

IMPACT OF SUSTAINABILITY PRACTICES ON FIRMS' FINANCIAL PERFORMANCE OF INSURANCE COMPANIES IN SRI LANKA

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Abstract

A vital part of the nation's financial system, the insurance sector in Sri Lanka is currently negotiating stakeholder expectations, regulatory restrictions, and competitive pressures. Integrating Environmental, Social, and Governance (ESG) principles has become increasingly popular worldwide to enhance financial performance and ensure long-term sustainability. On the other hand, nothing is known about the effects of ESG practices on Sri Lankan insurers' financial results. From 2013 to 2022, this study examines the connection between 26 insurance companies in Sri Lanka and their financial performance as shown by Return on Assets (ROA) and sustainable practices using a quantitative research design. These businesses fall within the general and life insurance categories. In particular, the study investigates how the ESG factors impact these industries' financial results. Results show that social responsibility programs have a significant impact on ROA for both life and general insurance firms, underscoring the crucial role that social practices play in influencing financial performance. On the other hand, it was discovered that environmental or governance issues did not statistically influence ROA. There are apparent sectoral differences: general insurers place more emphasis on governance issues, while life insurers typically give priority to social and environmental norms. Additionally, correlation analysis reveals fewer correlations in general insurance and moderate associations in the life insurance industry. The study emphasises how crucial it is to incorporate social initiatives like employee welfare and community involvement into fundamental business plans to boost financial performance. It suggests enhancing sustainability reporting guidelines and creating industry-specific sustainability guidelines adapted to the unique needs of general and life insurance companies. The study offers valuable insights into how sustainable practices can impact financial outcomes in Sri Lanka's insurance industry, despite its limitations, which include its reliance on secondary data and the use of only one financial performance metric (ROA). These results demonstrate the growing importance of ESG integration in achieving industry competitiveness and long-term viability.

Keywords: environmental practices, governance practices, return on assets, social responsibility practices, Sri Lanka's insurance sector, sustainability practices

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Introduction

The insurance sector is a pillar of economic resilience, providing risk mitigation and long-term financial stability. This sector is significant in Sri Lanka, where it has existed for over a century. By 2024, the business had grown to 29 insurance companies offering a wide range of products, including life and health insurance and vital property and liability insurance (IRCSL, 2022). Despite its importance, the sector faces increased competition, regulatory compliance requirements, and changing consumer expectations. Despite these limitations, sustainability practices have evolved as a game-changing paradigm. Globally, businesses are implementing Environmental, Social, and Governance (ESG) frameworks to align their operations with social and environmental objectives. ESG practices have been linked to improved corporate reputation, risk management, and operational efficiency. In the financial services sector, particularly insurance, these practices are increasingly critical to driving profitability while meeting stakeholder expectations. Sustainability strategies utilised in global marketplaces improve financial performance, presumably due to enhanced brand loyalty, lower operating costs, and better risk management. Despite the growing global discourse on ESG integration, empirical research examining the link between sustainability practices and firm performance remains limited in the Sri Lankan context. While numerous international studies have explored ESG–financial performance relationships in banking, manufacturing, and energy sectors, the insurance industry has received comparatively little scholarly attention, especially in developing economies like Sri Lanka. Most existing literature focuses on developed markets where ESG disclosure frameworks are well established and data availability is high. However, Sri Lanka’s insurance sector operates within a unique institutional and regulatory environment, characterised by evolving sustainability reporting standards, limited stakeholder awareness, and differing resource capacities between life and general insurers.

Therefore, this study contributes to the existing body of knowledge by offering sector-specific, quantitative evidence on the impact of ESG dimensions on firm performance in both life and general insurance sectors in Sri Lanka. Findings from this study can guide insurers, regulators, and policymakers in promoting ESG frameworks that strengthen financial performance and sustainability reporting standards in Sri Lanka. The study employs Return on Assets (ROA) as a financial performance metric and assesses the influence of ESG dimensions on the life and general insurance industries. Based on the above justifications following research questions are formulated.

