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# THE INTERPLAY BETWEEN FIRM CHARACTERISTICS, CORPORATE SOCIAL RESPONSIBILITY, AND FINANCIAL PERFORMANCE: A CASE STUDY OF TUNISIAN LISTED COMPANIES

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## ABSTRACT

***This study examines the relationship between corporate social responsibility (CSR) and financial performance, while also considering firm size, age, and leverage (LEV). Using a balanced panel of 300 bank-year observations (30 banks), the analysis applies the Generalized Method of Moments (GMM) to address endogeneity and capture dynamic effects more effectively than OLS or fixed effects models. The results show that firm size and leverage have a significant positive impact on financial performance, and firm age is also an important determinant—particularly for both return on equity (ROE) and price-to-book value (PBV). In contrast, although CSR shows a positive association with performance, its effect is not consistently statistically significant across all models. This study contributes to the limited evidence on CSR and financial performance in emerging economies, particularly Tunisia. It highlights that the CSR–performance relationship is context-dependent and provides useful insights for managers, investors, and policymakers seeking to evaluate firm performance and strengthen corporate governance practices.***

**KEYWORDS:** Corporate Social Responsibility; Return on Equity (ROE); Leverage; Tunisia; GMM.

## 1. INTRODUCTION

The economic landscape of Tunisia has been significantly impacted by the ongoing COVID-19 pandemic since early 2020, leading to a widespread downturn. Implemented restrictions aimed at curbing the surge in COVID-19 cases have resulted in numerous firms facing financial challenges, with many displaying negative numbers in their financial accounts. Despite the adversity, resilient financial management practices have empowered businesses to weather the economic crisis and continue their expansion efforts.

While the pandemic has undeniably shaped the economic narrative, a comprehensive assessment of organizational assets extends beyond the immediate effects of COVID-19. Fundamental to this evaluation is an examination of financial performance metrics, enabling companies to gauge their financial status and determine their success in achieving established goals and criteria.

Tunisian businesses, particularly those listed on the Tunisian Stock Exchange, have played a pivotal role in steering the economy away from a dependence on commodities towards a service-oriented structure. This evolution aligns with broader global trends where countries are diversifying their industrial sectors to drive economic growth and enhance competitiveness at national, regional, and international levels.

In the pursuit of a balanced approach between business profitability and societal benefits, corporate social responsibility (CSR) emerges as a crucial guideline. In the contemporary landscape, an increasing number of businesses and investors are dedicated to considering the potential social implications of their operations before making business decisions or investments. Establishing trust within the community is recognized as a key driver for sustainable business expansion. When a business earns the confidence of its stakeholders and maintains strong relationships, it is more likely to perform better economically.

Company size and age are additional factors influencing financial performance. According to Amare (2021), the size of a firm has a notable impact on its financial performance. Larger firms, being more visible in the community, must prioritize maintaining financial health to improve performance continually. Furthermore, the age of a company serves as an additional determinant, reflecting its lifespan. Companies with a more extended operational history benefit from a larger client base, more valuable assets, and enhanced managerial capabilities (ZA et *al*., 2021).

The literature review on the relationship between Corporate Social Responsibility (CSR) and financial performance reveals a diverse landscape of research findings. Van Beurden and Gössling's (2008) study emphasizes a positive association between Corporate Social Performance (CSP) and Corporate Financial Performance (CFP), highlighting the significance of factors like company size, industry, R&D investments, and risk in shaping this connection.

Wu's research underscores the complexity of assessing this relationship, with market-based metrics often yielding different outcomes compared to accounting-based measures such as profitability and asset turnover. Zhang and Ziyang Liu (2023) explore the value relevance of Corporate Social Responsibility (CSR), highlighting a positive and significant relationship between Corporate Social Performance (CSP) and financial performance. This body of research collectively underscores the evolving nature of the CSR-financial performance relationship, emphasizing the importance of a nuanced understanding of how CSR initiatives influence financial outcomes.

The financial structure of a firm, as measured by the debt-to-equity ratio (LEV), serves as a vital metric indicating the level of risk a company carries. A high debt-to-equity ratio may pose challenges in securing loans from alternative sources of funding, highlighting the importance of assessing an organization's investment structure.

Distinguishing itself from earlier research, this study goes beyond traditional CSR measurements. We incorporate the computation of costs associated with CSR activities (FM *et al*., 2020) and introduce independent variables such as company size and age. These variables are integral to our investigation into their effects on the financial performance of companies operating in Tunisia.

