4. Analysis of Results**

This paper analyses influence of salient stakeholder groups on the disclosure quality of sustainability reports.

**Results of Correlation Analysis**

The Karl Pearson’s correlation is calculated to find moderate degree of positive correlation between the variables as shown in Table 4 shows the correlation between the variables.

**Table 4: Correlation coefficients**

	DQ	ESS	FS	CCS	RRRF	Listing Status
ESS	.427**					
FS	.498**	.358**				
CCS	.427**	-.061**	.304**			
RRRF	.658**	.337**	.426**	.381**		
Listing Status	.503**	.269**	.422**	.230**	.355**	
Size	.505**	.280**	.396**	.229**	.362**	.498**

\*\*p<0.01

**Sequential Multiple Regression Analysis**

To develop a model for predicting the DQ on the basis of ESS, CCS, FS, size, listing status and RRRF, Step wise Multiple Regression analysis is used. Following Table 5 summarizes the regression results.

**Table 5: Results of stepwise multiple regression analysis**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Collinearity Statistics		Adjusted R Square	F
		B	Std. Error	Beta		Tolerance	VIF		
1	(Constant)	-1.834	.045		-40.579*				
	RRRF	.493	.011	.658	43.107*	1.000	1.000	.432**	1858.223**
2	(Constant)	-2.428	.051		-47.724*				
	RRRF	.411	.011	.548	36.367*	.874	1.144		
	Listing Status	.597	.029	.308	20.442*	.874	1.144	.515**	1296.909**
3	(Constant)	-2.684	.053		-50.893*				
	RRRF	.377	.011	.503	33.622*	.829	1.207		
	Listing Status	.420	.031	.217	13.508*	.717	1.395		
	Size	.321	.024	.215	13.337*	.713	1.403	.548**	986.642**
4	(Constant)	-2.843	.053		-53.375*				
	RRRF	.347	.011	.462	30.797*	.782	1.279		
	Listing Status	.384	.031	.198	12.585*	.709	1.411		
	Size	.288	.024	.193	12.206*	.702	1.424		
	ESS	.312	.027	.164	11.389*	.848	1.179	.571**	811.512**
5	(Constant)	-3.137	.054		-57.611*				

				*				
	<b>RRRF</b>	.283	.012	.377	24.537*	.679	1.472	
	<b>Listing Status</b>	.339	.029	.175	11.575*	.702	1.425	
	<b>Size</b>	.254	.023	.170	11.195*	.695	1.439	
	<b>ESS</b>	.415	.027	.219	15.366*	.794	1.259	
	<b>CCS</b>	.422	.028	.217	15.214*	.788	1.270	.608**
6	<b>(Constant)</b>	-3.174	.055		-			
	<b>RRRF</b>	.273	.012	.365	23.490*	.661	1.513	
	<b>Listing Status</b>	.309	.030	.160	10.407*	.674	1.483	
	<b>Size</b>	.238	.023	.160	10.441*	.682	1.467	
	<b>ESS</b>	.382	.028	.201	13.797*	.750	1.334	
	<b>CCS</b>	.395	.028	.203	14.037*	.759	1.318	
	<b>FS</b>	.149	.029	.079	5.068**	.660	1.516	.612**
a. Dependent Variable: Disclosure Quality								
b. All results significant at 0.01% level of significance								

The explanatory power of the model increases as independent variables are added to the model. Initially, the model has  $R^2$  value of .432 indicates that 43.2% of the variability in the dependent variable (disclosure quality) is measured by the independent variable, RRRF. RRRF is the most significant variable highlighting the influence of government and regulators. DQ varies across different regions due to differences in laws and also due to influence of regional issues on selection of sustainability projects. The results show the positive influence of RRRF on disclosure quality. Given the differences in the legislation and awareness level of stakeholders, it may be concluded that disclosures are more in developed regions as the stakeholders are more aware and educated, and are in a position to influence the disclosure quality. Moreover, legislation is more strongly implemented in developed regions. A mention of this is found in studies in developing nations like Bangladesh (Hossain, Islam, & Andrew, 2006), Iran (Talebnia, Vakilifard,

Yaghoubneshad, & Alikhani, 2013) and Brazil (Flores, Villardon, & Galindo, 2016). In developing nations, the disclosures are low and are mainly done by organisations that are subsidiaries of large organisations.

