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THE IMPACT OF CORPORATE SUSTAINABILITY PRACTICES ON FINANCIAL PERFORMANCE - AN EMPIRICAL STUDY ON LISTED MANUFACTURING COMPANIES OF SRI LANKA

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Abstract

The modern world business organizations tend to operationalize the concept of sustainability into their bottom line in order to gain the competitive advantage and meet the increased demands of various stakeholder groups. Following the notions of Stakeholder Theory (ST) and Resource Based View (RBV), this study aims to assess whether Corporate Sustainability Practices (CSP) contribute towards enhancing the Corporate Financial Performance (CFP) in listed manufacturing companies of Sri Lanka over the period of 2012-2017. Further this paper addresses the timely need of research on the holistic concept of Sustainability, which has been replaced with constricted corporate social responsibility neglecting economic and environmental dimensions of the broader concept. The research design of this study deploys content analysis as the qualitative method and statistical analysis (panel data regression model) as the quantitative method. Disaggregated measures of sustainability have been used to assess CSP using the checklist following Taib, Ameer and Haniff (2012), while the CFP is assessed on the dimensions of Return on Assets (ROA). This paper reported that there is significant positive relationship between CSP and CFP in listed manufacturing companies of Sri Lanka.

Keywords: Corporate Sustainability Performance (CSP), Corporate Financial Performance (CFP) Stakeholder theory (ST), Resource Based View (RBV)

Introduction

Corporate sustainability has elevated the constituents of firm performance into a very broad level while emphasizing its utmost importance than ever before due to intense market competition and changing attitudes of stakeholders. According to Hart & Milstein (2003) CSP has been regarded as a key indicator for standing out competition and long term survival of businesses in corporate sector. The concept of sustainability could be defined as fulfilling current needs in such a way where future generation's ability to fulfill theirs would not be compromised. (Hahn & Figge, 2011) According to contribution of Dixon-Fowler, Slater, Johnson, Ellstrand, & Romi, (2013) to CSP research, CSP is an

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extended version of typical financial performance into the notion of triple bottom line where environment and social aspects of performance is also incorporated and integrated in evaluating the firm's overall performance. The impact on CSP on CFP of corporates has been interpreted in different ways while drawing different conclusions on phenomena. One perspective concludes the CSP would result in value creation to the firm whereby the firm risk would be significantly reduced (Affirms positive relationship) while another perspective emphasizes that incorporating CSP in to the firm performance would result in a deviation from firm's main objective of profit making whereby emphasizing the negative relationship between CSP and CFP. (Yu & Zhao, 2015)

In light of this, we, by undertaking this study attempt to explore the relationship between CSP and CFP in the manufacturing sector companies of Sri Lanka. A world renowned sustainability strategist Dr. R.A Fernando emphasized the criticality of embedding sustainability practices into corporate strategies for a developing Asian country like Sri Lanka to survive and thrive in the global economy by highlighting the point that Sri Lankan corporate sector should have a shift from being shareholder focused to stakeholder focused in order to facilitate sustainable value creation. (Sirimanna, 2011)

By undertaking this study, this paper comprehensively explores the annual reports (Mainly focusing on the sustainability reports where available) and the company webpages of listed manufacturing companies of Sri Lanka for 6 years adopting the cross-sectional panel data approach to understand and analyze the relationship between CSP and CFP. Even though there is a lack of cohesive determinants to evaluate CSP due to its qualitative nature in the existing literature of CSP research this study deploys a checklist approach where CSP would be measured based on disaggregated measures in terms of four perspectives / indexes namely community, diversity, environment and ethics. (Taib, Ameer, & Haniff, 2012)

Literature Review

In order to reflect CSP in firm performance disclosures, products and services offered by the firm, corporate policies and procedures should address environment and social components of triple bottom line reporting approach in addition to the core economic component. (Elkington, 1998) However, it is a well-accepted fact that the primary concern of a firm should be maximizing profits leading to maximization of shareholder wealth. According to neo classical economists, surpassing the economic objective which turns out to be the primary goal of a company by focusing on social and environment goals could be detrimental to the company and to its stakeholders as well. Therefore, corporates are very concerned whether sustainability initiatives would really contribute towards enhancing firm performance. (Chang & Kuo, 2008, pp. 365-380)

Since many successful organizations have identified corporate sustainability as a strategic and fundamental goal while embedding sustainability initiatives into their corporate policies and ground level operations, understanding the direct relationship and its between CSP on CFP has become crucial.