RQ1: *How do sustainability practices influence financial performance in Sri Lanka’s Life Insurance sector?*

RQ2: *How do sustainability practices influence financial performance in Sri Lanka’s General Insurance sector?*

The research objectives are as follows.

RO1: *How do sustainability practices implemented by Sri Lankan Insurance companies impact their financial performance?*

RO2: *Which dimensions of sustainability practices (ESG) have the most significant impact on the financial performance of Insurance companies?*

The remainder of the paper is organised as follows: Section 2, literature review, Section 3 describes data and methodology, Section 4 presents results and discussion, and Section 5 concludes the study.

Literature Review

The impact of corporate social responsibility (CSR) initiatives on firm performance

The study explores the correlation between corporate social responsibility (CSR) performance and audit fees in Malaysia. It suggests two possibilities: firms use CSR to enhance their image and personal benefits, leading to higher audit risks and fees, or CSR initiatives improve employee welfare, community development, and customer satisfaction. The study suggests policymakers must revise Malaysia's sustainability reporting framework (Krisnawati, 2014). The paper compares robust social sustainability programs in Malaysian capital markets, focusing on market acceptance, corporate image, and risk reduction, and suggests monitoring and enhancing the current CSR reporting framework to improve ethical standards and social norms (Yip, 2023).

Government practices and the financial stability in the insurance industry

The insurance industry is crucial for sustainable development and financial stability, requiring good corporate governance, health, and risk management. Research highlights the importance of environmental, social, and governance factors in the sector, as well as aligning economic profits with social inclusion and environmental protection. Insurance companies are incorporating ESG principles to address climate change, human rights, and disaster management. Robust governance frameworks, including United Nations sustainable insurance guidelines, help assess ESG risks and leverage opportunities for sustainable development (Kansal, 2023). Insurance companies can support national economic and social goals, create employment, and promote social inclusion by adhering to governance practices, corporate social responsibility initiatives, and ethical practices (Kansal, 2023).

Sustainability reporting and its effects on financial performance

Sustainability reporting significantly impacts a company's financial outcomes when adhering to global standards. It provides detailed disclosures on environmental and governance practices, allowing stakeholders to understand the company's commitment to sustainable operations. This transparency fulfils regulatory requirements and attracts investment by demonstrating long-term visibility and risk management capabilities. Investors view sustainability reports as indicators of operational efficiency, risk management, and forward-thinking strategies, leading to improved financial performance and competitive advantage (Angioni, 2024).

Transparent sustainability practices have been shown to boost investor confidence and market performance. Companies like Unilever and Patagonia have consistently demonstrated their commitment to reducing environmental impact and improving social welfare, attracting long-term investments. Transparent reporting on environmental footprints and social initiatives resonates with ethical investors, increasing market valuation and customer loyalty. High levels of transparency in sustainability reporting lead to increased investor confidence, improved market performance, and risk-taking, solidifying a company's market position and financial resilience (Angioni, 2024).

The hypotheses formulated for both life and General insurance firms consist of six in number.;

Life insurance sector

Environmental Practices

H1: *The level of environmental practices implemented by Sri Lankan Life insurance companies has a significant positive impact on the firms' financial performance.*

Social Practices

H2: *The level of social practices implemented by Sri Lankan life insurance companies has a significant positive impact on the firms' financial performance.*

Governance Practices

H3: *The level of governance practices implemented by Sri Lankan Life insurance companies has a significant positive impact on the firms' financial performance.*

General insurance sector

H4: *The level of environmental practices implemented by Sri Lankan general insurance companies has a significant positive impact on the firms' financial performance.*

Social Practices

H5: *The level of social practices implemented by Sri Lankan insurance general companies has a significant positive impact on the firms' financial performance.*

Governance Practices

H6: *The level of governance practices implemented by Sri Lankan general insurance companies has a significant positive impact on the firms' financial performance.*

