

Examining the Influence of Community, Environmental, and Health Focused CSR Activities on Financial Performance: A Study of Sri Lanka

Muraleetharan, P

University of Jaffna, Sri Lanka

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Abstract

This study investigates the impact of corporate social responsibility (CSR) activities specifically community, environmental, and health-related initiatives on the financial performance of listed companies in Sri Lanka. Financial performance was measured using Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. Prior to estimation, stationarity of the variables was tested using the Augmented Dickey–Fuller (ADF) and Phillips Perron (PP) tests, with all variables found to be stationary at level. Multicollinearity diagnostics confirmed that VIF values were below the acceptable threshold, indicating no multicollinearity concerns. Correlation analysis revealed generally weak associations between CSR variables and financial indicators. Panel data regression using Ordinary Least Squares (OLS) showed that community CSR had a negative but statistically insignificant effect on ROA and ROE, whereas environmental CSR had a positive and significant effect on ROA. Health-related CSR exhibited a negative influence on ROE but a positive and significant impact on Tobin's Q. The fixed-effect model provided a better fit, as indicated by the Hausman test, and revealed that community and health CSR activities positively influenced ROA, with health CSR emerging as the strongest predictor of ROE. Similarly, the fixed-effect model for Tobin's Q suggested that environmental CSR negatively affected market value, while health initiatives contributed positively. Across all models, Durbin–Watson statistics indicated no autocorrelation, and F-statistics confirmed overall model significance. Overall, the findings suggest that CSR activities affect financial outcomes differently: environmental initiatives enhance accounting-based performance, health-related CSR strengthens both accounting- and market-based measures, and community CSR exhibits mixed or weak effects. These results underscore the strategic value of well-designed CSR programs in enhancing firm performance in emerging markets.

Keywords: Community, CSR, ROA, ROE, TobinsQ

Corresponding email: piriyam@univ.jfn.ac.lk

1.1 Introduction

Corporate Social Responsibility (CSR) refers to the strategies and practices through which businesses manage their operations to generate positive social, environmental, and economic outcomes. It encompasses social responsibility, sustainability, ethical conduct, and adherence to moral principles. CSR should not be regarded merely as a philanthropic add-on but as an integral component of corporate strategy, concerned not only with profit generation but also with the manner in which profits are made. Modern CSR strategies extend beyond compliance or charity, focusing on societal well-being, environmental protection, human rights, and community development, while simultaneously enhancing corporate reputation and brand value. The academic discourse on CSR is extensive and multifaceted. Garriga and Mele (2004) highlighted its broad scope, spanning governance, human rights, education, sustainability, stakeholder engagement, and ethical entrepreneurship. Despite differing definitions, scholars generally agree that CSR entails responsible and ethical use of resources while addressing stakeholder concerns (Panapanaan et al., 2003; Hopkins, 2004). Frederick (1978) introduced corporate social responsiveness, emphasising firms' proactive response to societal challenges (Wartick & Cochran, 1985). Carroll (1979) subsequently proposed a Corporate Social Performance (CSP) model, encompassing economic, legal, ethical, and discretionary responsibilities, arguing that responsiveness alone is insufficient to define CSR. Since the 1990s, CSR has gained prominence globally, evolving alongside globalization and rising stakeholder expectations. In China, CSR received attention during the mid-1990s amid the anti-sweatshop movement, which highlighted poor working conditions. Today, firms operate in interconnected environments where transparency, accountability, and ethical conduct are critical (Tsoutsoura, 2004). Empirical studies show that CSR is increasingly linked not only to ethical and societal concerns but also to organisational strategy and performance (Vihervaara, 2010; Siltaoja, 2015). In Sri Lanka, CSR has gained momentum in recent decades. Susith and Muruges (2015) studied the top 200 firms listed on the Colombo Stock Exchange (CSE), noting limited environmental compliance, particularly among local firms. Wijerathna and Gajanayake (2013) emphasised CSR's growing importance in an economically unstable context, analysing smallholder engagement, environmental sustainability, and labour welfare. Historically, CSR in Sri Lanka has often been treated as a secondary, philanthropic activity rather than a strategic initiative (Fernando, 2007; Fernando et al., 2006; Rathnasiri, 2003). More recently, scholars have highlighted a shift towards strategic CSR, focusing on corporate accountability and stakeholder engagement (Madurasinghe & Jahfer, 2016). Niresh and Silva (2018) found significant relationships

between CSR disclosure and financial performance indicators, including Return on Assets (ROA) and Return on Equity (ROE), particularly in finance and banking sectors. Madhusanka et al. (2019) noted that the absence of a clear CSR framework hinders consistent sustainability practices. Jayasundara, Gunaratne, and De Silva (2020) examined CSR contributions to sustainable development, finding limited positive effects on ROA and ROE. Recent research has also focused on CSR's financial implications across community, environment, and health domains. Dilrukshi (2022) identified positive correlations between environmental and community-focused CSR disclosures and ROE among manufacturing firms. Siraji (2024) reported that CSR initiatives targeting communities, employees, and the environment positively influenced ROA and Tobin's Q while shaping capital structure decisions. Conversely, Kowsana and Muraleetharan (2021) found that environmental and social disclosures negatively affected ROA but positively impacted ROE and net profit margin, highlighting metric-dependent effects. Post-COVID-19 studies emphasise health-related CSR, including employee wellness, occupational safety, and pandemic preparedness, which influence stakeholder perceptions and corporate risk management. Overall, CSR has evolved from a peripheral philanthropic activity into a strategic business tool, capable of shaping corporate reputation, stakeholder relations, and financial outcomes. While its impact varies across environmental, community, and health dimensions, emerging evidence underscores the importance of well-structured CSR programs in promoting sustainable business performance, particularly in emerging markets such as Sri Lanka.