The explanatory power of the model increases to 51.5% by adding the listing status as independent variable to the model. Listed organisations are believed to be under greater stakeholder influence to prepare high quality disclosures than the not listed organisations (Rahman Belal A. , 2001)

The explanatory power of the model increases to 54.8% by adding size of the organisation as a proxy for employee salience. Employee cooperation is essential for success of any initiative of the organisation. The results show that large size organisations and MNEs prepare better quality disclosures. Similar results have been reported by Gamerschlag, Möller, & Verbeeten (2011) and Ghazali (2007). One of the reasons could be that large organisations usually have access to more resources and hence are in a position to spend and disclose more on such initiatives. However, there is a sluggish increase in sustainability initiatives among enterprises also (Bos-Brouwers, 2010).

By adding ESS as an Independent variable, the explanatory power of the model increase to 57.1%. Organisations in ESS sector are under greater influence from NGOs and environmental organisations and thus prepare high quality disclosures. The results are in consonance with a study by Dilling (2010). NGOs and environmental organisations are usually involved with the corporates in implementation of the social and environmental projects as they being the specialist in the area possess good knowledge of the community issues. Corporates usually route their funds for social and environmental projects through NGOs (DarKo, 2014). NGOs are consulted to incorporate their opinion in planning and execution of such projects. To extend this finding, we may add that for improving DQ, local community may also be consulted.

The explanatory power of the model increases to 60.8% by adding CCS as independent variable. Page & Fearn in 2005 found that consumers value a strong sustainability agenda and they care about corporate sustainability reputation when it comes to purchasing decisions. Consumers focus on factors like fair products but also value a sustainability agenda and quality disclosures.

Finally, when FS is added as independent variable, the explanatory power of the model rises to 61.2%. The results show that shareholders and investors are increasingly concerned about corporate sustainability reporting practices and influence the quality of

sustainability disclosures in organisations in financial sectors. The results are in consonance with studies by Willis (2003) and Cormier, Magnan, & Velthoven (2005) where they highlighted the economic significance of sustainability reports and their role in pleasing investors and driving investment behaviour.

The results indicate significantly positive influence of all stakeholders on disclosure quality. A P-value of 0 for all variables in each model reaffirms that the results are significant. As more independent variables are added to the model, the explanatory power of the model increases and the final model has explanatory power of 61.2%. All hypotheses are supported showing that RRRF, listing status, size of the organisation and being in CCS, ESS or FS have a significantly positive influence on DQ. A negative constant term for all the models signifies negligible DQ in case of absence of the stakeholder influence.

## 5. Conclusions

This paper analyses effect of stakeholder salience on disclosure quality using secondary data from GRI database for 2440 organisations for a period of 3 years from 2014 to 2017. The data included organisation specific information and report specific information. Organisation specific information including size of the organisation, Region related regulatory framework, listing status and sector of operation; are used as proxies for independent variable; stakeholder salience. The report specific information including reference to GRI, adherence level, taking external assurance, reference to any assurance standard, and provision of web link to the report in GRI database is used to find a dimension of disclosure quality of sustainability report by factor analysis using Principal Component Analysis. The factor scores thus obtained are used as dependent variable representing disclosure quality of a sustainability report. Using step wise multiple regression analysis, we found that organisations where sustainability reporting is regulated, large size, listed organisations, organisations in environmentally sensitive sectors, organisations in financial sectors and organisations in consumer contiguous sector prepare high quality sustainability disclosure. The study concludes that salient stakeholder's influence the disclosure quality in a sustainability report and recommends designing appropriate ways for involving the stakeholders. The organisations may involve their employees in social and environmental projects by seeking voluntary contributions from them (like old clothes and books) and by taking their services in projects like tree plantation and cleanliness drives. Employee suggestions may be taken by discussions with their representatives in trade union or by having integrated web portals, suggestion boxes etc. (Fairbank & Williams, 2001). Investor's opinions may be

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captured using a survey or by putting it across as an agenda during the annual general meetings or by having an interactive website (Cooley, 1999).