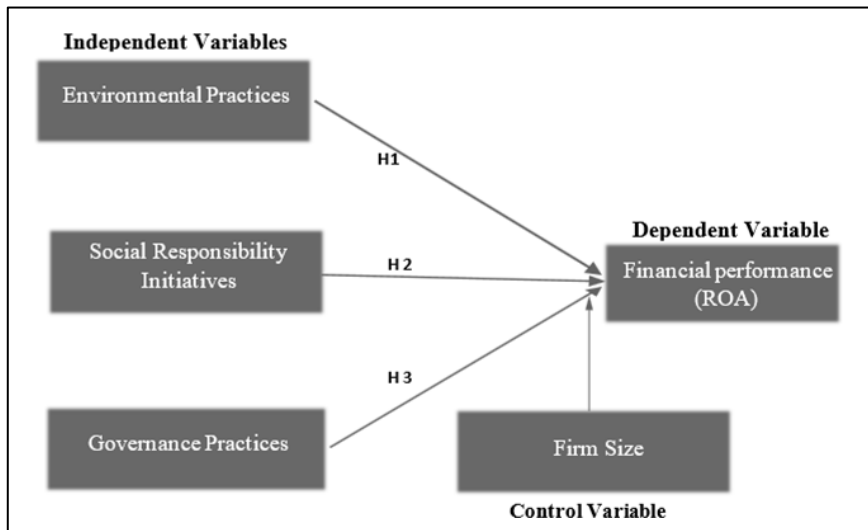
Methodology

Study period and sample

The main data source for this study is secondary data, which will be obtained from the annual reports of the chosen insurance companies from 2013 to 2022 that are listed on the CSE. Twenty-six selected insurance companies were selected out of a total population of twenty-nine insurance companies; this study examines nearly the full population. These businesses were chosen on the basis of their continuous operation throughout the past 10 years, which guarantees their financial stability. A comprehensive analysis of the trends and patterns in sustainability practices and financial performance can be conducted throughout the ten years (2013 - 2022). To determine long-term effects and correlations, this longitudinal technique offers an extensive dataset.

A methodical approach can be employed to create a Sustainability Reporting (SR) Index that utilises GRI standards to evaluate the sustainability performance of companies. The process begins by gathering sustainability disclosures from the companies' annual reports, ensuring adherence to GRI G4 guidelines for categorisation. The disclosures are then classified into three groups: environmental (12 indicators), social (30 indicators) and economic (4 indicators). A scoring system is then utilised whereby the presence of a disclosure qualifies for a score of 1, while the absence scores 0. In order to calculate the compliance scores, the number of disclosed indicators is divided by the total number of indicators within each examined category. Then, those scores are in turn converted into percentages. Finally, the final overall SR Index is reported as a weighted average of the three dimensions, assuming equal weights for ease of computation. This system makes it possible to evaluate the company's sustainability performance without leaving the GRI framework. The conceptual framework is given below

Figure1
Conceptual Framework



(Source: Developed by authors based on literature (2025))

Dependent variable

Among the ratios that are used to assess a company's profitability is ROA. ROA is a metric used to assess how well a business can generate revenue from its assets within management's authority. An increasing ROA value signifies improved success for the organisation. (Kadar, 2017).

Independent variable

Environmental practices, Social Responsibility initiatives and Governance practices were considered as independent variables, according to the GRI G4 guidelines.

Control variables

Firm size is frequently used as a determining factor for environmental, social, and economic activities. The natural logarithm of the total assets is used as the condition in the model to account for the company's size (Lassala, 2017).

This study adopts a quantitative approach using panel regression analysis. Assumption tests such as multicollinearity, heteroskedasticity, and autocorrelation diagnostics were conducted to ensure model validity.

Model specifications: The two models were developed based on life insurance firms and general insurance firms.