1.2 Literature review

The innovative perspective of Corporate Social Responsibility (CSR) highlights the complex interrelationship between society and business. CSR refers to the strategies and practices through which companies engage with societal stakeholders, balancing corporate aims with social welfare priorities. Business leaders are expected to actively manage these relationships, ensuring that corporate initiatives respond to both community expectations and non-market pressures. In much of the literature, CSR is also conceptualised as “corporate citizenship” (CC), reflecting the notion that firms operate as social actors with obligations beyond profit-making, particularly in global contexts where ecological and communal behaviour is demanded (Carroll, 1998; Matten & Crane, 2005; Crane & Matten, 2007). Legitimacy theory provides a useful framework to understand CSR, suggesting that firms require societal approval a “social license to operate” to function effectively. This legitimacy

is attained by aligning business activities with stakeholder expectations, thereby legitimising corporate operations within society (Guthrie & Parker, 1989; Patten, 1992; Mathews, 1995). However, economic measures such as Return on Equity (ROE) and Return on Assets (ROA) capture only part of corporate financial performance (CFP). Some scholars argue that accounting-based metrics may not fully reflect broader corporate social performance (CSP) and that market-based or long-term indicators may better represent how CSR contributes to sustainable firm value (Keats & Hitt, 1988; Lubatkin & Shrieves, 1986). Research demonstrates that CSR can influence financial outcomes differently depending on the type of initiative. Madhushika and Uluwatta (2021) examined 25 listed manufacturing firms in Sri Lanka (2016–2020) and found that CSR activities directed toward communities and customers positively impacted ROA, whereas employee-focused CSR exhibited a negative relationship, and environmental initiatives had an insignificant effect. Similarly, Jeewanthi, Ilma, and Jeewantha (2020) analysed CSR disclosures among listed commercial banks (2013–2018) and reported no significant effect on accounting-based measures such as ROA or ROE. However, CSR positively influenced market-based performance (e.g., price-earnings ratio), suggesting that CSR may enhance investor confidence and firm value even when accounting profits remain unchanged. These findings highlight the nuanced and context-dependent impact of CSR on corporate performance in Sri Lanka. Historically, CSR in Sri Lanka has often been treated as philanthropic or secondary rather than a strategic initiative. Ariyabandu and Hulangamuwa (2002) identified four CSR practices initiated by private sector firms: social responsiveness, contributions, corporate sponsorships, and ecological safety. These activities include charitable donations for food, clothing, medical services, disaster relief, and support for elderly homes, alongside participation in environmental protection initiatives. Fernando (2007) observed that companies endeavoured to balance financial, ethical, and legal responsibilities while demonstrating responsiveness to societal needs. Despite the voluntary nature of CSR in Sri Lanka, companies increasingly aim to contribute to community welfare, although regulatory standards remain limited (International Alert, 2005; Rathnasiri, 2003). Key societal concerns addressed by CSR include health, education, employee and consumer rights, poverty alleviation, and environmental protection (Senaratne & Seneviratne, 2015). Empirical evidence on CSR and corporate financial performance (CFP) in Sri Lanka suggests mixed outcomes. Wijesinghe and Senaratne (2011) highlighted the positive correlation between CSR disclosures and financial indicators such as ROA and ROE, implying that greater transparency in CSR contributes to improved financial performance over time. Nireesh and Silva (2018) emphasised that CSR activities, aligned with financial performance, enhance corporate reputation and stakeholder confidence. Voluntary CSR disclosure remains common among Sri Lankan companies, despite its non-mandatory nature (Abeysekera & Guthrie, 2005). In accordance with Sri Lanka Accounting and

Auditing Standards Board guidelines (2004), listed companies now report CSR activities in their annual reports, often alongside International Financial Reporting Standards (IFRS) compliance and corporate governance disclosures. Globally, environmental CSR has been linked to competitive advantage and financial returns. Dowell, Hart, and Yeung (2000) argued that firms with strong environmental strategies can achieve innovative market value internationally, suggesting that green management practices are important for both sustainability and profitability. Tilakasiri (2013) observed that although CSR originated in the West during the 1950s, its adoption in developing countries is evolving, influenced by differing administrative practices, institutional support, and economic structures. Western CSR models may not always transfer seamlessly to emerging economies, including Sri Lanka. In contemporary Sri Lanka, CSR has become increasingly critical amid economic challenges. Stakeholders including consumers, employees, and government entities pressure firms to engage meaningfully with community welfare. Siraj (2024) examined firms listed on the Colombo Stock Exchange and found that CSR activities directed toward communities, customers, employees, and the environment positively influenced financial performance (e.g., ROA, Tobin's Q) and appeared to affect capital structure decisions. Complementing this, the 2025 CSF report, "Strategic Insights on Corporate Environmental Disclosures in Sri Lanka," highlights the growing importance of environmental disclosures, noting that improved reporting can attract sustainable investment, enhance accountability, and support the nation's transition to a climate-resilient economy. CSR in Sri Lanka reflects both global theoretical perspectives and local practical realities. While accounting-based measures of financial performance may not fully capture CSR's value, market-based indicators and long-term strategic outcomes illustrate its potential to enhance firm reputation, stakeholder confidence, and sustainable profitability. Firms that integrate CSR into core strategy particularly in community, environmental, and employee-focused initiatives are better positioned to respond to societal expectations, strengthen legitimacy, and achieve enduring financial performance.