### References

- Amer, E. (2015). "The Penalization of Non-Communicating UN Global Compact's Companies by Investors and Its Implications for This Initiative's Effectiveness." *Business & Society* .
- Ashbaugh, H., Johnstone, K. M., & Warfield, T. D. (1999). "Corporate reporting on the Internet". *Accounting horizons* , 13 (3), 241-257.
- Azapagic, A. (2004). "Developing a Framework for Sustainable Development Indicators for the Mining and Minerals Industry". *Journal of cleaner production* , 12 (6), 639-662.
- Baviera-Puig, A., Gómez-Navarro, T. T., García-Melón, M., & García-Martinez, G. (2015). "Assessing the Communication Quality of CSR Reports. A Case Study on Four Spanish Food Companies." *Sustainability* , 7 (8), 11010-11031.
- Bebbington, J., Larrinaga, C., & Moneva, J. M. (2008). "Corporate Social Reporting and Reputation Risk Management." *Accounting, Auditing & Accountability Journal* , 21 (3), 337-361.
- Berry, T. C., & Junkus, J. C. (2013). "Socially Responsible Investing: an Investor Perspective." *Journal of Business Ethics* , 112 (4), 707-720.
- Boesso, G., & Michelon, G. (2010). "The Effects of Stakeholder Prioritization on Corporate Financial Performance: an Empirical Investigation." *International Journal of Management* , 27 (3), 470-496.
- Bos- Brouwers, H. E. (2010). "Corporate Sustainability and Innovation in SMEs: Evidence of Themes and Activities in Practice." *Business Strategy and the Environment* , 19 (7), 417-435.
- Brammer, S., Jackson, G., & Matten, D. (2012). "Corporate Social Responsibility and Institutional Theory: New Perspectives on Private Governance." *Socio-Economic Review* , 10 (1), 3-28.
- Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics* , 108 (4), 467-480.
- Campbell, D., Craven, B., & Shrive, P. (2003). "Voluntary Social Reporting in Three FTSE Sectors: a Comment on Perception and Legitimacy." *Accounting, Auditing & Accountability Journal* , 16 (4), 558-581.

- Carroll, A. B. (1999). "Corporate Social Responsibility Evolution of a Definitional Construct." *Business & society*, 3, 268-295.
- Christofi, A., Christofi, P., & Sisaye, S. (2012). "Corporate Sustainability: Historical Development and Reporting Practices." *Management Research Review*, 35 (2), 157-172.
- Cooley, T. (1999). "Interactive Communication--Public Relations on the Web." *Public Relations Quarterly*, 44 (2), 41-42.
- Cormier, D., Ledoux, M. J., & Magnan, M. (2011). "The Informational Contribution of Social and Environmental Disclosures for Investors." *Management Decision*, 49 (8), 1276-1304.
- Cormier, D., Magnan, M., & Velthoven, B. V. (2005). "Environmental Disclosure Quality in Large German Companies: Economic Incentives, Public Pressures or Institutional Conditions?" *European accounting review*, 14 (1), 3-39.
- Corporate Register.com. (2013). *CR Perspectives 2013 Global CR Reporting Trends and Stakeholder Views*. London: Corporate Register.com.
- DarKo, E. (2014). *Private Sector and NGO Engagement*. Economic And Private Sector Professional Evidence And Applied Knowledge Services.
- Dawkins, J., & Lewis, S. (2003). "CSR in Stakeholder Expectations: and Their Implication for Company Strategy." *Journal of Business Ethics*, 44 (2-3), 185-193.
- Deakin, S., & Hobbs, R. (2007). "False dawn for CSR? Shifts in Regulatory Policy and the Response of the Corporate and Financial Sectors in Britain." *Corporate Governance: An International Review*, 15 (1), 68-76.
- Devinney, T. M., Auger, P., Eckhardt, G., & Birtchnell, T. (2006). "The Other CSR: Consumer Social Responsibility." *Stanford Social Innovation Review*, 1-14.
- Dhingra, P., Singh, A. K., & Magu, G. (2014). "Limitations of Current Financial Reporting: A Case for Integrated Reporting." *Business Analyst April - September, 2014*. Available at SSRN 2583283., 35 (1), 85 - 110.
- Dilling, P. F. (2010). "Sustainability Reporting in a Global Context: What are the Characteristics of Corporations that Provide High Quality Sustainability Reports- an Empirical Analysis." *The International Business & Economics Research Journal*, 9 (1), 19-30.
- Fairbank, J. F., & Williams, S. D. (2001). "Motivating Creativity and Enhancing Innovation Through Employee Suggestion System Technology." *Creativity and innovation management*, 10 (2), 68-74.

