

-RESEARCH ARTICLE-

THE ASSOCIATION BETWEEN CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE: A JSE PERSPECTIVE

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—Abstract—

Corporate Social Responsibility (CSR) has become an increasingly important component of contemporary corporate strategy, reflecting the growing understanding that organisations' environmental and social initiatives can shape their financial success. This study investigates the association between CSR practices and the financial performance of leading firms listed on the Johannesburg Stock Exchange. Using Pearson correlation analysis and multiple regression techniques, the findings indicate a significant positive relationship between CSR and financial outcomes, with the regression model accounting for 52.2% of the variation in Environmental, Social, and Governance (ESG) scores. Based on these results, the study suggests that JSE-listed organisations integrate CSR reporting into their strategic governance and management systems, while policymakers and regulatory authorities should consider measures that encourage ESG disclosure to support long-term sustainable financial performance.

Keywords: Corporate Social Responsibility; Financial Performance; ESG; Financial Management; Listed Firms; JSE.

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INTRODUCTION

CSR has become an important element of contemporary business strategy, allowing organisations to create economic value while contributing to societal well-being. [Masum et al. \(2020\)](#) describe CSR as a management approach based on ethical conduct and sustainable business practices. Likewise, [Neureiter et al. \(2024\)](#) note that CSR reporting enables organisations to demonstrate responsible business conduct and evaluate the outcomes of their social and environmental initiatives. More broadly, CSR involves the adoption of ethical and socially beneficial practices that support community development and social progress. [Mathuros et al. \(2025\)](#) argue that corporations are expected to operate in ways that advance societal welfare and community well-being. Similarly, [Jamil et al. \(2022\)](#) suggest that organisations increasingly regard CSR as a means of achieving competitive advantage through the effective fulfilment of social responsibilities. As a result, CSR engagement can enhance corporate reputation and attract both domestic and international investors.

Over the past decade, stakeholder attention towards responsible corporate behaviour has intensified considerably. [Liang and Renneboog \(2021\)](#) report that assets managed under socially responsible investment criteria expanded substantially between 2012 and 2020, reflecting growing investor emphasis on environmental and social performance. Adherence to responsible investment principles typically requires the application of screening mechanisms that evaluate firms against Environmental, Social, and Governance (ESG) criteria before their inclusion in specialised investment portfolios ([Jamil et al., 2022](#)). Moreover, shareholder proposals relating to corporate responsibility have become increasingly common and frequently receive substantial support, highlighting rising investor expectations regarding responsible business conduct.

Within the South African context, persistent socioeconomic challenges continue to affect significant segments of the population, including poverty and unequal access to education, healthcare, and employment opportunities ([Statistics South Africa, 2024](#)). In response, publicly listed corporations actively engage in CSR initiatives aimed at supporting local communities and addressing developmental concerns. Although these contributions undoubtedly benefit disadvantaged groups, they may also generate value for shareholders. Despite the growing integration of CSR into corporate strategy, uncertainty remains regarding its financial implications, particularly within South Africa. Many firms listed on the Johannesburg Stock Exchange (JSE) allocate substantial resources to CSR programmes; however, the extent to which these investments enhance profitability, organisational growth, or other financial outcomes remains insufficiently understood.

Existing literature presents mixed findings concerning the relationship between CSR and financial performance. While numerous studies report a favourable association between CSR engagement and financial outcomes, others find little or no significant relationship.

This inconsistency highlights the need for further investigation. Accordingly, this study explores how organisational CSR activities influence financial performance. Specifically, it evaluates whether CSR contributes to enhanced corporate reputation, stronger customer loyalty, and improved operational efficiency, and whether these mechanisms ultimately translate into superior financial outcomes. For the purposes of this research, top-listed companies are defined as firms that satisfy one or more of the following criteria: inclusion in the JSE Top 40 Index based on market capitalisation and membership among South Africa's leading corporate social investors.

The findings of this study are expected to provide valuable insights for multiple stakeholder groups. Companies listed on the JSE may gain a clearer understanding of the potential financial returns associated with CSR investments. Investors and asset managers can utilise the findings to inform investment decisions and portfolio strategies. Regulatory bodies and policymakers, including the Financial Sector Conduct Authority (FSCA) and the JSE, may draw upon the results to strengthen frameworks governing mandatory ESG disclosure and reporting practices. Additionally, the study contributes to the academic literature by enhancing understanding of the CSR–financial performance relationship within an emerging market setting.

The remainder of this paper is organised as follows. The Literature Review section examines the theoretical foundations and empirical evidence relating to CSR and financial performance. The Research Design and Methodology section outlines the data sources, sampling procedures, and analytical methods employed in the study. The Research Findings section presents and discusses the empirical results. Finally, the Conclusion section summarises the principal findings and outlines their practical and policy implications.

LITERATURE REVIEW

The evolution of CSR from a largely philanthropic activity to a central component of contemporary business strategy reflects significant changes in corporate priorities over time. Amid increasing stakeholder expectations and growing concerns regarding environmental sustainability, CSR has emerged as an essential mechanism through which organisations assess, manage, and respond to the economic, social, and environmental consequences of their activities. This section explores the multidimensional nature of CSR by examining its various components, ranging from economic responsibilities to philanthropic contributions, while evaluating the theoretical and empirical relationship between ethical business conduct and financial performance. The discussion is organised into two principal parts. The first provides a detailed examination of the four dimensions of CSR presented in [Figure 1](#). The second offers a comprehensive review of the theoretical foundations and empirical evidence concerning the relationship between CSR and organisational financial performance.