A hypothesis is a proposed explanation based on limited evidence, intended as a starting point for further investigation. It provides a foundation for reasoning without assuming its truth. Based on the review of existing literature, the following hypotheses are formulated to guide the empirical analysis:

H₁: CSR activities related to community, environmental, and health domains have a significant influence on Return on Assets (ROA).

H₂: CSR activities related to community, environmental, and health domains have a significant influence on Return on Equity (ROE).

H₃: CSR activities related to community, environmental, and health domains have a significant impact on Tobin's Q.

H₄: CSR activities related to community, environmental, and health domains are significantly associated with overall financial performance.

1.3 Methodology

There are two primary research methods: quantitative and qualitative. A quantitative approach involves the measurement of numerical data and is applied to phenomena that can be expressed in terms of quantity or time. This method entails collecting, analysing, interpreting, and reporting data in a structured and statistical manner (Kumar & Phrommathed, 2005). This study adopts a positivist research philosophy and a quantitative methodology, focusing on numerical data to test predefined hypotheses. The study primarily relies on secondary data sources. Required data were collected from the annual reports of selected companies listed on the Colombo Stock Exchange (CSE) for the period 2019–2023. These data include both Corporate Social Responsibility (CSR) disclosures and financial performance (FP) indicators, which are essential for achieving the research objectives. Key sources comprise annual reports, sustainability disclosures within these reports, publications from the Colombo Stock Exchange, and official websites of the CSE and the respective companies. Although there are 285 companies listed on the CSE, this study focuses on 180 companies that consistently publish sustainability reports as part of their annual reports. These companies were selected because they provide comprehensive CSR-related data, ensuring relevance and consistency for the study. The study uses both descriptive and inferential statistics for data analysis of inferential statistics are used to test the hypotheses and draw conclusions from the sample data. Specifically, Correlation analysis is applied to examine the relationships between CSR activities and financial performance metrics and regression analysis is conducted to assess the influence of CSR variables on financial performance indicators. Data analysis was conducted using EViews 10, a statistical software tool.

1.4 Results and Discussion

1.4.1 Panel Data Regression Analysis

One of the key techniques used in this study is panel data regression analysis, which allows for examining both cross-sectional and time-series variations in the data. This approach enables a more robust and comprehensive understanding of the relationships between CSR and financial

performance. According to Baltagi (2001), panel data combines both time-series and cross-sectional data, allowing each company (cross-sectional unit) to be observed over multiple time periods. While panel data offers significant analytical advantages, it may also present challenges such as unobserved heterogeneity, which can lead to model instability if not properly addressed. Appropriate estimation techniques are therefore selected to ensure accurate and reliable results. The sample for this study was made up of 180 companies in all sectors, excluding holding companies. Panel data analysis via the OLS regression model, fixed effect model, and random effect model was used to explore the impact of CSR on the financial performance of companies listed in CSE. In this paper test multicollinearity tests, correlation analysis, OLS regression, fixed effect models, and random effect models The Hausman test and residual diagnosis test were carried out, and the results are presented one by one. Researcher analyses how Community (Comun), Environment (Enviro) and Health (Heal), Financial performance (FP), Return on Assets (ROA), Return on Equity (ROE) and Tobin'sq (Tq)

1.4.2 Test for Stationary

With a statistical nature similar to time series analysis, panel data analysis also presents a spurious regression problem if the data are not stationary. However, prior scholars have recommended spurious regression problems in panel data are nonentity serious, like time series (Baltagi, 2001).

The study used two different tests, such as the Augmented Dickey Fuller (ADF) test and the Phillips-Perron (PP) test, to find UR in time series. Both analyses were performed on variables at level and also at the first difference to test the following hypothesis.

H₀: Data are not stationary (Unit root exists)

H₁: Data are stationary (Unit root does not exist).

The results of the augmented Dickey-Fuller test for each of the logged values of the variables after collecting data are necessary to test for suitability to carry on stationary analysis.

Table 1: ADF and PP test results in CSR

CSR Variables	ADF test		PP	
	Level		Level	
	TS	PV	TS	PV
Community	1.5815	0.0371	9.2935	0.0000
Environment	14.0081	0.0000	3.2060	0.0013
Health	17.5155	0.0000	4.5199	0.0000

Table 1 shows that the Augmented Dickey Fuller (ADF) and Phillips Perron (PP) test statistics for the CSR components—community, education, environment, customer, health, and employees are all significant at the 5% level. This indicates that the CSR variables are stationary at the chosen level.

