Role of Gender Diversity on Corporate Social Responsibility: Evidence from a Developing Economy

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Abstract

While the importance of Corporate Social Responsibility (CSR) increased during the COVID-19 period, it is also imperative to increase the female representation of the board. Empirical evidence suggests inconclusiveness of the results in the country, period and methods applied. In addition, there is a dearth of studies in the world as well as developing economies. To bridge these research gaps, this study examined the impact of gender diversity on corporate social responsibility in the developing economy as Sri Lanka during the COVID-19 period. A quantitative study using a survey design was conducted with sample size of 133 companies listed at Colombo Stock Exchange using random sampling. The data analysis included descriptive analysis and correlation using Statistical Package for Social Science (SPSS) and Partial Least Squares Regression Model through SMART PLS 3.0. This study found the level of gender diversity in Sri Lanka is 10% indicating low level in the developing economy. Findings also revealed that gender diversity and legal responsibility have significant impact while economic, ethical, and philanthropic have no impact on Sri Lankan companies. Although the study is limited to listed companies and quantitative cross-sectional study, results clearly suggest an increase to the percentage of women directors on board to improve legal responsibility and further achieve sustainable goals in the economy. The findings also suggest new perspective on resource dependence theory.

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1. Introduction

Corporate Social Responsibility (CSR) and its consequences for corporations have gained considerable interest from academics and professionals. As CSR was introduced as "a combination of strategies, practices, and principles that firms follow to strength and create relationships towards stakeholders and the environment" (Carroll, 2009, p. 499-500), it has become an essential tool for companies and operations throughout a variety of industries with the rise in environmental and ethical concerns. For instance, García-Sánchez (2020) examined how companies responded during the most difficult times of the pandemic and what goals they set for themselves to overcome the crisis. The study found out that certain businesses have demonstrated a strong commitment to society by implementing activities to offset Covid-19 effects through three responsibility clusters: (i) securing only the interests of shareholders and investors; (ii) promoting the well-being of society in general and vulnerable groups in particular; and (iii) integrating the previous charitable actions with commercial interests.

In Sri Lankan context, businesses are also engaged in various CSR activities at the internal levels, such as employee health, workplace safety, compensation, and employment and at the external level, such as donations, charitable giving, volunteering, providing resources to customers, and supporting the community to ensure their safety and well-being. However, the Department of Census and Statics (2020) disclosed that Sri Lankan economy has grown a negative impression caused by the Covid-19 pandemic. The stiff restriction that applies to the entire island, the implementation of immigration restrictions, and the blocking of ports and airports in other impacted countries, throughout the country, racist social distance measures have been adopted, as well as emergency health and economic procedures all affect the economic growth of Sri Lanka. These policies have a substantial influence on people's survival, families, and societies, as well as national economies and global trade. The economy of Sri Lanka shortened by 1.6% in the first quarter of 2020 and by a 2% growth (Department of Census and Statics, 2020).

The diversity of genders is one of the most significant diversity factors for companies. Gender diversity became a crucial issue for nearly all firms as a result of the Covid-19 pandemic. The pandemic has had major consequences, especially on women and girls, and will impact global attempts to meet most gender-related SDG targets, particularly those about

gender equality. However, at all levels of the workforce, including management, gender diversity is crucial. The pandemic has several industries commitment to adapting CSR strategies and activities to current health, financial, and social desires. While business companies redefine goals by considering how to fulfil financial, social, and environmental targets, the CSR tactics has eventually focused more on support to their employees, customers, and communities through donating money to health facilities or local governments, donating equipment to resist the disease, moving to the different manufacturing processes to produce tools that doctors and nurses need such as gowns, masks, and hand sanitizer (Sunday Observer, 04th August 2021).

It is sometimes stated that an overly homogeneous team may disregard significant alternatives and encourage its members' own biases in their conclusions (Asmat & Boring, 2020). It is advantageous to have a varied workforce since having a variety of perspectives is essential for growing in a workplace that is constantly changing. A culture of inclusion and equality is a useful force for innovation and growth. Diversity is seen to bring not only additional creativity but also a distinct perspective and the identification of different unsatisfied product demands that a non-diverse team would have missed. Furthermore, a company's seeming sensitivity to the issue of diversity may assist it to attract top personnel. A diversified workforce with inclusive practices and a range of viewpoints is intrinsically more competitive in a globalized economy.

Gender diversity in a workplace implies men and women hired at a comparable rate, paid evenly, and given the same working opportunities with equal promotions (UN Women, 2018, p. 5). The performance of business within an organization is impacted by the significant variations in gender diversity in the workplace. The 'business case' for gender diversity in the workplace, which refers to the argument frequently expressed by business leaders that more diverse teams and leadership help organizations expand and become more competitive, has evolved and received widespread support in recent years (Asmat & Boring, 2020).