The Four Elements of CSR

To develop a comprehensive understanding of the influence of CSR on contemporary organisations, it is necessary to examine the individual dimensions that collectively constitute the concept. Although CSR is often regarded as a single framework for ethical business conduct, it is more accurately conceptualised as a structured hierarchy of obligations that organisations owe to their stakeholders and the wider society. [Figure 1](#) illustrates these distinct dimensions and provides a framework for understanding the various components of CSR.



Figure 1: Different Elements of Corporate Social Responsibility (CSR)

Source: Authors

As illustrated in [Figure 1](#), economic responsibility constitutes the fundamental layer upon which all other dimensions of CSR are built. [Carroll \(2021\)](#) argues that organisations must first establish and maintain economic viability before effectively pursuing broader social commitments. This responsibility extends beyond generating returns for shareholders and includes conducting business in a manner that promotes equitable employee remuneration and supports local supply networks. [Fatma et al. \(2020\)](#) observed that organisations capable of aligning profitability objectives with societal contributions achieved substantially stronger long-term sustainability outcomes, reporting improvements of approximately 22%. For example, Anglo American and several other JSE-listed mining organisations dedicate roughly 1.2% of their annual profits to enterprise development programmes, thereby enhancing competitiveness while contributing to economic growth ([Trialogue, 2023](#)).

The second-dimension concerns environmental responsibility, which requires organisations to reduce the adverse ecological consequences of their operations through the adoption of sustainable business practices. Drawing upon an assessment of 1,200 ESG disclosures, [Zhao et al. \(2021\)](#) identified initiatives such as carbon-neutral strategies and circular economy programmes as important indicators of environmental stewardship. Similarly, [Drempetic et al. \(2020\)](#) found that organisations with formally implemented

environmental policies experienced a 17% decline in regulatory penalties. Within the South African context, Sasol's investment of R2.1 billion in water-recycling infrastructure demonstrates a commitment to environmental sustainability while addressing escalating national water scarcity concerns ([Sasol Limited, 2023](#)).

Ethical responsibility represents another important dimension and extends beyond mere compliance with legal requirements. It encompasses fair treatment of employees, transparent governance practices, and active measures to combat corruption. [Aguinis and Glavas \(2017\)](#) reported that ethical CSR initiatives substantially strengthen workforce commitment, with employee loyalty increasing by approximately 31% across a sample of 85 multinational organisations. In South Africa, ethical governance has been reinforced through the King IV framework, with evidence indicating that 92% of JSE Top 40 companies have established whistleblowing systems. A notable example is Vodacom, which operates a dedicated whistleblower platform that receives more than 200 reported cases annually ([Vodacom Group Limited, 2023](#)).

The final dimension is philanthropic responsibility, which involves voluntary contributions directed towards addressing societal needs, including educational development, poverty alleviation, and disaster-relief initiatives. When aligned strategically with an organisation's capabilities and long-term objectives, philanthropic CSR activities can generate significantly greater returns on investment. In South Africa, MTN's educational programmes have provided training and support to more than 15,000 teachers, while Shoprite's disaster-relief initiatives have distributed assistance valued at R178 million, benefiting approximately 2.1 million individuals ([Shoprite, 2023](#)). These examples illustrate how philanthropic engagement can create meaningful social impact while simultaneously strengthening organisational legitimacy and stakeholder relationships.

Theoretical Connection between Financial Performance and CSR

Several theoretical perspectives provide explanations for the relationship between CSR and financial performance. Among the most influential is Stakeholder Theory, which posits that organisations create value by addressing the interests and expectations of multiple stakeholder groups, including customers, employees, suppliers, investors, and local communities. By responding effectively to these stakeholder demands, firms can strengthen valuable intangible assets such as corporate reputation, legitimacy, trust, and stakeholder loyalty. Over time, the accumulation of these assets may enhance organisational competitiveness and contribute to sustained shareholder wealth creation. Another prominent perspective is the Shared Value Theory advanced by [Porter and Kramer \(2018\)](#), which argues that organisations can simultaneously generate economic value and address societal challenges by integrating social objectives into their core business strategies.

Empirical evidence largely supports these theoretical propositions. A comprehensive meta-analysis undertaken by [Friede et al. \(2015\)](#), which synthesised findings from more than 2,000 academic studies, revealed that nearly 80% reported either a positive or neutral association between CSR and financial performance. Furthermore, approximately half of the reviewed studies identified a statistically significant positive relationship between the two constructs. These findings suggest that CSR is generally not detrimental to organisational financial outcomes and may serve as a value-enhancing investment when implemented strategically and aligned with corporate objectives. To provide a broader perspective on the existing body of knowledge, [Table 1](#) presents a summary of major studies conducted between 1999 and 2024. The table outlines the respective authors, publication periods, geographical contexts, methodological approaches, and principal findings relating to the association between CSR and financial performance.

Table 1: Previous Research

Researcher (s)	Year	Location	Methodology	Finding
Margolis & Walsh	2003	United States of America, Canada, Japan	A qualitative review approach was undertaken using evidence gathered over a 30-year timeframe.	In 55% of the studies reviewed, no meaningful association was identified. The findings suggest that CSR does not always enhance financial outcomes, particularly when implementation is ineffective or poorly aligned with organisational strategy.
Luo & Bhattacharya	2006	North America, Europe and Asia	The study employed a longitudinal empirical design using data derived from Fortune 500 firms.	CSR was associated with higher customer satisfaction (+20%) and increased market share (+15%) through premium pricing opportunities. These outcomes contributed to stronger profit margins, greater customer retention, improved competitive positioning, and enhanced brand value. The effects were particularly pronounced within Business-to-Consumer (B2C) industries.
Eccles, Ioannou and Serafeim	2014	USA	A matched-pair research framework was utilised, incorporating longitudinal empirical analysis of 90 selected firms.	Organisations implementing formal sustainability policies recorded 19% greater profitability, largely attributable to operational efficiencies and cost reductions associated with energy and waste management.
Godfrey	2005	USA	The study adopted a qualitative methodology grounded in literature evaluation and economic theory analysis.	CSR functions as a form of reputational protection, lowering stock-price volatility by approximately 30% during periods of crisis, including corporate scandals and economic downturns.
S&P Global	2021	North America, Europe and Asia-Pacific	A quantitative market-based assessment was conducted using firms drawn from the S&P 500 index.	Firms with superior ESG performance generated stock returns that exceeded those of comparable firms by 25% during the 2020 market downturn, primarily because of stronger stakeholder confidence.