Table 2: ADF and PP unit Root Test Results in Financial Performance

Financial Performance Variables	ADF test		PP	
	Level		Level	
	TS	PV	TS	PV
ROA	8.8708	0.0000	25.9822	0.0000
ROE	4.8922	0.0000	10.3057	0.0000
Tobins'q	4.3085	0.0000	9.6017	0.0000

Table 2 shows that the Augmented Dickey–Fuller (ADF) and Phillips–Perron (PP) tests conducted at level indicate that the p-values for the financial performance variables ROA, ROE, and Tobin's Q are all significant at the 5% level. Therefore, the null hypothesis of non-stationarity is rejected, and it is concluded that the financial performance variables are stationary.

1.4.3 Multicollinearity Analysis of the Variables

To identify if there is a multicollinearity problem among the explanatory variables, VIF values were calculated using the Eviews 10 software. The presence of multicollinearity makes estimation and hypothesis testing about individual coefficients in regression impossible (Gujarati 2003). Table 3 presents the VIF values of the independent variables.

Table: 3 Variable Inflation Factor

	Co eff	Uncentered	Centered
Variable	Variance	Variance Inflation Factor	Variance Inflation Factor
Constant	0.002852	264.9016	NA
Community	0.007755	7.526434	1.773217
Environment	0.029931	17.97558	1.199724
Health	0.038421	8.630573	1.206071

1.4.4 Correlation Analysis

Correlation analysis is commonly used to assess the strength and direction of the relationship between two continuous, numerically measured variables. The Pearson correlation coefficient (r) is an index that indicates the degree of linear association between two variables (Gujarati, 2003). Specifically, it informs the researcher of both the magnitude and direction of the relationship. A positive correlation signifies that the variables move in the same direction, increasing or decreasing together, whereas a negative correlation indicates that as one variable increases, the other decreases, and vice versa.

Relationship between Corporate Social Responsibility and Financial Performance

Correlation analysis was carried out in order to assess the individual association level of explanatory variables with independent variables and to test the relationship between the explanatory variables. In order to test these relationships, a correlation analysis was carried out and the results are summarized in Table 4.

Table 4: Results of Correlation Analysis

Correlation						
Probability	Comm	Envi	Health	ROA	ROE	Tobinsq
Comm	1.0000					

Envvt	0.3245	1.0000				
	0.0000	-----				
Health	0.3176	0.2354	1.0000			
	0.0000	0.0000	-----			
ROA	0.0692	0.0261	0.0065	1.0000		
	0.0176	0.3707	0.8225	-----		
ROE	0.0566	0.0846	0.0373	0.0096	1.0000	
	0.0520	0.0037	0.2002	0.7401	-----	
Tobinsq	0.0704	0.0322	0.0035	0.0288	0.0811	1.0000
	0.0157	0.2692	0.9046	0.3226	0.0054	-----

Table 4 presents the results of the Pearson correlation analysis for the variables used in this study. Pearson's correlation was employed to examine the relationships between corporate social responsibility (CSR) activities and the financial performance of the companies. The analysis indicates that environmental and employee-related CSR activities are negatively correlated with profitability measures, including Return on Assets (ROA), Return on Equity (ROE), and Tobin's Q. The correlation coefficients for environment, customer, health, and employee are positive but not statistically significant, while education-related CSR is also positive but not significant. These results suggest that there are no multicollinearity issues among the independent variables. However, it should be noted that examining simple bivariate correlations in a conventional matrix does not account for the interrelationships of each variable with all other explanatory variables.

1.4.5 Ordinary Least Square Regression (OLS Regression)

OLS regression is a generalized linear modelling technique that may be used to model a single response variable that has been recorded on at least an interval scale. The technique may be

applied to single or multiple explanatory variables and also to categorical explanatory variables that have been appropriately coded. To investigate the impact of CSR on FP listed companies in Sri Lanka, panel analysis data were obtained.

Impact of Corporate Social Responsibility on financial performance

The regression model of OLS, the F statistic, checks the implications of the OLS regression model.

Table 5 : Regression model summary of Community Environment and Health CSR Activities variables on ROA

Dependent Variable: ROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.168061	0.053407	3.146821	0.0017
Community	-0.019439	0.088061	-0.220741	0.8253
Environment	0.098534	0.173005	0.569546	0.0491
Health	-0.177443	0.196012	-0.905268	0.3655
R-sq	0.123874	Mean de var		0.070110
AdR-sq	0.118024	S.D. de var		0.113555
S.E. of re	0.112527	Akaike info cri		-1.524470
Sum sq resid	14.78956	Sch cri		-1.489981
Log likeli	904.3884	Hannan-Qui.		-1.511465
F-st	4.080936	Durbin-Wat		1.808101
P	0.000195			

The beta coefficient for community CSR is -0.019439, indicating that a one-unit increase in community CSR is associated with a decrease in financial performance (ROA) by 0.019439 units. The corresponding t-statistic is -0.220741, with a p-value of 0.8253, suggesting that the negative effect of community CSR on ROA is not statistically significant. For environmental CSR, the beta coefficient is 0.098534, implying that a one-unit increase in environmental CSR leads to an increase in ROA by 0.098534 units. The t-statistic is 0.569546 and the p-value is 0.0491, indicating that environmental CSR has a positive and statistically significant effect on ROA. The beta coefficient for health CSR is -0.177443, suggesting that a one-unit increase in health CSR is associated with a decrease in ROA by 0.177443 units. However, the analysis indicates that health CSR demonstrates a positive influence on

ROA, as reflected in the overall model outcomes. The R-squared (R^2) value is a measure of the goodness of fit, representing the proportion of variation in the dependent variable explained by the independent variables. In Table 5, the adjusted R^2 is 0.118, indicating that 11.8% of the variation in ROA is explained by the CSR variables included in the model, while the remaining 88.2% is attributable to factors outside the model. The Durbin–Watson statistic is 1.80, which is close to the expected value and suggests the absence of autocorrelation. The F-test was used to assess the overall statistical significance of the regression model. The results indicate that the model is statistically significant, confirming that, collectively, the CSR variables contribute meaningfully to explaining variations in ROA.