In a different league, expanding the number of women directors on board will encourage the industry to commit to more CSR practices. Women, which constitute half of the world's human capital, are one of its most underutilized resources. Sustainable economic growth at national and global levels depends on women joining the labor force and fuller use

being made of their skills and qualifications. More working women would also help offset the negative effects of declining fertility rates and ageing populations in many OECD countries (Foster, 2016, p. 11). To achieve gender equality and empower all women and girls, or just Gender Equality, the 17 Sustainable Development Goals (SDG) of the 2030 Agenda were formed. The gender equality goal, or SDG 5, focuses on achieving real and sustained gender equality in all aspects of women's and girls' lives. This includes eliminating gender disparities, violence against women and girls, early and forced marriage, equal leadership opportunities, and universal access to sexual and reproductive rights (UN Resolution 70/1, the 2030 Agenda).

In the previous decagon, many scholars focused more on women directors' representation and their impact on corporate social responsibility. Many new empirical evidence and findings have been added to the literature as a result of these investigations. For instance, Issa and Fang (2019) and Boukattaya and Omri (2021) found female representation related to CSR reporting, Ahmed (2017) also found a considerable positive connection between CSR practices and gender-diverse boardrooms of Asian emerging economies, and Quintana-García et al. (2018) and Wu et al. (2021) also found gender diversity and CSR with positive relationship. However, Shamil et al. (2014) and Khan (2017) has presented a negative relationship between CSR and female representation on boards while Yarram and Adapa (2021) stated that women directors do not affect the individual components of CSR.

With the number of literature on women representation on board and its relations with the CSR, there is less evidence from a developing country such as Sri Lanka. While there were studies conducted in Sri Lanka on gender diversity and sustainability (Mudiyanselage, 2018; Fernando et al., 2020), this study mainly focuses on the women directors and their impact on CSR. While the studies of Mudiyanselage (2018) and Fernando et al. (2020) have used sustainability reporting as the measurement of CSR, there is no statutory requirement for sustainability reporting in Sri Lanka. As sustainability reporting is quite significant, particularly only among larger firms in Sri Lanka (Dissanayake et al., 2016), therefore, employing sustainability reporting as a CSR measurement does not yield accurate and comprehensive results. Dissanayake et al. (2016) argued that, in comparison to economic and social indicators, environmental indicators are less frequently reported in Sri Lanka listed

companies. Even though companies followed sustainability reporting, they have not disclosed the negative side and the issues of the operating activities. Hence, the full image of the sustainability reporting will not be disclosed. Similarly, there exists inconclusive evidence related to gender diversity and CSR as well as there is a dearth of studies related to gender diversity and CSR in the Sri Lankan context. On the other hand, gender diversity on board has a very critical impact on those economic and environmental environments and sustainable development. Thus, the major research problem associated with this study is whether there is an impact of gender diversity on corporate social responsibility in Sri Lanka.

This study aims to examine the impact of gender diversity on CSR elements such as economic responsibility, legal responsibility, ethical responsibility and philanthropic responsibility. The relationship between gender diversity and CSR is explained using Resource Dependence Theory (RDT). The significance of the board of directors in managing unpredictability in the external environment and gaining access to vital resources is highlighted by RDT (Hillman et al., 2009; Pfeffer & Salancik, 2003). Female directors provide numerous advantages to firms as they assist firms in better understanding specific clients and hence in gaining access to superior resources (Nadeem et al., 2017).

2. Literature Review

Gender Diversity on board is characterized by "*the presence of female directors on the board of directors of corporations*" (Carter et al., 2003, p. 33-38). It indicates the fair representation of members of various genders within the corporate board. The concept of gender diversity suggests that the corporate boards should be in better structure with suitable gender representation. According to Dutta et al. (2008, p. 70), board gender diversity is the "*presence of women on the board of directors and term it an important aspect of board diversity*". This may improve board functioning and, as a result, business performance.

On the other hand, CSR is described as "*the social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time*" (Carroll, 2009, p. 499-500). This means a business organization needs to consider the economic factors, laws, ethics, and philanthropic expectations of society. These four components imply that business has to do something for

the society. These responsibilities are not what the business firm does for itself but what the organization does for the entire society.