Model 1: Life Insurance sector

$$ROA_{it} = \beta_0 + \beta_1 \text{Environmental_Lit} + \beta_2 \text{Social_Lit} + \beta_3 \text{Governance_Lit} + \beta_4 \text{Firmsize_Lit} + \epsilon_i$$

Model 2: General Insurance sector

$$ROA_{it} = \beta_0 + \beta_1 \text{Environmental_Git} + \beta_2 \text{Social_Git} + \beta_3 \text{Governance_Git} + \beta_4 \text{Firmsize_Git} + \epsilon_i$$

Findings and Discussion

A broad variety of values across several factors can be found in the life insurance firms' descriptive statistics. With a substantial standard deviation of 3.09 and an average of 22.65 for firm size, there is a significant range in these firms' sizes. The 2.49 'within' standard deviation indicates that there may be some variation in the size of individual businesses over time. The standard deviations reveal considerable variation, with mean scores for governance, environmental, and social responsibility requirements being relatively low. This implies that some businesses have made substantial progress in these fields while others are still lagging. Another indicator of financial performance that varies throughout companies is the ROA. With a standard deviation of 0.07 and an average ROA of 0.03, an extensive range of profitability levels is indicated. The descriptive statistics show how diverse Sri Lanka's life insurance market is, with differences in size, financial performance, and sustainability policies.

The descriptive statistics for general insurance companies reveal the distribution of essential variables. With an average of 22.73 and a standard deviation of 1.41, firm size is a critical factor, showing a modest variance. Significant variations in size across enterprises are shown by the ‘between’ standard deviation of 1.02, whereas the ‘within’ standard deviation of 0.59 implies minimal changes in size within particular firms over time. The firm size ranges from 21.07 to 24.96, further supporting the notion. These areas require development regarding sustainability practices as the mean scores for governance, environmental, and social responsibility criteria are relatively low. Significant variance across organisations is shown by the standard deviations for these variables, suggesting that some companies are more advanced in their sustainability efforts than others.

Lastly, ROA, a measure of financial success, exhibits an average of 0.04 with a standard deviation of 0.04. This implies that general insurance providers in Sri Lanka have varying degrees of profitability. The descriptive statistics illustrate that Sri Lanka's general insurance market is diversified, with differences in financial performance, sustainability practices, and company size.

Both sectors exhibit comparable trends in sustainability practices, with comparatively low average scores for social responsibility, environmental, and governance criteria. The standard deviations, however, demonstrate a great deal of variance within each sector, pointing to a wide variety of sustainability methods businesses use. The two sectors' average financial performance is identical, as determined by ROA. The life insurance industry seems to have a somewhat higher standard deviation for ROA, which suggests that there is more variation in the profitability levels of life insurance companies. Overall, the life insurance industry appears to have a wider diversity of firm sizes, even if both industries have low average sustainability scores and differing degrees of financial performance.

Regression analysis

Regression Model of the Life Insurance Sector:

$$ROA_{it} = \beta_0 + \beta_1 \text{Environmental_L}_{it} + \beta_2 \text{Social_L}_{it} + \beta_3 \text{Governance_L}_{it} + \beta_4 \text{Firm_size_L}_{it} + \epsilon_i$$

$$ROA_{it} = -0.1182 - 0.0447 \text{Environmental_L}_{it} + 0.0763 \text{Social_L}_{it} - 0.0013 \text{Governance_L}_{it} + 0.0059 \text{Firm_size_L}_{it} + \epsilon_i$$

Regression Model of the General Insurance Sector:

$$ROA_{it} = \beta_0 + \beta_1 \text{Environmental_G}_{it} + \beta_2 \text{Social_G}_{it} + \beta_3 \text{Governance_G}_{it} + \beta_4 \text{Firm_size_G}_{it} + \epsilon_i$$

$$ROA_{it} = -0.1356 + 0.0003 \text{Environmental_G}_{it} + 0.0747 \text{Social_G}_{it} + 0.0155 \text{Governance_G}_{it} + 0.0068 \text{Firm_size_G}_{it} + \epsilon_i$$

Table 01

Regression analysis - Life

Variable	Coef.	Std. Err.	z	P> z	95% conf.	Interval
Social_res_L	0.0763437	0.0294801	2.59	0.010	0.0185638	0.1341235
Environment_L	-0.044699	0.0257211	-1.74	0.082	-0.0951115	0.0057134
Governance_L	-0.0013172	0.0157376	-0.08	0.933	-0.0321623	0.029528
Firm_size_L	0.0059165	0.0034213	1.73	0.084	-0.0007892	0.0126221
Constant	-1.181639	0.761887	-1.55	0.121	-2.67491	0.311632
P-value	0.0043					
R-squared (within)	0.1006					
R-squared (between)	0.0909					
R-squared (overall)	0.0906					