Table 1(continued): Previous Research

Researcher (s)	Year	Location	Methodology	Finding
Fatma, Khan, Rahman and Perez	2021	Asia (India, China, Bangladesh, Indonesia), Latin America (Brazil, Mexico), Africa (South Africa, Nigeria) and Middle East (UAE, Saudi Arabia)	Quantitative techniques were applied using longitudinal panel data obtained from Bloomberg.	CSR participation was linked to 22% higher long-term ROA, particularly among customer-oriented sectors such as retail and banking.
Friede, Busch and Bassen	2015	USA, Europe, Asia-Pacific and Africa	The study synthesised evidence from 2,250 individual investigations through a systematic review approach, making the research qualitative in nature.	The relationship between CSR and financial performance was mixed; however, approximately 80% of the reviewed studies reported either neutral or positive associations. Around half identified a statistically significant positive relationship, indicating the potential of CSR initiatives to strengthen financial performance.
Porter and Kramer	2011	USA	The research was based on theoretical integration supported by illustrative case-study evidence.	Strategic CSR, whereby social and environmental objectives are integrated with core business activities, generates competitive advantages for organisations.
Barnett and Salomon	2012	USA	Quantitative methods were employed through the analysis of longitudinal panel data collected from 121 firms over a 15-year period.	The findings indicate a U-shaped relationship between CSR expenditure and financial performance. Moderate investment in CSR contributes positively to financial outcomes, whereas excessive expenditure may adversely affect performance.
Amodu	2018	South Africa (JSE)	A qualitative design was adopted using contextual enquiry, contextual mapping, and case-study analysis.	The study found that compliance with B-BBEE, a key component of South Africa's ESG social pillar, positively influences financial performance, with compliant firms achieving 12% higher ROA than non-compliant counterparts.
Maignan, Ferrell and Hult	1999	Europe & USA	A quantitative survey-based methodology was utilised, involving 154 participants.	Engagement in CSR activities enhances brand perceptions by establishing an ethical market position. Such positioning aligns with consumer expectations and encourages greater employee commitment. Organisations with strong CSR engagement reported an 18% increase in employee retention and a 12% improvement in customer loyalty.

Source: Researchers as listed

Drawing from the preceding discussion, it can be observed that a meaningful association exists between CSR, ESG, and financial performance, although the strength and direction of this relationship may vary across different organisational and contextual settings. Existing evidence highlights several recurring patterns regarding the influence of CSR and ESG on financial outcomes:

Positive Association

A substantial body of literature indicates that CSR contributes positively to organisational performance. For example, studies such as [Fatma et al. \(2020\)](#) report that firms with strong CSR engagement often experience higher profitability, including improvements in customer satisfaction levels of approximately 20% and increases in return on equity (ROE) of around 22%, particularly within consumer-oriented industries.

Risk Reduction

CSR can function as a protective reputational mechanism that enhances organisational resilience during periods of uncertainty. Research by [S&P Global \(2021\)](#) suggests that firms with established CSR practices may experience reductions in stock-price volatility of up to 30% during crises, thereby mitigating financial and reputational risks.

Optimal Investment Balance

[Barnett and Salomon \(2012\)](#) propose a U-shaped relationship between CSR expenditure and financial performance. Their findings suggest that moderate and strategically targeted CSR investments generate the greatest financial benefits, whereas excessive investment beyond an optimal threshold may diminish returns and negatively affect organisational performance.

South African Context

Evidence from South Africa indicates that organisations demonstrating strong compliance with Broad-Based Black Economic Empowerment (B-BBEE) requirements tend to achieve approximately 12% higher ROE. This finding illustrates that the financial benefits associated with ESG initiatives are often influenced by local institutional, regulatory, and socio-economic conditions. Overall, although CSR and ESG are generally associated with enhanced financial outcomes, the magnitude of these benefits is influenced by factors such as industry characteristics, geographical context, and the degree of strategic integration. Consequently, successful implementation requires organisations to align CSR and ESG initiatives with their specific operational environment and long-term strategic objectives.

RESEARCH DESIGN AND METHODOLOGY

A descriptive research design was adopted to examine the relationship between CSR and financial performance. The study employed a quantitative longitudinal approach. A quantitative framework was considered appropriate because it facilitates the objective measurement of variables using ESG ratings and financial indicators, thereby enabling a rigorous assessment of the association between them. The longitudinal design was selected because the financial implications of CSR initiatives often emerge over extended periods, making it necessary to evaluate organisational performance across multiple years (Ployhart & Vandenberg, 2010). Accordingly, data covering the period from 2015 to 2025 were analysed to identify potential trends in the relationship between CSR investment and financial outcomes. The study relied on secondary data due to the availability of standardised financial and sustainability measures. Financial information was obtained from the IRESS database, whereas ESG data were sourced from Bloomberg ESG ratings. The target population comprised the Top 30 CSR investors listed on the JSE. These organisations were selected because of their substantial market influence, significant commitment to CSR expenditure, and the accessibility of their publicly available financial information. Judgement sampling was employed, whereby researcher expertise guided the selection of suitable cases. The sample selection process was based on the following criteria:

- **Accessibility:** Availability of company information through IRESS or JSE sources.
- **Consistency:** Adoption of standardised ESG reporting practices.
- **Relevance:** Inclusion among the JSE's Top 30 CSR investors.