## STAKEHOLDERS INFLUENCE ON SUSTAINABILITY DISCLOSURES: AN EMPIRICAL INVESTIGATION

Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). "Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework." *Journal of Business Ethics* , 122 (1), 53-63.

Fernández-Feijóo-Souto, B., Romero, S., & Blanco, S. R. (2012). "Measuring Quality of Sustainability Reports and Assurance Statements: Characteristics of the High Quality Reporting Companies." *International Journal of Society Systems Science* , 4 (1), 5-27.

Flores, N. T., Villardon, P. G., & Galindo, P. V. (2016). "Sustainability Multivariate Analysis Based on the Global Reporting Initiatives(GRI) Framework Using a Case Study: Brazil Compared to Spain and Portugal." *International Journal of Sustainable Development and Planning* , 1-11.

Fonseca, A., Macdonald, A., Dandy, E., & Valenti, P. (2011). "The State of Sustainability Reporting at Canadian Universities." *International Journal of Sustainability in Higher Education* , 12 (1), 22-40.

Gamerschlag, R., Möller, K., & Verbeeten, F. (2011). "Determinants of Voluntary CSR Disclosure: Empirical Evidence from Germany." *Review of Managerial Science* , 5 (2-3), 233-262.

Ghazali, N. A. (2007). "Ownership Structure and Corporate Social Responsibility Disclosure: some Malaysian Evidence." *Corporate Governance: The international journal of business in society* , 7 (3), 251-266.

Global Reporting Initiative (GRI) (2013). *The External Assurance of Sustainability Reporting*. Global Reporting Initiatives Research And Development Series.

Gray, R. (2006). "Social, Environmental and Sustainability Reporting and Organisational Value Creation? Whose Value? Whose Creation?" *Accounting, Auditing & Accountability Journal* , 19 (6), 793-819.

Guenther, E., Hoppe, H., & Poser, C. (2006). "Environmental Corporate Social Responsibility of Firms in the Mining and Oil and Gas Industries: Current Status Quo of Reporting Following GRI Guidelines." *Greener Management International* , 53 (7-25).

Habek, P., & Wolniak, R. (2015). "Assessing the Quality of Corporate Social Responsibility." *Quality & quantity* , 50 (1), 399-420.

Haddock-Fraser, J., & Fraser, I. (2008). "Assessing Corporate Environmental Reporting Motivations: Differences Between 'Close- to- Market' and 'Business- to- Business' Companies." *Corporate Social Responsibility and Environmental Management* , 15 (3), 140-155.

Hamadeen, R. M. (2007). Assurance of Corporate Stand-alone Reporting: Evidence from the UK. Doctoral dissertation, University of St Andrews.

Hodge, K., Subramaniam, N., & Stewart, J. (2009). "Assurance of Sustainability Reports: Impact on Report Users' Confidence and Perceptions of Information Credibility." 19(3), *Australian Accounting Review* , 19 (3), 178-194.