(Source: Authors, based on survey results)

The R-squared values suggest a moderate fit of the model to the data. The within-group R-squared of 0.1006 indicates that the model explains 10.06% of the variation in ROA within each company. The between-group R-squared of 0.0909 suggests that the model explains 9.09% of the variation in average ROA across companies. When all other variables are equal, a 0.0763 rise in ROA corresponds to a one-unit increase in the social responsibility standard score. At the 1% level, this effect is statistically significant. When all other factors are held constant, a 0.0447 decrease in ROA corresponds to a one-unit increase in the environmental standard score. Nevertheless, at the standard 5% level, this effect is not statistically significant. When all other variables are equal, a 0.0013 drop in ROA corresponds to a one-unit increase in the governance standard score. There is no statistical significance to this impact. When all other factors are equal, a one-unit increase in firm size is linked to a 0.0059 rise in ROA. At the 10% level, this effect is statistically significant to a moderate extent. The model indicates that social responsibility positively and statistically significantly affects life insurance firms' financial performance, as ROA indicates. ROA does not seem to be much impacted by environmental or governance specifications, and firm size has a marginal effect.

Table 02
Regression analysis - General

Variable	Coef.	Std. Err.	z	P> z	95% conf.	Interval
Social_res_G	0.0747068	0.0212101	3.52	0.000	0.0331358	0.1162778
Environment_G	0.0003444	0.0013425	0.26	0.798	-0.0022869	0.0029757
Governance_G	-0.0155335	0.0153352	-1.01	0.311	-0.04559	0.014523
Firmsize_G	0.0067563	0.0052042	1.30	0.194	-0.0034437	0.0169564
Constant	-1.355901	1.1146938	-1.18	0.237	-0.3603857	0.892056
P-value	0.0000					
R-squared (within)	0.2582					
R-squared (between)	0.0307					
R-squared (overall)	0.1735					

(Source: Authors, based on survey results)

R-squared values imply that the model fits the data moderately. The within-group R-squared of 0.2582 indicates that the model accounts for 25.82% of the variation in ROA within each company. The between-group R-squared of 0.0307 implies that the model accounts for 3.07% of the variation in average ROA across enterprises. A one-unit rise in the social responsibility standard score relates to a 0.0747 increase in ROA when other parameters remain unchanged. The effect is statistically significant at the 1% level. A one-unit increase in environmental standard score corresponds with a 0.0003 increase in ROA, assuming all other factors remain constant. This effect is statistically insignificant. A one-unit increase in the governance standard score relates to a 0.0155 decrease in ROA, assuming all other factors remain unchanged. This effect is statistically insignificant. A one-unit increase in firm size is associated with a 0.0068 increase in ROA, holding other factors constant. This effect is not statistically significant. Overall, the model indicates that social responsibility has a favourable and statistically significant effect on general insurance companies' financial performance, as evaluated by ROA. Environmental, governance and firm size do not seem to impact ROA substantially. In both sectors, as evaluated by ROA, social responsibility is identified as the most critical element driving financial performance. A more excellent social responsibility score led to a considerable rise in ROA.

These findings align with Krisnawati (2014), who emphasised that social responsibility programs enhance a company's image, foster employee satisfaction, and contribute positively to profitability — consistent with the significant positive effect of social practices found in this study. Similarly, Yip (2023) highlighted that strong social performance and transparent CSR initiatives improve market reputation and stakeholder trust, ultimately reducing audit risks and increasing investor confidence. This supports the current study's evidence that social responsibility practices significantly influence the Return on Assets (ROA) of both life and general insurers in Sri Lanka.