Applying these criteria resulted in a final sample of 27 organisations. Although relatively modest in size, the sample remains highly representative of the study population. The selected firms represent those among the Top 30 CSR investors that consistently reported both ESG and financial data throughout the study period from 2020 to 2024. Collectively, these organisations account for a substantial share of JSE market capitalisation and CSR expenditure within South Africa. Consequently, while the sample does not encompass every listed company, it provides a robust representation of leading organisations engaged in CSR activities. Furthermore, studies focusing on emerging markets frequently utilise comparable sample sizes (Friede et al., 2015). Following sample selection, appropriate measurement proxies were identified for the principal constructs. ESG scores were utilised as the proxy measure for CSR performance, while financial performance was represented through selected financial ratios. The financial data were collected from secondary sources covering five consecutive years, spanning 2020 to 2024. Primary data sources included the IRESS financial database and publicly available information from the JSE.

Several methodological limitations should be acknowledged. First, Pearson correlation analysis and regression modelling identify statistical associations but do not establish causal relationships. Consequently, the findings cannot be interpreted as definitive evidence that

investment in CSR initiatives directly improves organisational financial performance. Second, the possibility of reverse causality exists, whereby financially stronger organisations may possess greater resources to invest in CSR activities. Third, the issue of endogeneity cannot be fully excluded, as unobserved factors may simultaneously influence both ESG scores and financial performance measures, potentially generating spurious relationships between the variables. To analyse the data, three categories of statistical procedures were undertaken:

- **Normality Testing:** This preliminary diagnostic procedure was used to determine whether the data approximated a normal distribution. The results informed the selection of subsequent analytical techniques.
- **Correlation Analysis:** Correlation analysis was conducted to evaluate the strength and direction of relationships between CSR-related measures and various indicators of financial performance.
- **Multiple Regression Modelling:** Multiple regression analysis was employed to assess the combined influence of several independent variables, including financial ratios, on ESG scores.

The results generated from these statistical procedures are presented and discussed in the following section.

RESEARCH FINDINGS

The findings of this study were obtained through the importation of secondary data into SPSS, followed by the application of appropriate statistical analyses. A 5% margin of error was adopted, corresponding to a 95% confidence level for all statistical tests. The interpretation and presentation of results focused primarily on statistical significance. Consequently, only those variables and financial ratios demonstrating a statistically meaningful relationship were included in the discussion, whereas measures that failed to achieve significance were excluded from the final analysis. The following sections present and interpret the findings derived from each statistical procedure undertaken in the study.

Normality Testing

The objective of the normality assessment was to determine whether the dataset satisfied the assumptions required for parametric statistical analysis. Data distribution was evaluated using the Shapiro–Wilk normality test, which assesses the extent to which a variable conforms to a normal distribution. The test produces a probability statistic, commonly referred to as the p-value. A p-value greater than 0.05 indicates that the distribution does not significantly deviate from normality and can therefore be regarded as normally distributed. The results of the Shapiro–Wilk normality analysis are presented in [Table 2](#).

Table 2: Shapiro Wilk Significance Results

	2020	2021	2022	2023	2024
N	27	27	27	27	27
ESG Score	0.737	0.510	0.205	0.101	0.510
Assets/Capital Employed	0.171	0.783	0.118	0.912	0.783
Debt to Equity	0.435	0.308	0.663	0.905	0.308
Operating Profit/Number of Employees	0.485	0.969	0.112	0.813	0.156
Operating Profit Margin	0.331	0.708	0.544	0.336	0.438
Return on Assets	0.216	0.364	0.124	0.388	0.364
Price Earnings Ratio	0.590	0.305	0.487	0.292	0.721

Source: Authors

According to [Table 2](#), the Shapiro–Wilk test was employed to evaluate the normality of each variable across the five-year observation period from 2020 to 2024, with 27 observations recorded for each year. Under the test assumptions, the null hypothesis states that the data are normally distributed. Therefore, p-values exceeding 0.05 indicate insufficient evidence to reject normality, whereas p-values of 0.05 or below suggests a statistically significant departure from a normal distribution. The results demonstrate that the normality assumption was satisfied for most variables throughout the study period. In the case of ESG, the reported p-values exceeded the 0.05 threshold in every year examined, including 2020 ($p = 0.737$), 2021 ($p = 0.510$), 2022 ($p = 0.205$), 2023 ($p = 0.101$), and 2024 ($p = 0.510$). Although the values recorded in 2022 and 2023 were comparatively closer to the critical threshold, they remained above the significance level and therefore continued to support the assumption of normality.

A similar pattern was observed for the assets-to-capital-employed ratio. The variable exhibited relatively strong evidence of normality across all years, with particularly high p-values reported in 2021 ($p = 0.783$), 2023 ($p = 0.912$), and 2024 ($p = 0.783$). The corresponding values for 2020 ($p = 0.171$) and 2022 ($p = 0.118$) were lower but still comfortably above the accepted threshold. Likewise, the debt-to-equity ratio satisfied the normality criterion throughout the period, with p-values ranging from 0.308 in 2021 and 2024 to 0.905 in 2023. Greater variation was evident for operating profit per employee. Strong support for normality was observed in 2021 ($p = 0.969$) and 2023 ($p = 0.813$). Although the corresponding values in 2020 ($p = 0.485$) and 2022 ($p = 0.112$) were comparatively lower, they nevertheless remained above the critical value, indicating no statistically significant violation of normality. In 2024, the p-value declined to 0.156, suggesting a modest departure from perfect symmetry; however, the result still exceeded the 0.05 threshold and therefore did not warrant rejection of the normality assumption.