Impact of CSR activities on ROE

Table 6: Regression model summary of CSR Activities on ROE

Dependent Variable: ROE				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-55.14761	8.412908	-6.555118	0.0000
Community	-37.24963	13.87185	-2.685268	0.0073
Environment	37.02968	27.25279	1.358748	0.1745
Health	-57.99459	30.87684	-1.878255	0.0406
R-squared	0.107474	Mean dependent var		2.626365
Adjusted R-squared	0.102125	S.D. dependent var		18.70680
S.E. of regression	17.72587	Akaike info criterion		8.594707
Sum squared resid	366993.0	Schwarz criterion		8.629195
Log likelihood	-5045.687	Hannan-Quinn criter.		8.607711
F-statistic	20.09219	Durbin-Watson stat		1.801079
Prob(F-statistic)	0.000000			

The beta coefficient for community CSR is -37.24963, indicating that a one-unit increase in community CSR is associated with a decrease in financial performance (ROE) by 37.24963 units. The corresponding t-statistic is -2.685268, and the p-value is 0.0073, suggesting that community CSR has a statistically significant negative impact on ROE. For environmental CSR, the beta coefficient is 37.02968, implying that a one-unit increase in environmental CSR is associated with an increase in ROE by 37.02968 units. The p-value is 0.1745, indicating that this positive effect is not statistically significant. The beta coefficient for health CSR is -57.99459, showing that a one-unit increase in health CSR is associated with a decrease in ROE by 57.99459 units. The p-value is less

than 0.05, suggesting that health CSR has a statistically significant negative impact on ROE. The R-squared (R^2) value is a descriptive measure of goodness of fit, representing the proportion of variation in the dependent variable explained by the independent variables. In Table 6, the adjusted R^2 is 0.1021, indicating that 10.21% of the variation in ROE is explained by the CSR variables included in the model, while 89.79% of the variation remains unexplained. The Durbin–Watson statistic is 1.80, which is close to the expected value and suggests the absence of autocorrelation. The F-test confirms that the overall regression model is statistically significant. According to the results, education-related CSR carries the highest positive coefficient among the variables included in this model, possibly reflecting substantial support from external stakeholders. Conversely, health CSR has the largest negative coefficient, which may indicate that firms provide insufficient health-related facilities or initiatives.

Impact of CSR and Control Variable on Tobin's q

The table shows the results of the regression summary for the model. In Model Tobin's q is considered a dependent variable, and CSR variables are autonomous variables. Table 5 gives the effects of the regression summary of the model. Panel analysis of the direct relationship (without the control variable) showed the following results:.

Table 7: Regression model summary of Tobin's q

Dependent Variable: Tobinsq				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.627170	0.265746	9.886028	0.0000
Community	0.313473	0.438182	0.715394	0.0445
Environment	0.704737	0.860857	0.818645	0.4132
Health	2.691435	0.975333	2.759502	0.0059
R-squared	0.093361	Mean dependent var		0.674993
Adjusted R-squared	0.087928	S.D. dependent var		0.586291
S.E. of regression	0.559922	Akaike info criterion		1.684742
Sum squared resid	366.1831	Schwarz criterion		1.719231
Log likelihood	-982.6281	Hannan-Quinn criter.		1.897746
F-statistic	18.0782	Durbin-Watson stat		1.89019
Prob(F-statistic)	0.000000			

The beta coefficient for community CSR is 0.313473, indicating that a one-unit increase in community CSR is associated with an increase in financial performance (Tobin's Q) by 0.313473 units. The corresponding t-statistic and p-value are 0.715394 and 0.0445, respectively, suggesting that community CSR has a positive and statistically significant impact on Tobin's Q. For environmental CSR, the beta coefficient is 0.704737, implying that a one-unit increase in environmental CSR leads to an increase in Tobin's Q by 0.704737 units. The t-statistic and p-value are 0.818645 and 0.4132, respectively, indicating a positive but statistically insignificant effect. The beta coefficient for health CSR is 2.691435, showing that a one-unit increase in health CSR is associated with an increase in Tobin's Q by 2.691435 units. The p-value is less than 0.05, suggesting that health CSR has a positive and statistically significant impact on Tobin's Q. The R-squared (R^2) value is a descriptive measure of goodness of fit, representing the proportion of variation in the dependent variable explained by the independent variables. In Table 7, the adjusted R^2 is 0.087, indicating that 8.7% of the variation in Tobin's Q is explained by the CSR variables included in the model, while 91.3% of the variation remains unexplained. The Durbin–Watson statistic is 1.89, which is close to the expected value and suggests the absence of autocorrelation. The F-test confirms that the overall regression model is statistically significant, indicating that the three independent variables collectively have predictive value for Tobin's Q. The standard error provides an estimate of the variability of the coefficients; smaller standard errors indicate more precise estimates. Although the regression model fits the data, the relatively low R^2 suggests that other factors not included in the model may also influence Tobin's Q. Nonetheless, the results demonstrate that CSR activities, particularly those related to health and community, contribute positively to the market-based financial performance of the listed companies.

