

## Whether Corporate Social Responsibility is used to Cover-up Earnings Management Practices? An Empirical Study on Listed Manufacturing Companies in Sri Lanka

T.D.S.H Dissanayake<sup>1#</sup> and A.R Ajward<sup>2</sup>

<sup>1</sup> Department of Accountancy and Finance, Rajarata University of Sri Lanka

<sup>2</sup> Department of Accounting, University of Sri Jaywardenepura

#for correspondence; [sulo.hiranthi@gmail.com](mailto:sulo.hiranthi@gmail.com)

**Abstract** – This study investigates whether corporate social responsibility (CSR) is used as a strategy to oppose the negative perception on companies by engaging in earnings management (EM) practices by using a sample of listed manufacturing companies in Colombo Stock Exchange (CSE) for the period 2014 to 2017. EM practices were measured using real activity based EM (RAEM) by using the measurement model of Roychowdhury (2006) and the framework of the Global Reporting Initiative (GRI) was used as the measure for the CSR. The findings of the study indicated a combatively high level of RAEM (mean: 9.891) a below average level of CSR (mean: 0.474) in Sri Lankan context. Furthermore, the findings based on the correlation and panel regression analyses indicate that CSR is being misused as a strategy to cover up the negative perception that would arise from EM practices. These findings are expected to have significant policy implications, particularly in controlling the misuse of CSR disclosure for opportunistic purposes.

**Key words:** Earnings Management, Corporate Social Responsibility, GRI Index and Entrenchment Strategy

### Introduction

In the contemporary turbulent business environment, accounting earnings is the mostly cited performance indicator and also is of the major interest of stakeholders (Prior et al. 2008). These parties are more interested about organizational activities and their support assist the existence of the organization, and these parties use financial reports to distinguish the best performing firms from poor performers, and such reports enable their financial decision making (Healy & Wahlen 1999). In such a context, Prior et al. (2008) argues that under managerial opportunism, some managers tend to manipulate earnings in smaller or larger amounts than the reality without violating Generally Accepted Accounting Principles (GAAP)--to get the support of stakeholders. Subramanyam (1996) argue due to this flexibility, accrual accounting is subject to managerial discretion. In fact, Watts and Zimmerman (1978) define earnings management as managers exercising their discretion over the accounting numbers and intervention to mislead stakeholders' decisions. Further, Prior et al. (2008) argue that in the absence of the potential for personal benefits, rational managers would not engage in earnings management and they identified three sets of motives for earnings management practices that include, practices of capital markets, contractual arrangements, and regulatory motivations.

Further, Zahra, Priem and Rasheed (2005) identified these deliberate management actions, contrived to disguise the real value of a firm's assets, transactions, or financial position, and will have negative consequences for shareholders, employees, the communities in which firms work, society at large, and manager's reputations, job security, and careers. Prior et al. (2008) reveals that due to these negative consequences, managers are under the threat of facing rogue behavior of employees, misunderstanding from customers, pressure from investors, defection from partners, legal action from regulators, boycotts from activists, illegitimacy from the community, and exposure from the media. Ultimately, these threats may destroy the firm's reputation capital.

As a result of above negative consequence managers are motivated to (mis)use corporate social responsibility (CSR) disclosure as a strategy to oppose stakeholders' involvement and attentiveness, which could cost a manager his/her job and damage the firm's reputation as an entrenchment strategy (Prior et al. 2008). In such a situation, a positive relationship that could be expected between the EM and CSR. However, CSR is related to ethical and moral issues concerning corporate decision-making and behavior and, as such, addresses complex issues like environmental protection, human resources management, health and safety at work, local community relations, and relationships with suppliers and customers (Chapple & Moon). Further, Prior et al (2008) explains engaging CSR not only improves stakeholder support, but also enhance corporate performance.

Further, legitimacy theory supports this argument since the manager's motivation under the managerial opportunism hypothesis can also be explained by legitimacy theory. Lindblom (1994, p.2) defines "legitimacy" as "a condition or status, which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part". According to this theory, a firm always tries to be legitimate in the larger social system and if there is a disparity between the two value systems (legitimacy gap), they may apply one of four methods to cover their illegitimacy. One method is to manipulate the perception of the relevant public by distracting attention from one issue to another. For example, when there is a negative perception regarding environmental pollution caused by a firm, the manager intentionally accentuates other activities of the firm, such as its offerings to environmental charities or investments in green energy technologies, to improve the firm's reputation (Choi et al. 2013). Moreover, Muttakin et al. (2015) identified emerging markets are more engaged in the misuses of CSR to cover up the costs of EM.