The operating profit margin and return on assets variables also displayed consistent normal distributions across all years under investigation. For operating profit margin, p-values ranged between 0.331 in 2020 and 0.708 in 2021. Similarly, return on assets produced values

ranging from 0.124 in 2022 to 0.388 in 2023, all of which remained above the significance level. The price-to-earnings ratio followed the same pattern, with p-values varying between 0.292 in 2023 and 0.721 in 2024. Overall, the Shapiro–Wilk test findings confirm that all seven variables met the normality assumption throughout the 2020–2024 period, as none of the reported p-values fell below the 0.05 significance threshold. Consequently, the use of parametric statistical techniques for the subsequent stages of analysis is considered appropriate and statistically justified.

Correlation Testing

Following confirmation that all variables satisfied the normality assumption, the Pearson product–moment correlation coefficient was employed to assess the strength and direction of the relationships among the variables. Pearson correlation analysis is appropriate when data are normally distributed and enables the measurement of linear associations between variables. The correlation coefficient is denoted by the symbol r , with values ranging from -1 to $+1$, where positive values indicate a direct relationship and negative values indicate an inverse relationship. For the purposes of this study, the magnitude of the correlation coefficients was interpreted according to the following guidelines:

- $r \leq 0.3$ indicates a weak relationship or small effect size.
- $r \geq 0.5$ indicates a strong relationship or large effect size.
- $r \geq 0.8$ indicates a very strong relationship or very large effect size.

The relationship between ESG scores and the assets-to-capital-employed ratio remained consistently strong throughout the study period. The strongest association was observed in 2022 ($r = 0.830$), representing a very large effect and indicating that firms with superior ESG performance generally possessed substantially larger asset bases or higher levels of capital employed during that year. Strong positive correlations were also recorded in 2020 ($r = 0.680$), 2021 ($r = 0.623$), 2023 ($r = 0.791$), and 2024 ($r = 0.695$). The persistence of these findings suggests a stable positive connection between ESG performance and organisational capital deployment. One possible explanation is that larger and more capital-intensive firms possess greater resources to implement and sustain ESG-related initiatives.

The association between ESG scores and the debt-to-equity ratio displayed greater variability across the five-year period. Strong correlations were observed in 2020 ($r = 0.713$) and 2021 ($r = 0.617$), indicating a substantial relationship between ESG performance and organisational financing structures. However, the strength of this relationship declined during 2022 ($r = 0.408$) and 2023 ($r = 0.466$), suggesting that the influence of ESG factors on leverage decisions was not consistent across all years. In contrast, 2024 recorded the strongest coefficient among all analysed variables and years ($r = 0.846$), representing a very large effect size. This result implies that firms with stronger ESG performance tended to exhibit significantly higher debt-to-equity ratios during the final year of analysis. Such a

finding may reflect the increasing availability of sustainability-linked financing mechanisms and ESG-oriented funding opportunities.

Table 3: Pearson Correlation Coefficients

Details	N	2020 r	2021 R	2022 r	2023 r	2024 r
ESG Score and Assets/Capital Employed	27	0.680	0.623	0.830	0.791	0.695
ESG Score and Debt to Equity	27	0.713	0.617	0.408	0.466	0.846
ESG Score and Operating Profit/Number of Employees	27	0.857	0.588	0.888	0.418	0.605
ESG Score and Operating Profit Margin	27	0.518	0.621	0.593	0.677	0.436
ESG Score and Return on Assets	27	0.691	0.472	0.446	0.540	0.542
ESG Score and Price Earnings	27	0.503	0.411	0.409	0.549	0.447

Source: Author

Among all financial indicators examined, operating profit per employee demonstrated the strongest and most consistent association with ESG performance. Exceptionally high correlations were identified in 2020 ($r = 0.857$) and 2022 ($r = 0.888$), with the latter representing the highest coefficient recorded in the entire dataset. These findings indicate a substantial positive relationship between ESG performance and labour productivity, as measured by operating profit generated per employee. Although the correlations weakened somewhat in 2021 ($r = 0.588$), 2023 ($r = 0.418$), and 2024 ($r = 0.605$), they remained moderate to strong. Overall, operating profit per employee emerged as the indicator most strongly associated with ESG performance across the study period.

The relationship between ESG scores and operating profit margin also remained positive throughout the analysis. Correlation coefficients ranged from 0.436 in 2024 to 0.677 in 2023, with the strongest association occurring in the latter year. Comparable results were observed in 2020 ($r = 0.518$), 2021 ($r = 0.621$), and 2022 ($r = 0.593$), indicating a relatively stable pattern over time. These findings suggest that firms demonstrating stronger ESG performance generally achieved higher operating profit margins, potentially because of enhanced operational efficiency, stronger stakeholder engagement, and reduced exposure to regulatory or reputational risks. Although the coefficient declined in 2024, the relationship remained positive and economically meaningful. The association between ESG scores and return on assets (ROA) was strongest in 2020 ($r = 0.691$). Thereafter, the magnitude of the relationship declined moderately, with coefficients of 0.472 in 2021, 0.446 in 2022, and 0.540 in 2023. The correlation remained relatively stable in 2024 at 0.542. While the results continue to indicate a positive relationship between ESG performance and asset profitability, the gradual reduction in effect size may suggest that the competitive advantages associated with ESG adoption became less pronounced as a larger number of firms embraced sustainability practices.