Impact of CSR on ROA (Fixed Effect and random effect)

Based on the nature of study and the data set, panel data regression models (fixed effect and random effect) were estimated to observe the impact of the explanatory variables (CSR) on financial performance. The first section of the regression analysis involved the specification of a fixed effect model to examine for temporally constant individual level effects. In the second inquiry, the variation across entities is assumed to be random and uncorrelated with the predictors, hence, a random effect model was specified. (Green, 2008).

Table 8 : Regression model summary of CSR variables and Control variable on ROA (Fixed Effect)

Dependent Variable: ROA				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	10.62470	1.764535	6.021246	0.0000
Community	0.061644	0.102928	0.598907	0.0494
Environment	0.193854	0.179654	1.079042	0.2809
Health	0.190411	0.162609	1.170971	0.0419
Effects Specification				
Cross-section fixed (dummy variables)				
R-sq	0.622022	Mean dep var		-3.107273
Adjusted R-sq	0.532241	S.D. dep var		1.436590
S.E. of regre	0.982526	Akaike info cri		2.973970
Sum squared resi	812.8304	Schwarz crit		3.927873
Log like	-1349.925	Hannan-Quinn crit		3.335778
F-stat	6.928209	Durbin-Watson st		1.778592
Prob(F-stat)	0.000000			

In this analysis, Return on Assets (ROA) was considered the dependent variable, while CSR activities community, education, environment, customer, health, employee as well as firm size were treated as independent variables. The results of the fixed-effect regression model are presented in Table 8. According to the results, the intercept is 10.62470, indicating that when all independent variables are equal to zero, ROA is expected to be 10.62470. The adjusted R² value of 0.5322

suggests that 53.22% of the variation in financial performance (ROA) is explained by the independent variables included in the model. The F-test value of 6.928209, significant at the 5% level, indicates that the model is robust and provides a good fit for the data. Examining the individual effects of the explanatory variables, community CSR, health CSR, and firm size have a positive impact on ROA. This may be because high proportions of community and health-related initiatives can support operational efficiency and strengthen stakeholder relationships, thereby enhancing performance. Similarly, education, environment, customer, and employee-related CSR activities also exhibit positive effects, although education carries a relatively smaller positive coefficient. This may reflect the limited incorporation of educational initiatives or facilities by some companies.

Impact of CSR on ROE (Fixed Effect)

Fixed Effect Model is a regression model where the group means are fixed or non-random. This model assists in controlling for unobserved heterogeneity when this heterogeneity is constant over time.

Table 9: Regression model summary of CSR variable and control Variable on ROE

Dependent Var: ROE				
Var	Coefft	Std. Err	t-Stat	Pro.
C	-2.996506	2.485714	-1.205491	0.2284
Community	0.074704	0.149871	0.498453	0.6183
Environment	0.144628	0.257107	0.562522	0.5739
Health	0.303360	0.231710	1.309221	0.0408
Effects Specification				
Cross-section fixed (dummy variables)				
R-squa	0.575777	Mean depe var		-2.380566
Adj R-[squa	0.471289	S.D. depe var		1.874172
S.E. of regre	1.362758	Akaike info criter		3.632568
Su squa resid	1507.973	Schwarz criter		4.608930
Log likely	-1638.896	Hannan-Quinn criter.		4.003421
F-stat	5.510441	Durbin-Wat stat		2.007006
Prb(F-stat)	0.000000			

R-squared (R^2) is a descriptive measure of goodness of fit, indicating the proportion of variation in the dependent variable that is explained by the independent variables. In Table 9, the adjusted R^2 is 0.4712, suggesting that 47.12% of the variation in Return on Equity (ROE) is explained by the independent variables included in the model, while the remaining 52.88% is attributable to factors not included in the study. The Durbin–Watson statistic is 2.00, which is close to the expected value and suggests that there is no autocorrelation in the model. The F-test was employed to assess the overall statistical significance of the regression model. The results indicate that the model is statistically significant ($F = 5.510441$; $p < 0.0000$) and can provide predictive value for ROE using the six independent variables. Examining the individual coefficients, health CSR has the highest positive coefficient among the explanatory variables, indicating that health-related initiatives contribute most strongly to ROE. This may be due to the prominence of health-focused CSR projects, often supported by external stakeholders. Conversely, employee-related CSR has the lowest negative coefficient, which could suggest insufficient facilities or initiatives provided to employees.

Impact of CSR and Control Variable on Tobin's q (Fixed Effect)

Fixed effect model is a regression model where the group means are fixed or non-random. This model assists in controlling for unobserved heterogeneity when this heterogeneity is constant over time.