Most of the extant studies had used accrual-based earnings management as a proxy to measure earnings management, but Roychowdhury (2006) successfully argues that real activity-based earnings management is highly likely to have an adverse impact on various stakeholders by distorting normal operating activities rather accrual-based earnings management. Furthermore, Jayawardhena (2017) claims that there is a still significant gap and more work needs to be done to find out extant of earnings management in Sri Lanka. Thus, this study uses real earnings management to measure EM practices. Based on these observations, the main objective of this study is to investigate how Corporate Social Responsibility is being (mis)used as a cover-up strategy to compensate the costs of the Earnings Management practices through real earnings management in listed manufacturing firms in Sri Lanka. Manufacturing sector is selected here due to being one of the vital sectors in the Sri Lankan economy. In addition to this main objective, this study also expects to assess levels of EM and CSR in the Sri Lankan context.

The findings of this study are expected to be beneficial to policymakers in controlling the misuse (i.e., abuse) of CSR disclosure for deviant intentions. Furthermore, this study is expected to fill an empirical gap in the foreign and local context.

The remainder of this study is organized as follows. The next section describes the conceptual framework and methodology adopted in this study. Thereafter, the results of the analyses and a discussion is made. The conclusions derived are explained in the last section.

### **Methodology**

This section explains the research methodology of this study, where the sample selection procedure, data collection, the conceptual framework and operationalization of the variables and measurements are elaborated.

Since this study investigates the *association* between how CSR is being used as an entrenchment strategy to compensate the costs of the EM Practices, a quantitative approach was followed. A similar approach is used in the studies of Prior et al. (2008) and Choi et al. (2012) and other prominent extant studies.

The population for this research consists of all companies listed on the Colombo Stock Exchange under the manufacturing sector. As of 31<sup>st</sup> March 2017, there were 38 listed companies of which 28 were selected as the research sample covering the period 2014 to 2017 based on information availability, the financial period ending 31<sup>st</sup> March and being listed throughout the selected period; and no biases were observed based on the omitted firms.

Figure 1 below indicates the conceptual diagram, which was developed based on the comprehensive literature review performed.

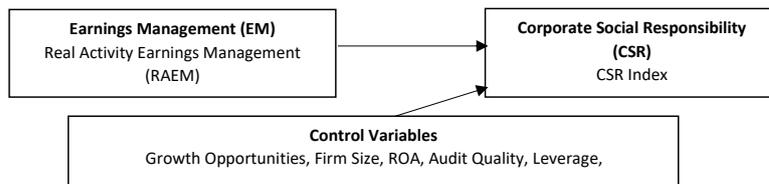


Figure 1: Conceptual Diagram  
Source: Author Constructed

Accordingly, the following hypothesis was developed:

**H<sub>1</sub>: CSR is being misused to cover-up the costs of EM practices (i.e., there is a positive association between level of EM and CSR disclosure)**

Table 1 below illustrates the operationalization of the selected dependent, independent and control variables.

Table 1: Operationalization

| Variable  | Measurements   | Extant Studies that used similar operationalization                                       |
|---|--|---|
| <b>Earnings management (EM) – Independent Variable</b>            |  |   |
| Real Activity based Earnings Management – (RAEM <sub>i,t</sub> )  | Abnormal Cash Flow from Operations for firm <i>i</i> for period <i>t</i> , Abnormal Production Cost of firm <i>i</i> for period <i>t</i> , Abnormal Discretionary Accruals for firm <i>i</i> period <i>t</i> , which are assessed based on Roychowdhury Model (2006) | Hong and Anderson (2011); Kim et al. (2012); Cho and Chun (2015); Bozzolan et al. (2015); |
| <b>Corporate Social Responsibility (CSR) – Dependent Variable</b> |  |   |
| CSR Index (CSR <sub>i,t</sub> )                                   | CSR Disclosure Index developed based on the GRI Framework and consider 79 performance indicators (economic, environmental and social performance based indicators) and were scored based on a structured content analysis.   | Thilakasiri (2012); Choi et al. (2013); Cho and Chun (2015); Ghabayen (2016)              |
| <b>Control Variables</b>  |  |   |
| Growth Opportunities - (GROW <sub>i,t</sub> )                     | Ratio of market to book equity the end of the period <i>t</i> of firm <i>i</i> .   | Choi et al. (2013); Cho & Chun (2015); Peni and Vahamaa (2010); Bozzolan et al.(2015);    |