Finally, the relationship between ESG scores and the price-to-earnings (P/E) ratio was both the weakest and the most volatile among the variables examined. A strong positive correlation was observed in 2020 ($r = 0.503$), followed by weaker coefficients in 2021 ($r = 0.411$) and 2022 ($r = 0.409$). The relationship strengthened again in 2023 ($r = 0.549$) before declining to 0.447 in 2024. These fluctuations suggest that market valuation, as reflected by the P/E ratio, was not consistently aligned with ESG performance. Investor sentiment, macroeconomic conditions, interest-rate movements, and industry-specific factors may have exerted a stronger influence on equity valuations, thereby reducing the visibility of ESG-related effects within market-based measures. Taken together, the findings provide substantial support for the proposition that ESG performance is positively associated with financial performance across multiple dimensions. However, the magnitude and consistency of these relationships differ across individual financial indicators and time periods, indicating that the financial benefits of ESG engagement are influenced by both organisational and contextual factors.

Multiple Regression Model

This section presents the results obtained from the multiple regression analysis undertaken to further examine the relationship between ESG performance and selected financial indicators. Multiple regression analysis was employed to assess the combined influence of the independent variables on ESG scores and to determine the extent to which variations in ESG performance could be explained by the financial measures included in the model. The regression findings are organised into three principal tables. [Table 4](#) presents the Model Summary, providing an overview of the explanatory power of the regression model.

Table 4: Model Summary for Multiple Regression Model

Description	R	R Square	Adjusted R Square	Std Error of Estimate
Multiple Regression Model	0.7224	0.522	0.515	34.041

Source: Author

[Table 5](#) reports the Model Metrics, including the statistical measures used to evaluate overall model significance and goodness of fit.

Table 5: Model Metrics

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	53775.233	6	895.872	0.773	0.000
Residual	101974.073	88	1158.796		
Total	107349.305	94			

Source: Author

Finally, [Table 6](#) presents the Regression Coefficients, which indicate the direction, magnitude, and statistical significance of the relationships between the individual financial

indicators and ESG scores. The results contained within these tables are discussed in detail in the following sections.

Table 6: Coefficients to the Model

	Unstandardised Coefficients (B)	Standard Error	t	Sig
Constant	60.665	12.659	2.792	0.000
Assets/Capital Employed	6.728	9.055	3.743	0.026
Debt/Equity	0.050	0.137	1.368	0.004
Operating Profit/Number of Employees	2.333	0.000	1.150	0.018
Operating Profit Margin	0.116	0.139	2.836	0.004
Return on Assets	0.765	0.387	1.975	0.015
Price Earnings	0.002	0.149	1.014	0.001s

Source: Author

The multiple regression results indicate a moderately strong relationship between the set of independent variables and ESG performance, as reflected by an R value of 0.722. This suggests that the selected financial indicators collectively demonstrate a meaningful association with variations in ESG scores. The coefficient of determination (R^2) was calculated at 0.522, indicating that 52.2% of the variation in ESG performance can be explained by the six independent variables included in the regression model. Furthermore, the Adjusted R^2 value of 0.515 is only marginally lower than the reported R^2 value. The proximity between these two statistics suggests that the explanatory power of the model has not been artificially inflated through the inclusion of unnecessary predictors. Consequently, the model demonstrates a satisfactory degree of parsimony, indicating that the selected variables contribute meaningfully to explaining changes in ESG performance.

Despite the model's relatively strong explanatory capacity, approximately 47.8% of the variation in ESG scores remains unexplained. This residual variance suggests that additional determinants not captured within the current model may also influence ESG performance. Potential factors include qualitative dimensions of CSR that are difficult to quantify using secondary data sources, such as organisational culture, managerial commitment to sustainability initiatives, governance quality, and corporate reputation. These intangible characteristics may exert a substantial influence on ESG outcomes but are not readily observable through conventional financial datasets. In addition, industry-specific conditions and broader macroeconomic influences may account for part of the unexplained variation. Within the South African context, factors such as electricity supply disruptions, exchange-rate volatility, economic uncertainty, and changes in regulatory requirements may affect both organisational sustainability practices and financial performance. As these variables were not incorporated into the present analysis, their effects remain outside the explanatory scope of the regression model. Given these limitations, future research may benefit from adopting a mixed-methods approach that combines quantitative analysis with qualitative investigation. Such an approach could provide deeper insight into the organisational,

managerial, and contextual factors that shape ESG performance and thereby improve the explanatory power of subsequent models.

The ANOVA results were utilised to evaluate the overall statistical significance of the regression model. The findings indicate that the model is statistically significant, as evidenced by a significance value of 0.000 ($p < 0.001$). This result demonstrates that the variation explained by the regression model is substantially greater than would be expected by chance alone, thereby confirming the model's overall explanatory relevance. The reported F-statistic further supports the suitability of the model for examining the relationship between the selected financial indicators and ESG performance. Collectively, the independent variables contribute significantly to explaining variations in ESG scores, indicating that the model possesses meaningful predictive capability. About the variance decomposition, the regression sum of squares amounted to 53,775.233, representing the portion of total variation in ESG scores explained by the model. In contrast, the residual sum of squares was 101,974.073, reflecting the proportion of variation that remains unexplained by the included predictors. Although a substantial amount of variance is accounted for by the model, the larger residual component suggests that additional factors not incorporated into the analysis continue to influence ESG performance.

Overall, the ANOVA findings confirm that the regression model provides a statistically valid framework for assessing the relationship between the selected financial variables and ESG scores, thereby supporting the use of the regression results for further interpretation and discussion. The regression coefficients provide insight into the individual contribution of each predictor to ESG performance while controlling for the effects of all other variables included in the model. Each coefficient therefore reflects the unique influence of a particular financial indicator on the dependent variable.