Empirical evidence on gender diversity and CSR showed female representation on boards have a plenteous influence on their CSR policies. For instance, Bear et al. (2010) found female representation is positively connected to CSR strength ratings. Similarly, Cabeza-García et al. (2018) emphasized that corporations with a higher female attendance move to disclose higher data about CSR activities. Furthermore, Issa and Fang (2019) and Boukattaya and Omri (2021) argued that female representation was completely associated with CSR reporting, Yasser et al. (2017) found a considerable positive connection between CSR practices and gender-diverse boardrooms of Asian emerging economies while Quintana-García et al. (2018) and Wu et al. (2021) confirmed previous findings that gender diversity and CSR have a positive relationship. While these studies found relationship between gender diversity and CSR using secondary data, Khan (2017) presented a negative connection between CSR and female representation on boards. Similarly, Yarram and Adapa (2021) argued that women on board do not result in the individual components of CSR while Fakir and Jusoh (2020) revealed female directors and sustainability performance in the Bangladesh context have no relationship. These findings suggest that there is an inconclusive relationship between gender diversity and corporate social responsibility.

In Sri Lanka, there are some empirical evidence on how gender diversity impacts CSR and financial performance. For instance, Wellalage and Locke (2013) illustrate that Sri Lankan boardrooms are not entirely varied in terms of gender, race, educational qualifications, and performance. Meanwhile, Shamil et al. (2014) found women directors are inversely linked with sustainability reporting, Rupawaththa (2017) identified considerable reverse relation between boardroom female directors and financial performances., Mudiyanselage (2018) and Fernando et al. (2020) found females on the board are positively and considerably linked to sustainability disclosure while Thambugala (2020) special inherent characteristics of female directors such as love, compassion, and empathy explicit more favor towards women and children-based CSR activities. Sri Lankan studies conducted using secondary data observed inconclusive results.

Most of the earlier studies suggest expanding the sample as well to increase the consideration of industries. In addition, most studies proposed to use different data collecting

methods including questionnaire survey because results found inconclusive results. Therefore, this study tried to bridge these gaps by examining gender diversity and CSR using a survey questionnaire in Sri Lanka. In addition, substantial number of studies use resource dependency theory (Pfeffer & Salancik, 1978) to anticipate the relationship between the presence of women on boards and CSR (Amorelli & García-Sánchez, 2021). Accordingly, this study examined the relationship between gender diversity and CSR using resource dependence theory. According to this theory, more diverse boards contribute to better access to resources, reducing reliance on environmental resources, providing different points of view, advice, legitimacy, business contacts, and information channels (Pfeffer & Salancik, 1978; Terjesen et al., 2009), and favoring the adoption of CSR policies (Hillman et al, 2002). In addition, empirical evidence from Bear et al. (2010), Cabeza-García et al. (2018), Issa and Fang (2019), Yarram and Adapa (2021), and Boukattaya and Omri (2021) mentioned a positive association between female representation and CSR. By considering the previous findings and resource dependence theory, this study argues that the representation of women directors on corporate boards impacts CSR. Therefore, the main hypothesis for this research is proposed as:

H1: There is a significant association between gender diversity and corporate social responsibility.

H1a: There is a significant association between gender diversity and economic responsibility.

H1b: There is a significant association between gender diversity and legal responsibility.
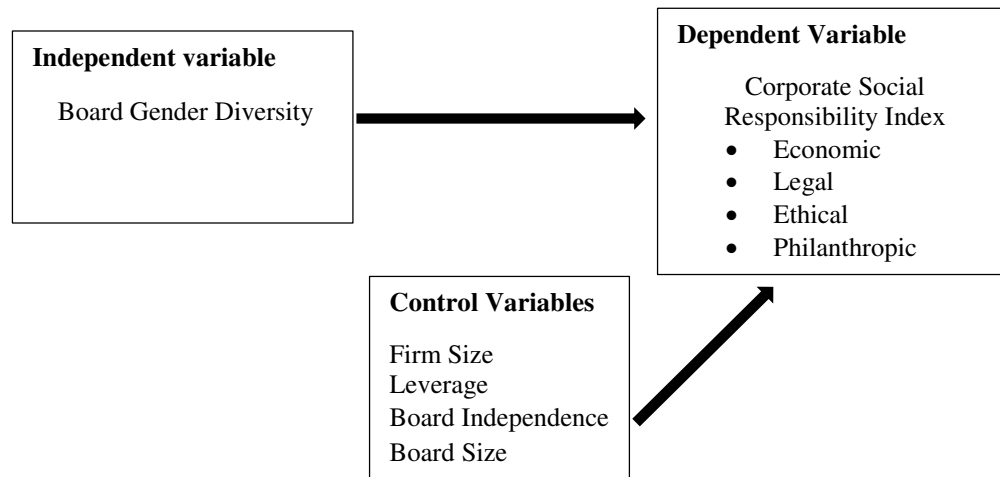
H1c: There is a significant association between gender diversity and ethical responsibility.