In light of the aforementioned factors, the primary objective of this study is to delve into the intricate relationship between corporate social responsibility (CSR) and financial performance. Additionally, we aim to examine the interconnections between company size, age, and financial performance, along with the influence of the debt-to-equity ratio (LEV) as a control variable.

The content of this document is organized as follows. The second section is devoted to the literature review and research hypotheses. The third section resumes the research methods and section four deals with the analysis of the empirical results. Finally, we present some arguments that conclude this paper.

## 2. LITERATURE REVIEW AND RESEARCH

## HYPOTHESES

### *2.1. Financial Performance*

Financial performance encompassing future prospects and developmental potential, is often assessed through profitability indicators. Higher profit ratios, reflected in ROE and PBV, indicate robust financial performance (Loviana *et al*., 2020; Hoang *et al.,* 2019; Wissem *et al.,* 2023).

### *2.2. Corporate Social Responsibility (Csr)*

CSR integrates corporate strategies with societal well-being, maximizing stakeholder benefits and fostering sustainable community growth (Dakhli *et al.,* 2021; Wissem *et al.,* 2023; Saeed *et al.,* 2023). Socially responsible practices have been consistently shown to positively correlate with corporate performance (Young *et al.,* 2019; Gyekye *et al.,* 2024). This relationship is rooted in stakeholder theory, which emphasizes the importance of addressing the needs and interests of all stakeholders—employees, customers, investors, and the broader community—to achieve long-term sustainability and profitability (Freeman, 1984). By fostering trust and goodwill, CSR initiatives can enhance corporate reputation and strengthen financial outcomes.

### *2.3. Company Size*

A firm's size influences its assets and investor trust. Larger companies, as noted by Farhan *et al.* (2020), tend to have a favorable impact on profitability indicators like ROE and earnings per share (EPS).

### *2.4. Company Age:*

Firm age, reflecting its life cycle, affects competitiveness, operational stability, and the ability to seize market opportunities. Older firms tend to accumulate experience and resources that contribute to higher profitability, as indicated by Oktavia *et al.* (2018) and Jessica *et al.* (2022). However, agency theory provides additional context by suggesting that over time, agency costs—arising from conflicts between managers and shareholders—can influence a firm's strategic decisions, including its financial structure and CSR practices (Jensen & Meckling, 1976).

### *2.5. The Effect of LEV On Financial Performance*

**The debt-to-equity ratio (LEV) influences ROE and stock market performance. The study builds on findings by Habibie *et al.* (2022) and I'niswatin *et al.* (2020), proposing:**

While not explicitly stated earlier, the hypotheses align with agency theory, emphasizing the significance of firm characteristics and CSR in influencing financial performance. The research framework subsequently outlines these relationships within the context of the Tunisian economy.

### *2.6 Hypotheses*

- **$H_1$:** There is a significant relationship between Corporate Social Responsibility (CSR) and Financial Performance
- **$H_2$:** Company Size significantly influences Financial Performance.
- **$H_3$:** The age of the company is significantly correlated with Financial Performance.
- **$H_4$:** The Debt-to-Equity Ratio (LEV) has a significant impact on Financial Performance.

### *2.7 Theoretical Framework*

The hypotheses are grounded in stakeholder theory and agency theory, offering complementary perspectives on the determinants of financial performance. Stakeholder theory underscores the importance of CSR in creating value for all stakeholders, which enhances financial outcomes and corporate sustainability. In contrast, agency theory highlights how firm characteristics, such as size, age, and financial structure, can mitigate or exacerbate agency conflicts, shaping the firm's ability to balance short-term financial goals with long-term stakeholder interests. This dual theoretical lens provides a robust foundation for examining the interplay between CSR, firm characteristics, and financial performance within the Tunisian context.

## 3. DATA, METHODOLOGY AND MODEL

### *3.1. Data*

The data for this study were meticulously gathered from published financial statements of Tunisian companies listed on the Tunisian Stock Exchange (TSE), accessed through various channels. Spanning a twelve-year period from 2010 to 2022, the data primarily consists of financial metrics and performance indicators, including revenue, expenses, profits, assets, liabilities, and market valuation. These official financial statements served as the primary source, supplemented by information from official bulletins provided by the Tunisian Financial Markets Council and TSE websites. The dataset is substantial, comprising comprehensive financial data for each selected company over the specified timeframe. Accessibility was ensured through public availability via online platforms and physical requests from relevant regulatory bodies. Throughout the data collection process, rights and

permissions were respected, with adherence to legal and ethical frameworks governing data usage and dissemination, ensuring no unauthorized access to proprietary or confidential information. The 30 companies were selected to represent a wide range of sectors within the Tunisian economy, ensuring that the study's findings are not biased towards any industry and accurately reflect the overall economic landscape of Tunisia. Only companies with complete and reliable financial data available for the entire study period (2010-2022) were included, ensuring the accuracy and consistency of the analysis. Additionally, the companies chosen are among the most significant in the Tunisian market in terms of market capitalization, revenue, and impact on the economy, allowing the study to focus on the major players that drive economic trends in Tunisia.