Constant ($B = 60.665$, $p = 0.000$): The intercept represents the expected ESG score when all independent variables are equal to zero. The coefficient is statistically significant, indicating that the baseline value of the dependent variable differs significantly from zero. Assets/Capital Employed ($B = 6.728$, $p = 0.026$): This variable exhibits a positive and statistically significant relationship with ESG performance. Holding all other factors constant, a one-unit increase in assets/capital employed is associated with an increase of 6.728 units in the ESG score. The magnitude of the coefficient suggests that capital intensity is an important determinant of ESG performance. Debt/Equity ($B = 0.050$, $p = 0.004$): The coefficient for the debt-to-equity ratio is positive and statistically significant. The results indicate that a one-unit increase in the debt-to-equity ratio corresponds to an increase of 0.050 units in ESG performance, suggesting a positive association between leverage and sustainability outcomes.

Operating Profit/Number of Employees ($B = 2.333$, $p = 0.018$): This predictor demonstrates a statistically significant positive effect on ESG scores. Compared with several other

variables in the model, its relatively large unstandardised coefficient indicates considerable practical importance. The finding suggests that organisations with higher operating profit generated per employee tend to achieve stronger ESG performance.

Operating Profit Margin ($B = 0.116$, $p = 0.004$): Although the coefficient is comparatively small, the relationship remains positive and statistically significant. This indicates that improvements in operating profit margin are associated with modest increases in ESG performance. Return on Assets (ROA) ($B = 0.765$, $p = 0.015$): ROA exhibits a positive and statistically significant relationship with ESG scores. The results indicate that a one-unit increase in ROA is associated with an increase of 0.765 units in ESG performance, highlighting the contribution of asset profitability to sustainability outcomes.

Price-to-Earnings (P/E) Ratio ($B = 0.002$, $p = 0.001$): The P/E ratio also demonstrates a statistically significant positive relationship with ESG performance. Although the coefficient is numerically very small, its significance indicates that market valuation remains positively associated with ESG scores after controlling for the other predictors in the model. Overall, all six independent variables achieved statistical significance at the 5% significance level ($p < 0.05$). These findings indicate that each predictor contributes uniquely to explaining variations in ESG performance and collectively reinforce the existence of a meaningful relationship between financial performance indicators and ESG outcomes.

DISCUSSION

The findings of this study provide strong support for the dominant theoretical perspective within the international literature, which posits a positive association between CSR and financial performance. The consistently strong Pearson correlation coefficients observed between ESG scores and the selected financial indicators reinforces this position. For example, the relationship between ESG performance and assets-to-capital-employed ranged from 0.623 to 0.830, while the correlation between ESG scores and operating profit per employee varied between 0.418 and 0.888. These findings are consistent with [Luo and Bhattacharya \(2006\)](#), who reported that CSR contributes to enhanced customer satisfaction and increased market share, as well as with [Fatma et al. \(2020\)](#), who identified superior long-term ROA among organisations actively engaged in CSR initiatives. A particularly noteworthy finding is the exceptionally strong correlation between ESG scores and the debt-to-equity ratio in 2024 ($r = 0.846$). This result may indicate the growing importance and accessibility of sustainability-linked and green financing instruments within the South African market. Such an interpretation aligns with the observations of [Drempetic et al. \(2020\)](#), who argue that organisations implementing credible environmental policies often benefit from improved access to financial resources and reduced exposure to regulatory sanctions. The increasing integration of ESG considerations into lending and investment decisions may therefore explain the strengthening relationship between sustainability performance and capital structure during the latter stages of the study period. The

explanatory power of the regression model further supports the robustness of the findings. With an R^2 value of 0.522, the model explains more than half of the variation in ESG performance, a result that is broadly consistent with previous quantitative studies examining CSR within emerging-market contexts. Moreover, the highly significant overall model statistic ($p < 0.001$) confirms that the observed relationships are unlikely to have occurred by chance.

The identification of operating profit per employee and assets-to-capital-employed as the most influential predictors provides additional insight into the mechanisms through which CSR may influence organisational outcomes. These findings suggest that the benefits associated with CSR are realised primarily through improvements in productivity, resource utilisation, and capital efficiency. Such an interpretation is closely aligned with Stakeholder Theory, which maintains that investments in employees, operational capabilities, and stakeholder relationships ultimately generate economic value for organisations. By enhancing workforce commitment, organisational reputation, and operational effectiveness, CSR initiatives can contribute to superior financial performance over time. The results also correspond with the findings of [Eccles et al. \(2014\)](#), who concluded that sustainability-oriented organisations tend to outperform their counterparts because of greater efficiency, stronger governance structures, and more effective resource management. Consequently, the evidence generated by this study suggests that the combined explanatory power of Stakeholder Theory and Shared Value Theory provides the most suitable framework for understanding the observed relationship between CSR and financial performance. Together, these perspectives explain how socially responsible practices can simultaneously create value for stakeholders and enhance organisational financial outcomes, thereby supporting the strategic integration of CSR into contemporary business operations.

CONCLUSION

The present study investigated the effect of CSR on financial performance among leading JSE-listed firms. ESG scores were used as a proxy for CSR, while selected financial ratios represented financial performance. Using secondary data from 2020 to 2024, the findings revealed a positive relationship between CSR and financial performance. Pearson correlation analysis showed moderate to very strong positive relationships between ESG scores and the financial indicators examined. Operating profit per employee emerged as the strongest predictor of ESG performance, with correlations reaching $r = 0.888$ in 2022. Assets-to-capital-employed also demonstrated consistently strong relationships, with coefficients ranging from 0.623 to 0.830. These results suggest that firms with stronger CSR performance tend to generate greater value per employee and maintain larger capital bases. Positive associations were also observed between ESG scores and debt-to-equity, operating profit margin, ROA, and the P/E ratio. The regression analysis further supported these findings. The model explained 52.2% of the variation in ESG performance ($R^2 = 0.522$) and was statistically significant ($p < 0.001$). All six predictors—assets-to-capital-employed,

debt-to-equity, operating profit per employee, operating profit margin, ROA, and P/E ratio—were statistically significant. Among them, assets-to-capital-employed and operating profit per employee were the strongest predictors. These findings support Stakeholder Theory and Shared Value Theory.

