Firm-specific characteristics and environmental disclosure: A study of selected listed companies in Sri Lanka

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Abstract

The environment is a valuable gift for us received by nature. However, most of the activities done by people and the organizations cause damage to the environment and eventually, sustainability. To be more specific, organizations damper the environment due to their industrial works. Therefore, there is an emerging need to protect the environment. Furthermore, the concern for environmental protection is becoming high among the corporate bodies, and in the present era, organizations tend to disclose more on environmental-related activities. So, this study aims to investigate factors that determine the Environmental Disclosures (ED) and, more specifically, the relationship between Firm Characteristics and the extent of the ED of Sri Lankan listed companies. ED was measured in terms of content analysis, and environmental disclosure is quantified by referring to the guidelines (G3) laid down in Global Reporting Initiatives (GRI). Data was gathered over a period of five years from 2013-2017from top 25 companies listed on the Colombo Stock Exchange (CSE), Sri Lanka. Company characteristics as proxied by size, profitability, and age are considered explanatory variables that may influence the extent of sampled companies' environmental disclosures. The content analysis results showed that ED within annual reports are at a moderate level, and most of the companies have disclosed ED within the annual reports. The pooled regression analysis results indicate that company size and profitability are positively related to the extent of Environmental Disclosure, whereas company age has no statistically significant relationship with the extent of disclosure.

Keywords: content analysis, environmental disclosures, firm characteristics and GRI

Introduction

Over the past few years, reporting on Sustainability and Corporate Social Responsibility (CSR) has proliferated in the private sector. Sustainability development is defined as a development that fulfills the current desires without restraining the capacity of future generation to encounter their own desires (Brundtland, 1987) as the definition states that sustainability reporting is made up of economic, social and environmental factors and the accounting professionals are keen on incorporating these three elements in their annual reports. Information disclosure can take two forms, particularly; voluntary disclosures and mandatory disclosures. Voluntary Disclosures are not mandatory implies that are not directly required by Generally Accepted Accounting Principles (GAAP) or any other rule. Mandatory disclosure mostly concentrates on presenting financial statements and its' corresponding footnotes, which are compelled by laws and regulations. Ever since the beginning of 2010's, the interest in disclosure of most significant listed companies has greatly increased. The collapses of large companies listed on the stock exchange have put their greater attention on their disclosure procedure and standard setters for the rise in the peculiarity of Corporate Reporting. The expansion of sophisticated business formations, regulations, and ever-changing economies has led to stakeholders' demands to acquire information from organizations to figure out their future. So, corporate bodies must disclose all the essential information. As the major consumer of environmental resources, organizations must disclose their environmental activities to the shareholders and all other stakeholders. Organizations are being reviewed as socio-economic entities instead of only as economic entities in the present era. So, organizations have to bear responsibility for their activities, which may directly impact society. Therefore, there is a need to address the environmental impact in broad aspects while environmental reporting has become a prime reporting mechanism to communicate organizations' sustainability progress to stakeholders. In response to those concerns, many firms are voluntarily increasing their level of environmental disclosures through different ways in their annual reports. It is very difficult to identify the exact level of disclosures about environmental facts and what inspired to disclose environmental information in annual reports considering the above factors. This study attempts to discover the level of Environmental Disclosures in annual reports of Sri Lankan Listed companies and to explore whether the firm-specific characteristics (Company Size, Profitability, and Age) have a potential influence on the level of ED

Research Questions

- What is the actual level of Environmental Disclosures (ED) in annual reports of the listed companies in Sri Lanka?
- What would be the relationship between Firm-Specific characteristics and Environmental Disclosure of the listed companies on the Colombo Stock Exchange (CSE)?

Objectives of the study

- to examine the extent of Environmental Disclosures in the listed companies' annual reports in Sri Lanka over the years from 2013 – 2017.

- to examine the relationship between Firm-Specific characteristics and ED of the sampled firms listed on CSE.

Literature Review

Disclosure refers to a way of making new information known. Moreover, it is a way of people worldwide to get an idea and understand new things. In the contemporary era, disclosing the environment's facts becomes critical since the environmental issues are quite high. According to Berthelot, Cormier and Magnan (2003), ED is “A bunch of information associated with the firm’s past, current and future environmental management movements and performance”. Once the concern about the environment became high, revealing facts about the environment would also become high. Companies are using their annual reports as a way to transmit critical facts regarding their activities. Even if it is a financial or non-financial figure or else a company action, it’s a right of the stakeholders to get informed by the organization's top-level management. That clarity may create an ionic bond between the organization and its stakeholders. Except for the financial information, organizations tend to confess their CSR activities in annual reports. Gray, Owen and Adams (2009) defined theory as a clear cut, an origination of the association between things. Also, a theoretical framework merely defined as a collection of related concepts that may consist of a single theory or a combination of a number of theories (Collis & Hussy, 2009). Specifically, the three main theories, legitimacy theory, stakeholder theory and institutional theory which have been employed in the CSR literature, are integrated by considering theoretical predictive desires of CSR practices (Fernando & Lawrence, 2014).