Hodge, R. (2014). "Mining Company Performance and Community Conflict: Moving Beyond a Seeming Paradox." *Journal of Cleaner Production* , 84, 27-33.

Holm, C., & Rikhardsson, P. (2008). "Experienced and Novice Investors: Does Environmental Information Influence Investment Allocation Decisions?" *European Accounting Review* , 17 (3), 537-557.

Hossain, M., Islam, K., & Andrew, J. (2006). "Corporate Social and Environmental Disclosure in Developing Countries: Evidence from Bangladesh." *Proceedings of the Asian Pacific Conference on International Accounting Issues, October 2006*. Hawaii.

Hutter, K., Hoffmann, S., & Mai, R. (2015). "Carrotmob A Win–Win–Win Approach to Creating Benefits for Consumers, Business, and Society at Large." *Business & Society* .

Jackson, G., & Apostolakou, A. (2010). "Corporate social responsibility in Western Europe: an institutional mirror or substitute?" *Journal of Business Ethics* , 94 (3), 371-394.

Jose, P. D., & Saraf, S. (2013). "Corporate Sustainability Initiatives Reporting: A Study of India's Most Valuable Companies." *IIM Bangalore Research Paper* , 1-40.

Kolk, A. (2008). "Sustainability, Accountability and Corporate Governance: Exploring Multinationals' Reporting Practices." *Business Strategy and the Environment* , 17 (1), 1-15.

Kolk, A., & Pinkse, J. (2010). "The Integration of Corporate Governance in Corporate Social Responsibility Disclosures." *Corporate Social Responsibility and Environmental Management* , 17 (1), 15-26.

KPMG. (2015). *Currents of Change, KPMG Survey of Corporate Responsibility Reporting 2015*. KPMG.

Laurinkevičiūtė, A., & Stasiškienė, Ž. (2011). "SMS for Decision Making of SMEs." *Clean Technologies and Environmental Policy* , 13 (6), 797-807.

Legendre, S., & Coderre, F. (2013). "Determinants of GRI G3 application levels: the case of the fortune global 500." *Corporate Social Responsibility and Environmental Management* , 20 (3), 182-192.

## STAKEHOLDERS INFLUENCE ON SUSTAINABILITY DISCLOSURES: AN EMPIRICAL INVESTIGATION

- Leitoniene, S., & Sapkauskienė, A. (2015). "Quality of Corporate Social Responsibility Information." *Procedia-Social and Behavioral Sciences* , 213, 334-339.
- Liket, K., & Maas, K. (2016). "Strategic Philanthropy Corporate Measurement of Philanthropic Impacts as a Requirement for a "Happy Marriage" of Business and Society." *Business & Society* , 55 (6), 889-921.
- Lorenzo, J. M., Alvarez, I. G., & Sanchez, I. G. (2009). "Stakeholder Engagement and Corporate Social Responsibility Reporting: The Ownership Structure Effect." *Corporate Social Responsibility and Environmental Management* , 16 (2), 94-107.
- Manetti, G., & Toccafondi, S. (2012). "The Role of Stakeholders in Sustainability Reporting Assurance." *Journal of Business Ethics* , 107 (3), 363-377.
- Mason, C. H., & Perreault, W. D. (1991). "Collinearity, Power, and Interpretation of Multiple Regression Analysis." *Journal of Marketing research* , 28 (3), 268-280.
- Michelona, G., Pilonatob, S., & Riccerib, F. (2015). "CSR Reporting Practices And The Quality Of Disclosure: An Empirical Analysis." *Critical Perspectives on Accounting* , 33, 59-78.
- O'Rourke, A. (2003). "A New Politics of Engagement: Shareholder Activism for Corporate Social Responsibility." *Business Strategy and the Environment* , 12 (4), 227-239.
- Orth, R., & Kohl, H. (2013). "Towards Corporate Sustainability—a Small and Medium-sized Enterprise Perspective." In *Proceedings 5th European Conference on Intellectual Capital, Bilbao, Spain*, (pp. 323-334).
- Page, G., & Fearn, H. (2005). "Corporate Reputation: What do Consumers Really Care About?" *Journal of Advertising Research* , 45 (3), 305-313.
- Rahman Belal, A. (2001). "A study of Corporate Social Disclosures in Bangladesh." *Managerial Auditing Journal* , 16 (5), 274-289.
- Rauffleta, E., Cruzb, L. B., & Bresc, L. (2014). "An Assessment of Corporate Social Responsibility Practices in the Mining and Oil and Gas Industries." *Journal of Cleaner production* , 84, 256-270.
- Reverte, C. (2009). "Determinants of Corporate Social Responsibility Disclosure Ratings by Spanish Listed Firms." *Journal of Business Ethics* , 88 (2), 351-366.
- Sharma, S. (2000). "Managerial Interpretations And Organizational Context As Predictors Of Corporate Choice Of Environmental Strategy." *Academy of Management journal* , 43 (4), 681-697.