H1d: There is a significant association between gender diversity and philanthropic responsibility.

Following the past studies and resource dependence theory, this study develops a conceptual framework to examine the main hypothesis. Figure 1 represents the conceptual framework of the study.

Figure 1

Conceptual Framework


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┌─────────────────────────────┐          ┌──────────────────────────────┐
│ Independent variable        │          │ Dependent Variable           │
│                             │          │                              │
│   Board Gender Diversity    │  ──────► │   Corporate Social           │
│                             │          │   Responsibility Index       │
│                             │          │   • Economic                 │
│                             │          │   • Legal                    │
└─────────────────────────────┘          │   • Ethical                  │
                                         │   • Philanthropic            │
                ┌──────────────────────┐ │                              │
                │ Control Variables    │ └──────────────────────────────┘
                │                      │
                │ Firm Size            │ ──────►
                │ Leverage             │
                │ Board Independence   │
                │ Board Size           │
                └──────────────────────┘
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Source: Constructed by Author, 2022

According to the conceptual framework the operationalization of variables is illustrated in Table 1.

Table 1

Operationalization of variables

Variable	Sub-dimension	Measure	Source/Reference	Abbreviation
Independent variable	Gender diversity	1. Blau index 2. Critical mass concept 3. Percentage of women on board	1. Bear, Rahman, and Post, (2010) 2. Yarram and Adapa, (2021) 3.Cabeza-García, Fernández-Gago and Nieto, (2018)	1. BLAU 2. % WOB
Dependent variable	Corporate Social Responsibility	1. Economic responsibility 2. Legal responsibility 3. Ethical responsibility 4. Philanthropic responsibility	Mahmood and Humphrey, (2013), Lai, Le, and Truong, (2013), Baden (2016) Ike C. Ehie (2016)	1. ECON 2. LEGA 3. ETHI 4. PHIL
Control variables	1. Firm size	The logarithm of total assets	Issa and Fang, (2019)	FISI
	2. Leverage	Quotient between borrowed funds and total assets	Cabeza-García, Fernández-Gago and Nieto, (2018)	LEVE
	3. Board independence	The proportion of independent directors	Bear, Rahman, and Post, (2010)	BIND
	4. Board size	Number of directors on the board	Boukattaya and Omri, (2021)	BOSI

Source: Constructed by Author,2022

Gender Diversity. This study measured gender diversity using two proxies namely Blau Index and Percentage of women of board of directors. Bear et al. (2010) operationalized gender diversity on the board with Blau's index. According to Harrison (2007, p. 1199–1228) "*Blau's index measures the distribution of members across different categories of experience, expertise, or demographic background, and is the most commonly used measure of diversity-as-variety*".

$$\text{Blau index} = 1 - \sum_{i=1}^{n} p_i^2$$

where:

Pi = is the percentage of (male/female) directors; and

n = is the number of distinguished categories (males/females) in the firm.

In addition, Yarram and Adapa (2021) also employed two proxies for the exploration of the link between female representation and corporate social responsibility. In the earlier studies, the first proxy, lady director percentage is figured as the number of ladies on board divided by the sum of directors on the panel at the finish of a specified year. The next proxy is the overall amount of woman board members in a specified year.

Corporate social responsibility. CSR is measured using four dimensions including economic, legal, ethical and philanthropic responsibility. Mahmood and Humphrey (2013) investigate the expectations of stakeholders for CSR by taking a sample of a wide segment of the Kazakhstani economy, containing 12 industries. Economic, Legal, Ethical, and Discretionary (philanthropic) were used as CSR dimensions. After validity and reliability tests were conducted the questionnaire was designed with a format asymmetric 5-point Likert scale. The questionnaire consisted of 40 questions with ten sets of four statements. Similarly, Lai et al. (2013) also used these four CSR dimensions to measure CSR with a sample of more than 300 laborers in the Ho Chi Minh office and a questionnaire that comprises 20 questions regard to the four CSR and questions regarding demographic features and employed position of the applicants. Furthermore, Ehie (2016) also used economic, legal, ethical, and philanthropic dimensions to investigate the CSR orientation in developing countries with a questionnaire consisting of 32 questions and each dimension has eight questions.