The results have important implications for businesses, investors, and policymakers. For firms, CSR should be viewed not only as a social obligation but also as a strategy that contributes to financial performance. Given South Africa's socioeconomic environment, effective CSR implementation can generate both social and economic value. For policymakers, the findings support stronger ESG disclosure requirements within the JSE framework. Greater transparency may improve market efficiency and encourage sustainable investment practices. FSCA may also consider initiatives that promote ESG adoption as part of sustainable finance policies. Future research could examine whether the CSR–financial performance relationship differs across firms of varying market capitalisation. Studies involving mid-cap and small-cap firms may provide additional insights. Further research may also explore causal relationships between CSR and financial performance and investigate how organisations design and implement CSR strategies to maximise positive outcomes. As investor attention to ESG continues to grow, the findings suggest that JSE-listed firms with strong CSR performance are likely to be better positioned to attract responsible investment.

REFERENCES

- Aguinis, H., & Glavas, A. (2017). On Corporate Social Responsibility, Sensemaking, and the Search for Meaningfulness Through Work. *Journal of Management*, 45(3), 1057-1086. <https://doi.org/10.1177/0149206317691575>
- Barnett, M. L., & Salomon, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic management journal*, 33(11), 1304-1320. <https://doi.org/10.1002/smj.1980>
- Carroll, A. (2021). Corporate social responsibility (CSR) and the COVID-19 pandemic: organizational and managerial implications. *Journal of Strategy and Management, ahead-of-print*. <https://doi.org/10.1108/JSMA-07-2021-0145>
- Drempetic, S., Klein, C., & Zwergel, B. (2020). The Influence of Firm Size on the ESG Score: Corporate Sustainability Ratings Under Review. *Journal of Business Ethics*, 167(2), 333-360. <https://doi.org/10.1007/s10551-019-04164-1>
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management science*, 60(11), 2835-2857. <https://doi.org/10.1287/mnsc.2014.1984>
- Fatma, M., Khan, I., Rahman, Z., & Pérez, A. (2020). The sharing economy: the influence of perceived corporate social responsibility on brand commitment. *Journal of Product & Brand Management*, 30(7), 964-975. <https://doi.org/10.1108/jpbm-04-2020-2862>

- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210-233. <https://doi.org/10.1080/20430795.2015.1118917>
- Jamil, M. N., Rasheed, A., & Mukhtar, Z. (2022). Corporate Social Responsibility impacts sustainable organizational growth (firm performance): An empirical analysis of Pakistan stock exchange-listed firms. *Journal of Environmental Science and Economics*, 1(2), 25-29. <https://doi.org/10.56556/jescae.v1i2.16>
- Liang, H., & Renneboog, L. (2021). Corporate Social Responsibility and Sustainable Finance. In *Oxford Research Encyclopedia of Economics and Finance*. Oxford University Press New York, NY. <https://doi.org/10.1093/acrefore/9780190625979.013.592>
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of marketing*, 70(4), 1-18. <https://doi.org/10.1509/jmkg.70.4.001>
- Masum, A., Aziz, H., & Hassan, M. (2020). Corporate social responsibility and its effect on community development: An overview. *Journal of Accounting Science*, 22(1), 35-40. <https://doi.org/10.9790/487X-2201053540>
- Mathuros, S., Kuljittree, S., & Wongkamhaengharn, K. (2025). Sustainability Strategies for SME Business Development Applying ESG Concepts to Create Competitive Advantage. *Arts of Management Journal*, 9(3), 135 - 153. <https://so02.tci-thaijo.org/index.php/jam/article/view/278541>
- Neureiter, A., Hirsch, M., Matthes, J., & Naderer, B. (2024). Sustainable Flying? The Effects of Greenwashed Claims in Airline Advertising on Perceived Greenwashing, Brand Outcomes, and Attitudes Toward Flying. *Environmental Communication*, 18(7), 873-890. <https://doi.org/10.1080/17524032.2024.2327060>
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal Research: The Theory, Design, and Analysis of Change. *Journal of Management*, 36(1), 94-120. <https://doi.org/10.1177/0149206309352110>
- Porter, M. E., & Kramer, M. R. (2018). Creating Shared Value. In *Managing Sustainable Business* (pp. 323-346): Springer Netherlands.
- S&P Global. (2021). ESG during COVID-19: Resilient outperformance, . <https://www.spglobal.com/esg/insights/esg-during-covid-19-resilient-outperformance>
- Sasol Limited. (2023). Sasol integrated report 2023: Resilient in a time of disruption. <https://www.sasol.com>
- Shoprite, H. (2023). *Sustainability Report 2023*. <https://www.shopriteholdings.co.za/content/dam/shp/docs/shp-sr-2023.pdf>
- Statistics South Africa. (2024). Annual report 2023/24 book 1, . https://www.statssa.gov.za/publications/AnnualReport/AR_Book1202324.pdf

- Triologue. (2023). Business in Society Handbook, . <https://trialogue.co.za/wp-content/uploads/2023/11/Triologue-Business-in-Society-Handbook-2023.pdf>
- Vodacom Group Limited. (2023). Environmental, social and governance report, . <https://vodacom-reports.co.za/integrated-reports/ir-2023/documents/Environmental-social-and-governance-report.pdf>
- Zhao, Y., Abbas, M., Samma, M., Ozkut, T., Munir, M., & Rasool, S. F. (2021). Exploring the relationship between corporate social responsibility, trust, corporate reputation, and brand equity. *Frontiers in Psychology*, 12, 766422. <https://doi.org/10.3389/fpsyg.2021.766422>