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|---|---|--|
| Firm Size - ( $FS_{i,t}$ )              | Natural logarithm of total assets of firm $i$ for the period $t$ .  | Watts and Zimmerman (1990); Bozzolan et al. (2015); Kim et al. (2012); Hong and Andersen (2011); Yip et al. (2011); Chih et al. (2008); Almahrog (2014) and Gras Gil et al. (2016) |
| Financial Performance - ( $ROA_{i,t}$ ) | Ratio between earnings before taxes and interest and assets the end of the period $t$ of firm $i$ .   | Watts & Zimmerman (1990); Skinner (2003); Jo and Kim (2007) and Almahrog (2014)  |
| Audit Quality - ( $AQ_{i,t}$ )          | Coded '1' if the auditor is a BIG 3 audit firm in Sri Lanka (i.e., KPMG, EY or PwC), and '0' otherwise of the firm $i$ for the period $t$ . | Kim et al. (2012); Becker et al. (1998); Mutttakin et al. (2015)   |
| Financial Leverage - ( $LEV_{i,t}$ )    | Ratio of total debt at the end of the period to the total assets at the end of the period $t$ of firm $i$ .                                 | Watts and Zimmerman (1990), Bozzolan et al.(2015); Gras Gil et al.(2016); Choi et al. (2013); Almahrog (2014)  |

Source: Author Constructed

In order to satisfy the objectives of this study, data cleaning and screening techniques (i.e., winsorization and treating of missing data), diagnostic test analysis (i.e., testing for linearity, normality, multicollinearity, and heteroskedasticity), descriptive statistics, Bivariate and Multivariate analyses were performed. The regression model that will be applied is as follows:

$$CSR_{i,t} = \alpha + \omega_1 EM_{i,t} + \omega_2 GROW_{i,t} + \omega_3 FS_{i,t} + \omega_4 ROA_{i,t} + \omega_5 AQ_{i,t} + \omega_6 LEV_{i,t} + \epsilon_{i,t}$$

The finding obtained by the application of these analysis strategies are discussed in the next section.

### Results and Discussion

The results of the descriptive analysis, correlation analysis and the ordered logistics and panel versions of the multivariate regression analyses are presented with the resulting discussion in this section.

Table 2: Descriptive Statistics

| Variable*    | Obs | Mean   | Median | Min    | Max    | Std.  |
|--------------|-----|--------|--------|--------|--------|-------|
| $CSR_{i,t}$  | 112 | .474   | .512   | .025   | 1.418  | .447  |
| $RAEM_{i,t}$ | 112 | 9.891  | 13.299 | -2.381 | 14.762 | .654  |
| $GROW_{i,t}$ | 112 | 1.881  | 1.161  | .563   | 5.781  | 1.682 |
| $FS_{i,t}$   | 112 | 21.538 | 21.304 | 20.268 | 22.892 | .900  |
| $ROA_{i,t}$  | 112 | .103   | .0924  | .036   | .197   | .049  |
| $LEV_{i,t}$  | 112 | .391   | .400   | .033   | .805   | .162  |
| $AQ_{i,t}$   | 112 | .893   | 1      | 0      | 1      | .310  |

\*Definitions of these variables are indicated in Table 1.

$GROW_{i,t}$ ,  $FS_{i,t}$ ,  $ROA_{i,t}$ ,  $LEV_{i,t}$  variables were winsorized at 5% due to the presence of outliers

The results of the descriptive statistics show that the level of real earnings management ( $RAEM_{i,t}$ ) is 9.89 and the median value is 13.299; while the standard deviation of this variable recorded as 0.654. The result indicates that there is no significant variation of this variable. In the Korean context, the recorded real earnings manipulation value is -0.017 (Cho & Chun 2015). Accordingly, result shows that there is a comparatively high real earnings management in Sri Lanka. In terms of the  $CSR_{i,t}$ , the mean value is 0.474 and there is a high level of variation as indicated by a high degree of standard deviation. This finding shows that there a below average level of CSR disclosure done in Sri Lankan companies.