The importance of integrating sustainability practices and its role on having an impact on CFP came in to prominence since sustainability started to be perceived as an indicator of growth and enhancing firm value. (Steurer & Konrad, 2008) However, since sustainability has been regarded as an emerging area of research, Hull and Rothenberg (2008) claims that the relationship between CSP and CFP is complex Alshehhi, Nobanee, & Khare (2018) in their study on the literature trends and future research potential of the impact of CSP on CFP, out of 78% of the publications done on the relationship between CSP and CFP in top tier journals reported a positive relationship. Brammer, Brooks and Pavelin (2006) claim that there is a negative relationship between sustainability practices and corporate financial performance. (Lee, Faff, & Smith, 2009)

Resource Based View and Stakeholder theory have been regarded as the two main theoretical foundations linked to understand the influence and the causality of the relationship. RBV could be used to explain the both directions of the relationship where the positive relationship is affirmed based on the fact that CSP equips firms with unique capabilities which would result in attainment of competitive

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advantage leading to enhanced financial performance. (Haffar & Searcy, 2017) Another perspective of RBV determines a negative relationship when financial performance is hindered because resources are channeled towards less profitable sustainable activities. (Endrikat, Guenther, & Hoppe, 2014) On the hand Stakeholder theory affirms that fulfillment of the stakeholder interests (this represents stakeholders which come under environment and social components other than shareholders) would lead to enhanced financial performance. (Chernev & Blair, 2015, pp. 1412-1425)

This paper principally relies on the annual reports and the web pages of the sample companies based on the arguments made under the legitimacy theory. Legitimacy theory elaborates that firms opt for periodic disclosures on sustainability practices in order to showcase and prove their ethical responsibility and legitimacy by providing information to facilitate an interaction with multiple stakeholder groups. (Wilson, 2013) and (Freeman, 1984) Hence, Majority of the studies available on CSP-CFP relationship in existing literature rely on the sustainability disclosures when assessing CSP whereby sustainability practices not disclosed by firms won't be captured when evaluating CSP.

Sample and Methodology

Sample

The sample for this study consist of 36 manufacturing sector companies of Sri Lanka over the period of 2012-2017 (2011/12 financial year to 2016/17 financial year) for which annual reports were available on Colombo Stock Exchange (CSE) website and the information available on company web pages were used. This study used the content analysis method by using cross sectional Panel data approach with a sample size of 216 firm/year observations.

Methodology

The qualitative and intricate nature of CSP disclosures makes it complex to measure sustainability. (Moldavska, 2017) In the global context the researches are able to use sophisticated market indices like Dow Jones Sustainability Index (DJSI) as an aggregate measure to evaluate total sustainability. (Robinson, Kleffner, & Bertels, 2011) However in Sri Lankan context, it is difficult to use an aggregated measure like DJSI index since there is no such index developed for Sri Lankan listed companies and also sustainability is still not given such prominence in Sri Lanka as the global players. In light of this, we used the checklist of disaggregated measures of sustainability practices developed by Taib, Ameer and Haniff (2012) to assess the CSP of the sample companies. The checklist consist of four interrelated approaches to measure sustainability performance of sample companies namely *community*, which measures the contribution and involvement of sample companies in the social projects; *diversity*, which measures commitment of sample companies towards human resources development, employment opportunities and training ; *ethics*, which measures the relationship of sample companies with its internal stakeholders ; *environment*, which captures the impact on environment from the product and processes of sample companies and their collective efforts on preserving the environment. (Taib, Ameer, & Haniff, 2012) The checklist consist of 12 items on community dimension, 21 items on diversity, 13 items on ethics and 22 items on environment. (See Table 1)

According to Taib, Ameer and Haniff (2012) the scoring procedure for sustainability was inspired by the work of Morhardt et al., (2002) where If a company provides basic / preliminary information relating to an item on the checklist, it was scored as 1 and if it did not, it was scored 0. If a company not only provided standard information but also an enhanced disclosure it was scored 2. A higher score of 2 reflects a company's superior and immense commitment to its stakeholders. (Social and Environment aspects) Return on Assets has been used to assess the Corporate Financial Performance (CFP) of sample companies.