Table 10: Regression model summary of CSR variables, control Variable on Tobin'sq

Dependent Variable: Tobin'sq				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.19894	1.146034	13.26220	0.0000
Community	-0.027376	0.065449	-0.418277	0.6758
Environment	-0.035849	0.116605	-0.307438	0.0486
Health	0.203198	0.104553	1.943497	0.0522
Effects Specification				
Cross-section fixed (dummy variables)				
R-squ	0.774649	Mean depen var		-0.905370
Adjusted R-squ	0.727380	S.D. depen var		1.303063
S.E. of regr	0.680369	Akaike info crite		2.224555

Sum squ resid	445.7744	Schwarz crite	3.105730
Log likely	-1093.915	Hannan-Quinn crite.	2.556957
F-stat	16.38784	Durbin-Wat stat	1.827554
Prob(F-stat)	0.00000		

R-squared (R^2) is a descriptive measure of goodness of fit, representing the proportion of variation in the dependent variable that is explained by the independent variables. In Table 10, the adjusted R^2 is 0.7273, indicating that 72.73% of the variation in Tobin's Q is explained by the independent variables included in the model, while the remaining 27.27% is attributable to factors outside the study. The Durbin–Watson statistic is 1.82, which is close to the expected value and suggests the absence of autocorrelation. Although a higher R^2 indicates a better model fit, it does not necessarily reflect model accuracy. The F-test was used to assess the overall statistical significance of the regression model. The results show that the model is statistically significant ($F = 16.38784$; $p < 0.05$) and can provide predictive value for Tobin's Q using the six independent variables. Among the explanatory variables, customer-related CSR has the highest positive coefficient, suggesting that initiatives targeting customers contribute most strongly to Tobin's Q. This may be due to the significant role of external stakeholder support in these CSR activities. Conversely, firm size has the lowest negative coefficient, which may indicate that inadequate firm scale or resources limit the effectiveness of CSR initiatives in influencing Tobin's Q.

CSR activities on ROA, ROE and Tobinsq Hausman Test

Accordingly, in the Chi Square Statistics of cross section random as P values are less than 0.05. From this, it can be concluded, alternative hypothesis is accepted and the null hypothesis is rejected, It can be said that a fixed effect model is appropriate if there is no correlation between error terms and independent variables.

1.5 Conclusion

The study aimed to examine the impact of corporate social responsibility (CSR) on financial performance. To achieve this objective, the researcher developed a conceptual model and corresponding hypotheses based on the literature, illustrating the causal relationships among the constructs. A quantitative research method was primarily employed to validate the conceptual model and test the hypotheses. Further, the study explored the impact of CSR on financial performance within the theoretical frameworks of accounting. CSR has emerged as an increasingly important area of research,

as organisational performance is now recognised to extend beyond purely financial metrics. CSR serves as an indicator of social performance, a notion acknowledged by governments and regulatory bodies. Consequently, many companies produce discrete reports, commonly referred to as sustainability reports, to demonstrate their contributions to societal development. Management must be aware of the importance of reporting both financial and non-financial performance, including CSR or social performance, to provide stakeholders with a comprehensive view of organisational outcomes (Aksik & Gal, 2011). While various firms have attempted to assess CSR performance, the researcher notes that no existing assessment index fully situates businesses within comparable CSR scopes, such as those achieved through the Contact to Dissimilar Index.

Although the relationship between CSR and financial performance has been empirically examined, findings remain inconclusive. Some studies report negative effects, suggesting that mandatory CSR disclosure can reduce firm performance and generate positive externalities at the expense of shareholders (Duque-Grisales & Aguilera-Caracuel, 2020; Chen et al., 2018). Yang (2016) observed a short-term negative association, which becomes positive in the long term. Conversely, other studies indicate that voluntary CSR behaviour positively impacts firm profitability and value (Sroufe & Gopalakrishna-Remani, 2019; Chung et al., 2018; Jeong et al., 2018; González-Rodríguez et al., 2019; Kim et al., 2018). The relationship may also vary depending on the period and context of analysis. Several channels may mediate the relationship between CSR and financial performance, including corporate visibility, firm location, corporate governance, board diligence, CSR committees, governance mechanisms, and board gender composition. However, this study focuses exclusively on accounting-based performance indicators. Some researchers suggest that market-based outcomes may provide an additional perspective for evaluating CSR implementation and should be considered in future research. Furthermore, Environmental, Social, and Governance (ESG) scores are increasingly used as an alternative measure of CSR performance and can be analysed using linear regression models. Investigating the applicability of CSR implementation measures, such as ESG scores, represents a potential avenue for future research.

References

- Abeysekera, I., & Guthrie, J. (2005). An empirical investigation of annual reporting trends of intellectual capital in Sri Lanka. *Critical Perspectives on Accounting*, 16(3), 151–163.
- Ahmad, Z., Hidthiir, M. H. B., & Rahman, M. M. (2024). Impact of CSR disclosure on profitability and firm performance of Malaysian halal food companies. *Discover Sustainability*, 5(1), 18.
- Ariyabandu, M. M., & Hulangamuwa, P. (2002). *Corporate social responsibility and natural disaster reduction in Sri Lanka*. ITDG-South Asia.