Legitimacy theory is extracted from the notion of organizational legitimacy, which has been interpreted as “a state or position, which remains when an organization’s morality is compatible with the value system of the broad social structure of which the organization is a part. When there is an inequality between actual and potential, which remains between the two value systems, then it believes that there is a risk to the organizations’ legitimacy” (Gehan, Mousa & Naser, 2015). Stakeholder theory is a theory that describes the relationship between an organization and its stakeholders. The main idea of the stakeholder theory is the success of an organization hangs on the degree to which the organization is skillful of dealing with its relationships with stakeholder groups, for example, shareholders, employees, customers, financiers, and societies or communities (Van Beurden & Gossling, 2008). Pamela and Christopger (2003) applied Stakeholder theory to define the quantity and quality in the annual reports of Australian listed companies in voluntary ED by applying the three – dimensional model which contained stakeholder's power, economic performance, and strategic posture of Ullmann (1985) As the results of this study show that stakeholder power and strategic posture dimensions were found to be significant in explaining ED. The results indicate that shareholders, lobby groups and regulators are the dominant stakeholder groups who can claim EI in annual reports. The approach of the strategic posture dimension recommends that organizations should disclose their CSR activities in the mission statements.

Ismail, Rahman and Hezabr (2018) investigated the factors that influence Corporate Environmental Disclosure (CED) Quality of oil and gas industry in developing countries. The results revealed that out of twelve predictors, only five variables were associated with CED quality. In particularly, organization size, profitability, membership of an industry's association, foreign ownership and leverage are positively and significantly related to the degree of quality of CED. In contrast, ownership concentration, state ownership, type of company, institutional ownership, close to the market, environmental certification, and multi-nationality were insignificantly related to the level of quality of CED. Egbunike and Tarilaye (2017) examined the impact of firms' distinct characteristics on non-mandatory environmental disclosures in Nigerian listed companies. The results reveal that several companies' EI were not revealed in their annual reports, whereas some companies disclosed and detailed the information in financial terms. Subsequently, the robust regression outcome confirms all the hypotheses of the study, indicating a positive relationship between environmental disclosure, earnings per share, size, governance, and leverage of the sampled manufacturing companies listed in Nigeria. Based on that, it was suggested that administration or the governance framework of the companies should be strengthened by appointing more independent directors in the board Rainsburyand and Hao (2016) did research on Disclosures of Environmental Accounting of manufacturing and mining listed companies at China and their empirical outcomes demonstrate that bigger companies are showing greater likelihood to reveal environmental accounting related information.

Methodology

This study is a quantitative study where the researcher used company annual reports to collect data from the sample selected. Furthermore, the researcher analyzed the data with the help of content analysis and expecting a clear idea of the linkage between firm-specific characteristics and Environmental Disclosure. Therefore, the target population of this study is 297 listed companies from various sectors in CSE as of 31st December 2018. The selection of the sample for this study is narrowed down to firms with the highest market capitalization. As far as the ED measurement is concerned, GRI- G3 index has been used to calculate EDI. At the same time, the independent variables are firm-based characteristics, particularly firm size, profitability, and company age, measured by the log of total assets, the log of ROE, and the log of years since inception, respectively.

Hypotheses of the study

H_1: Companies with a greater size disclose more on environmental information on their annual reports than companies with smaller sizes.

H_2: Companies with higher financial profitability disclose more on environmental aspects than companies with lower profitability.

H_3: Companies with higher age disclose more environmental information than companies with lower age.

Results and Discussions

Table 1. Results of Multiple Regression Analysis

EDI	Coefficient	Std.Error	t-Statistic	Prob.	Sig
TA	0.205	0.0206	9.95	0.000	***
ROE	0.108	0.0252	4.27	0.000	***
CA	0.0125	0.0391	0.32	0.749	
_cons	-0.595	0.2423	-2.46	0.015	
R - squared	0.5147				
AdjR - squared	0.5026				
F Value	42.78				
Prob> F	0.000				

*** p<0.01, ** p<0.05, * p<0.1

Table 1 presents the findings of multiple regression analysis for the association between firm- specific characteristics and ED as the outcome variable. In this study, the value of adjusted R square is 0.5026, which denotes that 50.26% of the variability in the outcome variable (ED) is defined by the three predictors namely firm size, profitability, and company age, while the remaining 49.74% of the variability in outcome variable is because of the factors which have not been modeled in the study. The F value is discovered to be 42.78 at $P < 0.01$. It is as indication that the model is robust at explaining the changes in the outcome variable. Out of all three independent variables, size of the firm followed by the Profitability is making the highest influence towards Disclosing Environmental related information by 0.205 and 0.108 respectively. At the same time company age is causing the lowest influence which is 0.0125 on ED. And it is predicted to increase ED by 0.205%when company size goes up by 1%, increase by 0.108% when profitability goes by 1%, increase 0.0125% when company age goes by 1% and is predicted to be

-0.595% when all independent variables are zero. Based on the test results of pooled OLS, the multiple regression would be of the following form;

$EDI = -0.595 + 0.205X_1 + 0.108X_2 + 0.0125X_3$

Where,

X_1 = Size of the firm

X_2= Profit of the firm

X_3 = Age of the firm

Hypotheses Testing

Table 2. Testing of Hypotheses

	Coefficient	P value	Decision criteria	Supported or Not supported
H_1	0.205	0.000	P<0.01	Supported
H_2	0.108	0.000	P<0.01	Supported
H_3	0.0125	0.749	P>0.1	Not supported

Conclusions and Recommendations

The findings indicate that the firm size and profitability have a significant positive relationship while it was found that the company's age had no statistically significant association with ED. Hence, it can be concluded that it is possible that the degree of ED for each of the sampled companies is not similar and which might have resulted in conflicting situations regarding the Coefficients of ED. Moreover, that is because ED is not mandatory in Sri Lanka. A proper system needs to be developed to enhance the motivational factors to disclose environmental information,. The system should be designed to change the attitude of the managers, stakeholders, and the general public to engage in environmental-related activities and consider more about the organizational disclosure of environmental-related information. The findings reveal that companies with higher age do not disclose more on environmental information than companies with lower age. So, it can encourage companies with more experience in the relevant field to disclose the environmental related information more.

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