Analysis and Discussion

Hypotheses development and multiple regression model

This study is intended to understand and analyze the *significance* and the *direction* of CSP-CFP relationship of the sample selected. Therefore the following two hypotheses are developed and tested accordingly.

H1 : There is a significant relationship between Corporate Sustainability Performance (CSP) and Corporate Financial Performance (CFP) of Listed Manufacturing sector companies of Sri Lanka

H2 : There is a positive relationship between Corporate Sustainability Performance (CSP) measured from community, diversity, ethics and environment aspects of the checklist developed

This study deployed a multiple regression model as given below to examine the effect of four perspectives used to gauge corporate sustainability performance (Community, Diversity, Ethics and Environment) along with Sales growth (SG) on ROA.

$$ROA_{it+1} = \alpha + \beta_1 CI_{it} + \beta_2 DI_{it} + \beta_3 ETI_{it} + \beta_4 EI_{it} + \beta_5 SG_{it} + \varepsilon_{it}$$

In order to check for the reliability of the items listed under the above mentioned four aspects/ indices of sustainability Cronbach's coefficient alpha was used. Cronbach's coefficient alpha reported a value of 0.774 which indicates a higher level of internal consistency for the items underlying the four aspects of CSP.

It was reflected that there is a positive correlation between all four aspects / indices of corporate sustainability performance (CI, DI, ETI and EI) and Corporate Financial performance (I.e: ROA) Apart from EI all the other 3 indices (CI, DI and ETI) demonstrated a significant positive relationship to ROA. Hence as discussed above, it could be observed that this model has complied with the value creation theory of suitability. Fixed effect model has been used to run the regression model and adjusted R² was 0.8773 indicating a relatively higher value. Overall, these results conclude that corporate sustainability performance of listed manufacturing companies in Sri Lanka positively affects their financial bottom line.

Further it could be evidenced from descriptive statistics that overall there is a noticeable gradual improvement of sustainability disclosures on all 4 aspects (CI, DI, ETI and EI) over the past six years. (See table 01 – Disclosure by year) In terms of Community index it could be observed that majority of the manufacturing sector companies engage in charity programs (Denoted by C1 - Corporate giving programs and amount given) In terms of Diversity index it could be observed that diversity related issues have not been addressed according to their corporate disclosures while majority of organizations tend to facilitate equal employment opportunities. In terms of Environment index it could be observed that majority of the organizations are concerned about their impact on the environment. (See Table 02 – Disclosures by items)

Conclusion, Limitations and Recommendations

This study was intended to explore the significance and the direction of relationship between Corporate Sustainability Performance (CSP) and Corporate Financial Performance (CFP) of listed manufacturing sector companies of Sri Lanka by using the disaggregated measures of disclosures for corporate sustainability practices. The cross sectional panel data approach has been used for the empirical endeavor by using a quite large sample comprised of 216 firm/year observations for 36

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companies across 6 financial years. The main findings of this study were that overall there is a significant and positive relationship between CSP and CFP. Hence the study draws a conclusion as to embedding sustainability initiatives to corporate strategies would enhance the financial bottom line eventually.

This study has its own inherent limitations such as the sample size, difficulty of generalizing results since this study is restricted only to a single sector. Also judgment has been used in the scoring procedure to gauge CSP and secondary data has been used. Hence it can be recommended that future researches to use relatively larger longitudinal covering multi-disciplinary contexts (several sectors) and to use primary data as well by adopting a mixed method for analysis.

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Table 01

This table reports the descriptive statistics of 04 aspects / indices used to measure corporate sustainability performance. CI – Community Index, DI – Diversity Index, ETI – Ethics Index and EI – Environment Index.