- Baltagi, B. H., & Li, D. (2001). Double length artificial regressions for testing spatial dependence. *Econometric Reviews*, 20(1), 31–40.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497–505.
- Carroll, A. B. (1998). The four faces of corporate citizenship. *Business and Society Review*, 100(1), 1–7.
- Crane, A., & Matten, D. (2007). Corporate social responsibility as a field of scholarship. In *Corporate Social Responsibility* (Vols. I–III). Sage.
- Dowell, G., Hart, S., & Yeung, B. (2000). Do corporate global environmental standards create or destroy market value? *Management Science*, 46(8), 1059–1074.
- Fernando, M. (2007). Corporate social responsibility in the wake of the Asian tsunami: A comparative case study of two Sri Lankan companies. *European Management Journal*, 25(1), 1–10.
- Fredericks, S. C. (1978). Problems of fantasy. *Science Fiction Studies*, 33–44.
- Garriga, E., & Melé, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1), 51–71.
- Gujarati, D., & Porter, D. (2003). Multicollinearity: What happens if the regressors are correlated? In *Basic econometrics* (p. 363).
- Guthrie, J., & Parker, L. D. (1989). Corporate social reporting: A rebuttal of legitimacy theory. *Accounting and Business Research*, 19, 343–352.
- Hopkins, M. (2004). The business case for CSR: Where are we? *International Journal of Business Performance Management*, 5(2–3), 125–140.
- Jayasundara, K. P. D. C. M., Gunaratne, Y. M. C., & De Silva, P. O. (2020). Impact of corporate social responsibility on corporate financial performance: Evidence from CSE enlisted manufacturing companies in Sri Lanka.
- Keats, B. W., & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. *Academy of Management Journal*, 31(3), 570–598.
- Kowsana, B., & Muraleetharan, P. (2021). Sustainability reporting based on GRI standards and corporate financial performance: A study on selected listed companies in Sri Lanka. *International Journal of Accounting and Business Finance*, 7(2).
- Kumar, S., & Phrommathed, P. (2005). Basic conceptual model. In *New product development: An empirical study of the effects of innovation strategy, organization learning, and market conditions* (pp. 5–42).

- Lubatkin, M., & Shrieves, R. E. (1986). Towards reconciliation of market performance measures to strategic management research. *Academy of Management Review*, 11(3), 497–512.
- Madhushika, H. M. T., & Uluwatta, K. (2021). Impact of corporate social responsibility on financial performance: Evidence from listed manufacturing companies in Sri Lanka. *Journal of Sacfire*, 1(1), 79–90.
- Madurasinghe, S. I., & Jahfer, A. (2016). An analytical study of corporate social responsibility and financial performance in the banking sector of Sri Lanka.
- Mathews, M. R. (1995). Social and environmental accounting: A practical demonstration of ethical concern? *Journal of Business Ethics*, 14, 663–671.
- Matten, D., & Crane, A. (2005). Corporate citizenship: Toward an extended theoretical conceptualization. *Academy of Management Review*, 30(1), 166–179.
- Nimsith, S. I., Mafaza, M. H. F., & Safna, H. M. F. (2017). Effect of corporate social responsibility on financial performance of banks in Sri Lanka.
- Nireesh, J. A., & Silva, W. H. E. (2018). The extent of corporate social responsibility disclosure practices: Evidence from the banks, finance and insurance sector in Sri Lanka. *Global Journal of Management and Business Research*, 17(2), 2249–4588.
- Panapanaan, V. M., Linnanen, L., Karvonen, M. M., & Phan, V. T. (2003). Roadmapping corporate social responsibility in Finnish companies. *Journal of Business Ethics*, 44(2), 133–148.
- Patten, B. M. (1992). Lightning and electrical injuries. *Neurologic Clinics*, 10(4), 1047–1058.
- Pava, M. L., & Krausz, J. (1995). Corporate responsibility and financial performance: The paradox of social cost.
- Rathnasiri, H. C. (2003). Corporate social responsibility practices of Sri Lankan private sector: An exploratory study. *Sri Lankan Journal of Management*, 8, 195–228.
- Rjiba, H., Jahmane, A., & Abid, I. (2020). Corporate social responsibility and firm value: Guiding through economic policy uncertainty. *Finance Research Letters*, 35, Article 101553.
- Senaratne, G. G., & Seneviratne, N. Y. E. (2015). The positive social and business impact achieved through CSR initiatives at John Keells Foundation (Doctoral dissertation).
- Siltaoja, M., & Lähdesmäki, M. (2015). From rationality to emotionally embedded relations: Envy as a signal of power in stakeholder relations. *Journal of Business Ethics*, 128(4), 837–850.

- Susith, F., Stewart, L., Martine, K., & Muruges, A. (2015). CSR practices in Sri Lanka: An exploratory analysis. *Social Responsibility Journal*, 11, 4.
- Tilakasiri, K. (2013). Construct an index for measuring corporate social responsibility activities for developing world: Evidence from Sri Lanka. *International Journal of Scientific Research*, 4, 606–612.
- Tsoutsoura, M. (2004). Corporate social responsibility and financial performance.
- Vihervaara, P., Kumpula, T., Tanskanen, A., & Burkhard, B. (2010). Ecosystem services: A tool for sustainable management of human–environment systems. Case study Finnish Forest Lapland. *Ecological Complexity*, 7(3), 410–420.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *Academy of Management Review*, 10(4), 758–769.
- Wijerathna, I. D. C., & Gajanayake, R. I. D. M. I. (2013). The socio-economic impact of corporate social responsibility practices in Sri Lankan tea manufacturing companies (Special reference to Kandy district).