However, the insignificant relationship between environmental practices and financial performance contrasts with the findings of Zhang et al. (2021) and Angioni et al. (2024), who reported that environmentally responsible behaviour enhances long-term financial resilience by improving risk management and attracting ethical investors. The difference may arise from the relatively low level of environmental reporting and investment in eco-initiatives within Sri Lanka's insurance sector compared to developed markets. This study is limited by its reliance on secondary data sources, the use of a single profitability metric (ROA), and the absence of qualitative insights that could provide deeper contextual understanding. To address these limitations, future research could incorporate primary data collection methods and adopt a broader set of financial indicators to capture a more comprehensive view of insurer performance.

Conclusion

According to the study's findings, social responsibility initiatives are essential for boosting the insurance sector's financial performance in Sri Lanka. It has been shown that companies in the life and general insurance industries gain from offering social initiatives like ethical corporate conduct, community involvement, and employee welfare as top priorities. These efforts also appear to boost ROA. This is consistent with the rising amount of research indicating that CSR improves financial results by lowering operational risks, boosting consumer loyalty, and improving brand reputation.

In contrast to what was anticipated, environmental and governance standards had no statistically significant impact on financial performance. The comparatively early adoption of sustainability reporting in Sri Lanka's insurance industry and the difficulties in quantifying the financial gains directly related to governance and environmental initiatives are two possible causes. The low financial impact observed from these two variables may also result

from structural and cultural variations in the insurance market. Due to the limited scope of governance practices reflected in the available data, there may not be a substantial correlation between financial performance and governance standards, even when the coefficient is positive but not statistically significant.

Minor variations in the relationship between these sustainability factors and financial performance exist between the life and general insurance industries. The life insurance industry exhibits a stronger association between environmental standards and social responsibility, indicating a more integrated approach to sustainability, even though social responsibility has a beneficial impact on ROA in both industries. However, compared to the life insurance industry, the general insurance industry places a greater emphasis on governance practices, which are more closely correlated with firm size and social responsibility scores.

The results suggest that Sri Lankan insurers can significantly improve profitability by adopting more robust and strategic social responsibility initiatives. This underscores the importance of embedding ESG principles into core business practices. Furthermore, policymakers have a critical role to play in fostering this shift by introducing incentives and strengthening disclosure frameworks, which would encourage greater transparency and accountability in ESG integration across the insurance sector.

References

Angioni, S., Casu, S., & Congiu, S. (2024). Exploring environmental, social, and governance (ESG) discourse in news: An AI-powered investigation through knowledge graph analysis. *IEEE Access*, 5–19.

Insurance Regulatory Commission of Sri Lanka. (2022). *Statistical review 2021*. IRCSL.

Jagyasi, D., & Rathi, A. (2023). Implementation of ESG index on long-term value and performance of organisations.

Kadar, K. (2017). Relationship analysis between EVA, EPS, ROA, ROE and price-earnings ratio. *Advances in Economics, Business and Management Research*, 22, 379–384.

Kansal, R., & Nigam, D. (2023). An empirical analysis in analysing the critical factors influencing the health insurance business in achieving sustainable development using the structural equation model. *2023 IEEE IAS Global Conference on Emerging Technologies (GlobConET)* (pp. 1–17). IEEE.

Krisnawati, G. Y. (2014). *Building a novel performance measurement system for corporate social responsibility toward sustainable development* (pp. 1–16). School of Business and Management, Institut Teknologi Bandung.

Lassala, C., Apetrei, A., & Sapena, J. (2017). Sustainability matters and financial performance. *Sustainability*, 1–14. MDPI.

(Note: MDPI journals require the journal name. If this is the MDPI journal *Sustainability*, this correction is accurate.)

Yip, Y. (2023). The nexus between corporate social responsibility performance and audit fee: The Malaysian evidence. *2023 International Conference on Digital Applications, Transformation & Economy (ICDATE)* (pp. 302–345). IEEE.

Zhang, S., & Kumar, J. (2021). Eco-innovation and its impact on the environment. *7th International Conference on Engineering and Emerging Technologies (ICEET)* (pp. 14–21). IEEE.