3. Methodology

The study examines the relationships between variables, thus, a quantitative strategy was utilized that falls under the positivistic paradigm. The population of this study constituted 281 listed companies in Sri Lanka and the sample was 164 listed companies that were selected by random sampling. Data was collected by distributing a self-administered structured questionnaire which was developed based on a comprehensive literature review by Ehie (2016) and refined based on expert opinions and a pilot survey. Before conducting the main survey, a sample of 10 respondents with more than two years of experience in listed companies was used to carry out a pilot study to validate the items in the questionnaire. The pilot study was conducted to test the items present in the questionnaire, measure the time taken to complete the questionnaire and identify difficulties respondents may face while completing it. After obtaining the results of this pilot study, some minor changes were made to the wording of some items in the questionnaire. Therefore, the content validity of the questionnaire was confirmed. The validity of the research questionnaire was decided based on conducting a reliability test.

The study used a random sample method to select 164 listed companies from a population of 281 listed companies. While the majority of research which employed secondary data suggested using various data collection techniques, a structured questionnaire was used in this study's primary data collection. The study obtained only 133 responses from the sample companies. Saldivar (2012) suggests that a response rate of at least 75%, which is comparable to very good, is required to be considered acceptable for responses in surveys. Hence, the response rate of 81 percent in this study is acceptable. Meanwhile, the Blau index, percentage of women on board, and critical mass used to measure gender diversity were derived from secondary data. The company profile shows most companies in the sample are large enterprises with more than 300 employees (60.2%), Diversified Financial category (17.3%) and nationally distributed (77.4%). The respondents' profile shows most of the respondents were male (54.9%), between 25 to 34 years old (50.7%), had worked between 3 to 5 years in an organization (46.3%) and have degrees (62.7%).

The descriptive statics denotes the mean, standard deviation, and minimum and maximum values of each variable. % WOB obtained a 0.1034 mean and 0.12441 standard deviations. Blau index had a 0.1574 mean and a critical mass had a 0.0902 mean. Economic

responsibility obtained the highest mean which was 4.2977 and philanthropy had the lowest mean at 3.5789. When considering the control variables firm size obtained an 8.5378 mean and the leverage obtained a 0.4111 mean which was the lowest.

The study ensured the demographic profile of the population has been reasonably represented and approximated by the selected sample. After the data collection, data were cleaned by identifying the inaccurate, incomplete data set and correcting them. The study conducts the reliability analysis to test the validity of the measurement instruments. After conducting the reliability and validity, descriptive statistics were generated to describe the basic characteristics of the cross-sectional data. Furthermore, this study used Pearson's correlation technique with SPSS statistical software to determine the relationship between variables after checking the assumptions. Since there are four dependent variables in this study, the models are comprehensive. As a result, the hypothesized models are assessed by Structural Equation Model – Partial Least Squares (SEM-PLS) in Smart PLS version 3.0.

4. Findings and Discussion

The initial step in the investigation was to examine the 133 companies and their demographic characteristics. The demographic characteristics of the 133 responses was described using age, gender, educational qualification, stakeholder category of the company, and the number of years in the current position as well the company profile using company name, number of employees, ownership of the company, geographic composition, and the related industry according to CSE. Meanwhile, the frequency distribution of questionnaire items was analyzed using strongly disagree to strongly agree for each statement. Using the SPSS software, descriptive statistical analysis was performed on independent, dependent, and control variables.

The descriptive statics of the independent variable are: % WOB; 0 minimum; 0.75 maximum; 0.1034 mean; and 0.12441 standard deviation. Based on these findings, it may be inferred that Sri Lanka only has 10% of women on board. However, OECD (2021) shows that WOB represents 31.6%, which is higher than 20%. On the other hand, when considering Blau index its minimum is 0 and the maximum is 0.47. In this study, the Blau index is between 0 and 0.47, with the standard deviation of 0.1595 and the mean of 0.1547. However, Issa and Fang (2019) suggested that the Blau index to be 0.0436, which is lower than Sri

Lanka as well as critical mass with minimum 0 and maximum 1. In this study, the critical mass exists between 0 and 1, mean 0.0902 and std. the deviation is 0.28759. The earlier findings of Cabeza-García et al. (2018) revealed that critical mass is 0.0995 which is higher than in Sri Lanka.

According to the descriptive statics of the dependent variable, there are four dimensions for measuring CSR economic, legal, ethical, and philanthropic. The minimum and maximum values of all responsibilities exist between 1.80 and 5. When considering economic responsibility, the mean is 4.2977 and the standard deviation is 0.55901; legal responsibility, mean is 4.1023 and the standard deviation is 0.44560; ethical responsibility, mean is 3.8226 and the standard deviation is 0.55523; philanthropic responsibility has a 3.5789 mean and 0.60265 standard deviations. The average total CSR has 3.9504 and 0.41256 standard deviation.