This finding is consistent with Thilakasiri (2012); Dissanayake, Tilt and Lobo (2016), who also find low levels of CSR disclosure.

Table 3: Correlation, Ordered Logistic and Panel Regression Results

| Variables           | Correlation with CSR <sub>i,t</sub> | Ordered Logistic* |            |      | Panel regression* |            |
|---------------------|-------------------------------------|-------------------|------------|------|-------------------|------------|
|                     |                                     | Coeff.            | Std. Error | VIF  | Coeff.            | Std. Error |
| RAEM <sub>i,t</sub> | 0.0899*                             | 0.004             | 0.011      | 1.03 | 0.004**           | 0.002      |
| GROW <sub>i,t</sub> | 0.0295                              | 0.057             | 0.088      | 1.26 | -0.006            | 0.021      |
| FS <sub>i,t</sub>   | 0.4784**                            | 1.040***          | 0.093      | 1.34 | -0.169**          | 0.071      |
| ROA <sub>i,t</sub>  | 0.1413**                            | 4.150**           | 0.745      | 1.19 | 0.052             | 0.294      |
| LEV <sub>i,t</sub>  | 0.1125                              | -0.462            | 0.385      | 1.18 | -0.218*           | 0.130      |
| AQ <sub>i,t</sub>   | 0.0751**                            | -0.403            | 0.289      | 1.15 | 0.015             | 0.132      |

\*Dependent Variable is CSR<sub>i,t</sub>

Definitions of these variables are indicated in Table 1.

\*p<0.10; \*\*p<0.05; \*\*\*p<0.01

In Table 3, the correlation coefficient and panel regression coefficients for RAEM<sub>i,t</sub> show that there is a positive and significant association ( $p<0.10$ ) between EM and CSR, and thus the main Hypothesis H<sub>1</sub> of this study that claimed that CSR is being misused to cover up the costs of the EM practices is supported. Along with this finding, managerial opportunism is observed, and managers seem to use CSR as a defensive strategy to maintain the best relationship with the stakeholders. There are several extant results support this hypothesis that include Pagon and Volpin (2005), Prior et al. (2008), who also found that managers who act in pursuit of private benefits by distorting earnings information are motivated to engage in corporate social responsibility to protect their entrenchment. Furthermore, Chih, Shen, and Kang (2008) also reported a high extent of earnings aggressiveness in socially responsible firms. Similarly, Dabor and Uyagu (2018, p. 99) also find a positive relationship with the earnings management and corporate social responsibility in manufacturing companies. Thus, based on the results of the correlation and panel regression analyses, the hypothesis posited under this study that claimed that CSR is being misused to cover up managers' opportunistic behavior via earnings management is supported, which is also consistent with related extant studies.

### Conclusion

This study examined whether corporate social responsibility (CSR) disclosure is being (mis)used as an strategy to compensate (i.e., cover-up) costs of the earnings management (EM) practices by using listed manufacturing firms over the period 2014 to 2017 in the Sri Lankan context. Furthermore, as an ancillary objective, the levels of both EM and CSR were assessed. In terms of the findings on the levels, the results revealed that there is *comparatively* a high degree (mean: 9.891) of manipulation in accounting earnings using real activities and a below average level of CSR (mean: .474) in the Sri Lankan context. Furthermore, the correlation and panel regression results indicated that CSR disclosure is being misused to cover-up the negative consequences of earnings manipulation to manage the stakeholders' expectations by finding a positive significant relationship between CSR and real activity based earnings management.

This study is expected to fill the empirical gap in the local context and used a unique proxy to measure earnings management (i.e., real activity earnings management, RAEM) in the measurement of earnings management. The above findings are expected to have significant policy implications. Policymakers and regulators need to monitor and control the use of CSR disclosure so that such information will not be misused or abused for covering-up or compensate practices such as earnings manipulations.

This study has certain limitations and the findings should be interpreted subject to these. This study considered only listed manufacturing firms in the Colombo Stock Exchange. Future researchers could expand the number of sectors as well as consider other countries as well. Further, this study has used the real activity earnings management to capture earnings management, and alternative proxies that

are available (such as accrual-based earnings management techniques, earnings misstatements, etc.), could be used in future research.

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