Disclosure by years

Year	CI		DI		ETI		EI	
	Mean	STD	Mean	STD	Mean	STD	Mean	STD
2012	6.08	6.15	7.11	7.57	7.92	2.18	10.22	6.07
2013	6.08	6.15	9.61	7.35	8.42	2.25	11.28	7.05
2014	9.72	6.62	12.28	8.22	10.42	3.17	14.44	7.98
2015	11.50	7.19	13.61	8.86	11.08	3.28	16.56	8.17
2016	13.61	6.28	17.50	8.81	12.14	3.73	19.83	7.39
2017	15.14	5.09	19.42	8.91	13.19	3.58	24.19	6.80

Table 02

Disclosure by items

Disclosure by items	Mean	STD
Community Index (CI)		

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C1 - Corporate giving program and amount given	1.19	0.60
C2 - Partnership with local schools or community-based groups	1.09	0.71
C3 - Public/private partnership	1.06	0.82
C4 - Community programs	0.83	0.79
C5 - Employee volunteer program	0.71	0.84
C6 - Exceptional and innovative charitable-giving programs	0.30	0.59
C7 - Current and former workforce volunteering	0.19	0.51
C8 - Exceptional volunteer program	1.10	0.84
C9 - Contribution to charitable foundations	1.07	0.88
C10 - Performance in community activism	1.06	0.69
C11 - New initiative and awards received	1.08	0.75
C12 - Commitment to donating	1.10	0.76
Diversity Index (DI)		
D1. Commitment to workforce diversity	1.07	0.72
D2. Recruitment and promotion	1.04	0.72
D3. Hiring and promoting minority and women	1.14	0.75
D4. Standards for overseas operations	0.16	0.49
D5. Implementation of innovative work/life programs	1.17	0.67
D6. Representation of women and minorities	0.55	0.80
D7. Discrimination in hiring and promotion	0.62	0.65
D8. Minorities constituents to have a voice	0.74	0.82
D9. Women's training for advancement	0.51	0.73
D10. Training and advancement programs on diversity	0.70	0.79
D11. Diversity related issues	0.00	0.00
D12. Women in advertising and marketing materials	0.42	0.60
D13. Participation in women and minority programs	0.69	0.72
D14. Women and minorities at position with substantial profit (loss)	0.05	0.26
D15. Diversity training for employees	0.81	0.78
D16. Gender equality in wages	0.81	0.64
D17. History of violations-abusive labour Conditions	0.31	0.62
D18. Exclusion of women from top management position	0.03	0.22
D19. Civil discrimination lawsuit against the company	0.00	0.07
D20. Equal employment opportunity	1.33	0.62
D21. Open work environment	1.10	0.81
Ethical Index (ETI)		
1. Written code of business conduct	1.34	0.51
2. Beyond the legal minimums	1.08	0.40
3. Equal employment opportunity codes	1.23	0.60
4. Conflict of interest	0.00	0.00
5. Commercial bribery	0.35	0.52
6. International business relationships	1.19	0.47

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7. Use of confidential and proprietary information	0.32	0.53
8. Export compliance and international economic sanctions	0.98	0.80
9. Political contributions	1.12	0.34
10. Antitrust and competition laws	0.00	0.00
11. Health, safety and environment	1.36	0.57
12. Harassment	0.19	0.47
13. Operated within framework of code of business conduct	1.37	0.50
Environment Index (EI)		
1. New product/process to reduce or minimize environmental impact	1.27	0.77
2. Effectiveness of the Company's environmental policies	1.04	0.64
3. New technologies and/or redesigned products for conversation	0.91	0.55
4. Environmental report	1.00	0.96
5. Commitment to change with respect to environmental performance	0.74	0.57
6. Proactive environmental efforts	0.92	0.80
7. Positive steps toward preserving environment	0.92	0.79
8. Environmental policies and accountability	0.76	0.51
9. New development or use of clean energy	1.01	0.77
10. Conservation of energy and natural resources	0.66	0.66
11. Specific environmental policies	0.69	0.62
12. Compliance with environmental laws and regulations	0.78	0.49
13. Company's major policies to prevent air and water pollution	0.54	0.61
14. Recycling efforts	0.90	0.80
15. Industry leader in environmental performance	0.62	0.74
16. Compliance with environmental status	1.12	0.63
17. Voluntary programs	0.56	0.62
18. Nature and amount go to EPA violations and fines paid	0.00	0.00
19. Pollution remediation	0.46	0.56
20. Civil lawsuits related to environmental performance in past 3 years	0.25	0.56
21. Environmental remediation liabilities	0.59	0.60
22. Current substantial liabilities	0.35	0.66