When considering the control variable, there are four control variables that include firm size, board independence, leverage, and board size. In terms of firm size, its minimum is 4.56, maximum is 11.23 which exists between 4.56 to 11.23, mean is 8.5378 and standard deviation is 1.49443. in terms of leverage, its minimum is 0, maximum is 1.72, leverage exists between 0 and 1.72, the mean is 0.2259, and the standard deviation is 0.22707. in terms of board size, its minimum is 0.30, with a maximum of 1.20, board size exists between 0.30 and 1.20, mean of 0.8974, and standard deviation is 0.13619. Board independence exists between 0 to 0.80 and has a 0.4111 mean and 0.13578 standard deviations.

Using SPSS software, a correlation analysis is carried out. Economic, ethical, and philanthropic responsibilities do not significantly affect gender diversity, but all three measures of gender diversity have a substantial impact only on legal responsibility. Table 2 displays the correlation analyses.

The hypothesized models are assessed by Structural Equation Model – Partial Least Squares (SEM-PLS) in Smart PLS M3 version 2.0. This study examined four main models and three sub-models inside each of the three main models. Model 01 consists of the individual components of CSR and gender diversity without the control variables. There are three sub-models under Model 01 as: Model 1.1 – Individual CSR with % WOB and without control variables; Model 1.2 - Individual CSR with Blau and without control variables;

Model 1.3 - Individual CSR with critical mass and without control variables; Model 02 consists of the individual components of CSR and gender diversity with control variables.

Table 2

Correlation Analysis Results

CSR measurement	% Of WOB	Blau Index	Critical Mass
ECON	.018	.035	0.039
LEGA	.212[*]	.228[**]	0.128*
ETHI	.032	.044	0.092
PHIL	-.071	-.066	0.072

Source: Constructed by Author,2022

There are three sub-models under Model 02 as Model 2.1 – Individual CSR with % WOB and control variables, Model 2.2 - Individual CSR with Blau Index and control variables, and Model 2.3 - Individual CSR with critical mass and control variables. Meanwhile, Model 03 consists of the total value of CSR and gender diversity with control variables. There are three sub-models under Model 03 as Model 3.1 – Total value CSR with % WOB and control variables, Model 3.2 Total value CSR with Blau Index and control variables and Model 3.3 - Total value CSR with critical mass and control variables. Model 04 consists of the average value of CSR and gender diversity with the control variables. There are three sub-models under Model 04 as Model 4.1 – Average value of CSR with % WOB and control variables, Model 4.2 - Average value of Blau and control variables, and Model 4.3 - Average value of critical mass and control variables.

This study has collected primary data by distributing the structured questionnaire for 133 listed companies and secondary data from the 2021 annual report of listed company as the sample. The internal consistency was examined with Cronbach's Alpha test to measure the reliability of the main variables which denotes the degree to which items function collectively as a complete set and are capable of independently assessing the same concept. Cronbach's Alpha Coefficient (CAC) is calculated for statements of each of the dimensions and the full set of data collected. The alpha value varies from one to zero. A higher alpha value means higher reliability. Gliem (2003) provides the following rules of thumb for the

measurement of the Cronbach's Alpha Coefficient: _ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable.

The validity of the measures is critical for the study before performing the statistical analysis because it determines the correctness and appropriateness of the measures in accomplishing the intended objective of finding answers to the research questions. The validity, according to Saunders et al. (2013) is the metric that establishes the correctness of the gathered data and its intended application. This study used a measuring model to evaluate the convergent and discriminant validity of two different forms of validity. By looking at average variance extracted (AVE) and composite reliability (CR) , the convergent validity of the measurement model was determined. (Hair et al., 2017).

All the findings of reliability and validity are supported by Hair et al. (2017) as shown in table 3.

Table 3

Measurement model analysis results

	Model 01				Model 02				Model 03	Model 04
	Econ	Ethi	Lega	Phil	Econ	Ethi	Lega	Phil		
Cronbach's Alpha	0.821	0.765	0.922	0.832	0.821	0.765	0.922	0.832	0.883	1.000
Composite Reliability (CR)	0.871	0.838	0.863	0.865	0.871	0.838	0.944	0.863	0.895	1.000
Average Variance Extracted (AVE)	0.576	0.511	0.668	0.515	0.576	0.511	0.809	0.565	0.332	1.000

Source: Constructed by Author,2022

The structural models were used to analyze the developed hypothesis after the measurement models were run for all four major models. Table 4 displays the findings from the examination of the structural model.