Singh, A., & Verma, P. (2014). "From Philanthropy to Mandatory CSR: A Journey Towards Mandatory Corporate Social Responsibility in India." *European Journal of Business and Management* , 6 (14), 146-153.

Spence, C. (2009). "Social and Environmental Reporting And The Corporate Ego." *Business Strategy and the Environment* , 18 (4), 254-265.

Stray, S., & Ballantine, J. (2000). "A Sectoral Comparison of Corporate Environmental Reporting and Disclosure." *Corporate Social-Responsibility and Environmental Management* , 7 (4), 165-177.

Szekely, N., & Brocke, J. v. (2017). "What can We Learn from Corporate Sustainability Reporting? Deriving Propositions for Research and Practice from over 9,500 Corporate Sustainability Reports Published between 1999 and 2015 Using Topic Modelling Technique." *PloS one* , 1, 1-27.

Talebnia, G., Vakilifard, H., Yaghoubnezhad, A., & Alikhani, R. (2013). "Corporate Social and Environmental Disclosure in Developing Countries: Evidence from Iran." *Management science letters* , 3 (1), 135-146.

Tate, W. L., Ellram, L. M., & Kirchoff, J. F. (2010). "Corporate Social Responsibility Reports: A Thematic Analysis Related to Supply Chain Management." *Journal of supply chain management* , 46 (1), 19-44.

Tregidga, H., & Milne, M. J. (2006). "From Sustainable Management to Sustainable Development: a Longitudinal Analysis of a Leading New Zealand Environmental Reporter." *Business Strategy and the Environment* , 15 (4), 219-241.

Tschopp, D. J. (2005). "Corporate Social Responsibility: A Comparison between the United States and the European Union." *Corporate Social Responsibility and Environmental Management* , 1, 55-59.

Unerman, J. (2008). "Strategic Reputation Risk Management And Corporate Social Responsibility Reporting." *Accounting, Auditing & Accountability Journal* , 21 (3), 362-364.

Vukic, N. M. (2015). "Corporate Social Responsibility Reporting: Differences among Selected EU Countries." *Business Systems Research* , 6 (2), 63-73.

Wanderley, L. S., Lucian, R., Farache, F., & Filho, J. M. (2008). "CSR Information Disclosure on the Web: A Context-Based Approach Analysing the Influence of Country of Origin and Industry Sector." *Journal of Business Ethics* , 82 (2), 369-378.

Wijk, J. V., & Persoon, W. (2006). "A Long-haul Destination: Sustainability Reporting Among Tour Operators." *European management journal* , 24 (6), 381-395.

## STAKEHOLDERS INFLUENCE ON SUSTAINABILITY DISCLOSURES: AN EMPIRICAL INVESTIGATION

Willis, A. (2003). "The role of the global reporting initiative's sustainability reporting guidelines in the social screening of investments." *Journal of Business Ethics* , 43 (3), 233-237.

Young, S., & Marais, M. (2012). "A Multi- level Perspective of CSR Reporting: The Implications of National Institutions and Industry Risk Characteristics." *Corporate Governance: An International Review* , 20 (5), 432-450.