Table 4

Results of Hypothesis Testing

Hypothesis		T value			P			Decision	R^2		
		% WOB	Blau Index	Critical mass	% WOB	Blau Index	Critical mass		% WOB	Blau Index	Critical mass
H1	There is a significant association between gender diversity and economic responsibility.	0.203	0.204	0.203	0.839	0.838	0.839	Not supported	0.081	0.081	0.081
H2	There is a significant association between gender diversity and legal responsibility.	3.065	2.639	2.641	0.002	0.008	0.008	Supported	0.065	0.066	0.065
H3	There is a significant association between gender diversity and ethical responsibility.	0.046	0.02	0.046	0.963	0.984	0.963	Not supported	0.076	0.076	0.076
H4	There is a significant association between gender diversity and philanthropic responsibility.	0.4	0.366	0.368	0.689	0.715	0.715	Not supported	0.029	0.028	0.029

Note. $**p < 0.01$, $* p < 0.05$

Source: Constructed by Author,2022

The findings show that legal responsibility dimension of CSR is positively and significantly associated with gender diversity. Legal responsibility is a stronger predictor of CSR, which help to make a disciplined society. Legal responsibility has a 0.0228 correlation and 0.008 P-value with 0.066 R 2. Even though 6.5% of the variation in CSR was explained by gender diversity, this implies that gender diversity is maintaining good legal CSR practices and will be more likely to show a higher level of legal engagement. These findings are consistent with the findings of Wu et al. (2021) that highlighted gender diversity's significant impact on CSR.

Concerning economic, ethical, and philanthropic responsibilities, the analysis shows no significant relationship with gender diversity. These finding contradict previous studies by

Yasser et al. (2017). The possible explanation for this is that the current study is focused only on the listed companies in Sri Lanka and the female representation on the board is less compared to the male representation. As a result, female representation is lower, and there is no discernible influence on CSR, explaining the current findings that there is no significant impact between economic responsibility and gender diversity.

Concerning the total value and the average value of CSR, this study showed no significant relationship between gender diversity and corporate social responsibility. CSR has a 0.096 R2 and 0.666 P-value with 0.478 t-value. This finding contradicts previous studies by Yasser et al. (2017) and Bear et al. (2010). This could be explained by the use of questionnaire data for the analysis contrasting earlier studies and that the current study is focused only on the listed companies in Sri Lanka and the female representation on the board is less compared to the male representation. Hence, female representation has no significant impact on CSR, which explained the current findings that there is no significant relationship between CSR and gender diversity.

Table 5 depicts the summary of the results.

Table 5

Results Summary

Objective	Hypothesis	Findings
(1). Level of gender diversity	Not applicable	% WOB = 10.3% Blau Index = 0.1547 Critical Mass = 0.0902
(2). Level of Corporate social responsibility	Not applicable	ECON =4.2977 LEGA =4.1023 ETHI =3.8226 PHIL = 3.5789 Average CSR =3.9504
(3). To examine the impact of gender diversity on corporate social responsibility.	There is a significant association between gender diversity and corporate social responsibility.	Not accepted
(4). To examine the impact of gender diversity on economic responsibility.	There is a significant association between gender diversity and economic responsibility.	Not accepted
(5). To examine the impact of gender diversity on legal responsibility.	There is a significant association between gender diversity and legal responsibility.	Accepted
(6). To examine the impact of gender diversity on ethical responsibility.	There is a significant association between gender diversity and ethical responsibility.	Not accepted
(7). To examine the impact of gender diversity on philanthropic responsibility	There is a significant association between gender diversity and philanthropic responsibility	Not accepted

Source: Constructed by Author, 2022

5. Conclusion

This study investigated the impact of gender diversity on CSR. Initially the discussion on the demographic statistics which are depending on the 133 responses gathered through the online questionnaire from the listed company in Sri Lanka. This study has developed one main hypothesis and four sub-hypotheses for testing using Pearson's correlation analysis and partial least squares analysis. The gender diversity has been measured by using three measurements % WOB, Blau index, and Critical mass. Hypotheses have been measured under four main models: individual components of CSR with and without control variables, the average value of CSR, and the total value of CSR each main model has consisted of three sub-models related to the measurement of gender diversity. One sub-hypothesis was concerned with a significant relationship and three sub-hypotheses were concerned with no relationship according to the results of partial least squares.

According to the findings, the correlation coefficient of legal responsibility has a significant impact on gender diversity, which was consistent with the partial least square analysis. Therefore, according to the results of Model 01 and Model 02, the findings support hypothesis H1b that there is a positive significant impact between gender diversity and the legal responsibility of the listed company in Sri Lanka. Furthermore, according to the correlation coefficient results, the economic, ethical, and philanthropic responsibilities have no significant impact on gender diversity. Model 01 and Model 02 of partial least square results also supported those findings. Thus, the hypotheses H1a, H1c, and H1d are not supported by the results. Model 03, which analyzed the relationship of total CSR with gender and control variables, found no significant impact between gender diversity and total CSR under all three sub-models. Thus, the hypothesis H1 is not supported by the results. Furthermore, Model 04, which analyzed the relationship of the average CSR with gender and control variables, also found no significant impact between gender diversity and average CSR under all three sub-models. Thus, the hypothesis of H1 is not supported by the results.

This study aims to highlight and emphasize the women directors' impact on CSR in Sri Lanka. Evidence from global cases showed an inconclusive relationship related to gender diversity and CSR with dearth of studies related to female representation and CSR in the Sri Lankan context. Therefore, this study further enriches the existing dearth of literature on the

impact of gender diversity at CSR Sri Lankan listed companies. Furthermore, this study adds new knowledge to the resource dependency theory which the gender diversified board improve the legitimacy result in increase in legal responsibility.

This study highlighted the relevance of having gender diversity and, as a result, motivate CSR efforts in the company. Additionally, expanding the amount of women directors on boards will encourage the industry to commit to more CSR practices. Concerning the results, the evidence proves that only legal responsibility has an impact on gender diversity while all other three responsibilities have no impact on gender diversity. According to the descriptive statics, Sri Lanka has only 10% of gender diversity on their boards which is equal only to the legally required percentage. Companies have to make policies to increase the number of women on board. When there are women on board, the legal responsibility will be enhanced. Moreover, OECD has identified a sustainable goal as gender equality. As Sri Lanka is a developing country, companies have to make more policies to achieve that sustainable goal. In addition, representing female directors on boards is significant for the economy since women contribute to both social and economic development.

The listed company can align corporate social responsibility with the company values. It assisted to maintain the sustainable culture and practices within the company. Companies can use more women on the board to establish a well-adapted sustainable culture and practices of the organization. Based on the respondents' feedback, company can change the procedure related to the economic, ethical, and philanthropic performance of the company. Similarly, complimenting women on board will gain greater value in the development of the procedures in the company. Companies can execute real corporate social responsibility activities for society. Without imagining the sustainability of the society, they can contribute their maximum for the improving social performance of corporate social responsibility.

In several ways, this study significantly advances the overall understanding of the gender diversity impact on CSR. These include efforts to fill up gaps in the literature, new theoretical insights, and some significant methodological advancements. This study focused on a structured questionnaire, whereas earlier studies employed sustainability reporting to investigate the influence of gender diversity on CSR. The findings of this study therefore not

only add to the body of knowledge in the field of CSR but also have significant implications for CSR and gender diversity in Sri Lanka. In contrast to earlier studies, the findings consider the entire CSE industry to analyze how gender diversity affects CSR rather than just one specific industry. As a result, the evidence supporting the presence of a link between the dependent and independent variables is strengthened. The in-depth analysis describes the current theories about CSR reporting that have been applied in earlier work, as well as their connection to CSR and gender diversity. Although well-known theories, such as resource dependency theory and stakeholder theory, have been utilized to examine the direct link between board characteristics and organizational performance, including CSR performance outcomes. The finding of when there is gender diversity the legal responsibility of the organization will increase is added to the stakeholder theory by this study. Additionally, this study's findings imply that CSR practices increase when there are more women on the board.

This study can identify some inherent limitations in different aspects. The current study is only limited to the listed companies in Sri Lanka with sample consists of only 164 listed companies and only 133 responses. In this scenario, there is a possibility that significant relationships will not be detected within the data set. In addition, because data were gathered using primary data collection methods, there is a possibility of not gathering enough or expected data to ensure the research's success. Another limitation relates to the social desirability bias, where respondents may give answers based on what they believe to be socially desirable because, as employees of a company, they are concerned that the information may harm the company's reputation and have an adverse effect on their jobs. As a result, respondents have a propensity to provide biased responses. The study constructed an anonymous instrument and assured respondents of the confidentiality of the data in an effort to lessen this constraint.

The study is limited to listed companies in Sri Lanka. Hence, the study can be expanded to private limited companies and companies limited by guarantee. In addition, the future study can make a comparison between the CSR initiatives practiced by public and private companies as it will provide meaningful information about the practices of CSR. With the current sample consisting of only 164 listed companies, future researchers can increase the sample to collect more data. This study was carried out based on a quantitative research approach and the qualitative aspect of the study was not addressed. Future

researchers can use a qualitative research approach and conduct this study using qualitative data collection methods like interviews.

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