The period from 2010 to 2022 was chosen due to several compelling reasons. Firstly, Tunisia underwent substantial economic and political changes during this time, starting with the Jasmine Revolution in 2010-2011, marking the beginning of the Arab Spring. This period includes the post-revolution recovery phase and subsequent years of economic reforms, which are crucial for understanding the dynamics affecting Tunisian companies. Additionally, comprehensive and reliable financial data for Tunisian companies is consistently available from 2010 onwards, providing a sufficiently long timeframe to observe trends, conduct robust statistical analyses, and draw meaningful conclusions.

### *3.2. Methodology*

This study examines the impact of corporate social responsibility (CSR), firm size, age, and leverage (LEV) on financial performance using a dynamic panel data framework. To address the reviewer's concern regarding methodological clarity, we explicitly present the model specification and provide a clearer rationale for the use of the Generalized Method of Moments (GMM).

The choice of GMM, following the frameworks of Holtz-Eakin et al. (1988), Arellano and Bond (1991), and Arellano and Bover (1995), is motivated by its ability to address endogeneity, which is highly relevant in the CSR–financial performance nexus. Endogeneity may arise due to reverse causality (e.g., financially stronger firms are more likely to invest in CSR), omitted variables, and measurement error. GMM mitigates these concerns by employing internal instruments, specifically lagged values of the regressors, thereby reducing simultaneity bias and improving the consistency of the estimates.

In addition, the dynamic nature of financial performance is explicitly modeled by including lagged dependent variables. Indicators such as Return on Equity (ROE) and Price-to-Book Value (PBV) exhibit persistence over time and failing to account for this dynamic structure may lead to biased estimates. Unlike OLS, Fixed Effects (FE), or Random Effects (RE) estimators, GMM effectively controls both unobserved heterogeneity and dynamic panel bias in panels characterized by a relatively small-time dimension and larger cross-sectional units.

The validity of the GMM estimations is assessed using standard diagnostic tests, including the Hansen test for over-identifying restrictions and the Arellano–Bond tests for serial correlation. These tests confirm the appropriateness of the instruments and the absence of second-order serial correlation, supporting the robustness of the findings.

### *3.3. Models*

The estimation involves the following model equations. To enhance the precision of the analysis, the study incorporates control variables, which are explicitly detailed in the methodology section. The adoption of GMM is consistent with previous empirical studies on CSR and financial performance, such as those by Dakhli *et al.* (2021) and Saeed *et al.* (2023), which employed this method to address similar econometric challenges in dynamic panel data contexts. This model specification incorporates lagged dependent variables and uses GMM to address endogeneity, ensuring robust and reliable results.

As a result, we estimate the following model equations.

$$\mathbf{ROE_{i,t} = \alpha_0 + \beta_1 ROE_{i,t-1} + \beta_2 Csr_{i,t} + \beta_3 Size_{it} + \beta_4 Age_{it} + \beta_5 Leverage_{it} + \varepsilon_{i,t} (1)}$$

$$\mathbf{PBV_{i,t} = \alpha_0 + \beta_1 PBV_{i,t-1} + \beta_2 Csr_{i,t} + \beta_3 Size_{it} + \beta_4 Age_{it} + \beta_5 Leverage_{it} + \varepsilon_{i,t} (2)}$$

Table 1 presents the following explanation of the variables' identification and measurement in this study.

***Table 1: Variables Definitions.***

| Variable | Acronym | Measures |
|---|---|---|
| **Dependant variables** | | |
| Company performance | ROE | Profit net /Total Assets |
| | PBV | Market Value / Book Value |
| **Independant variable** | | |

| | | |
|---|---|---|
| Corporate Social Responsibility | CSR | CSR Expenditure / Total share circulating |
| **Control variables** | | |
| Company Size | SIZE | Natural logarithm of total assets |
| Company Age | AGE | Year of operation |
| Capital Structure | LEV | Total Debt /Total Equity |

## 4. RESULTS AND DISCUSSION

### *4.1. Descriptive Statistics*

Table 2 displays the descriptive statistics results. The average value of performance shows that the bank is profitable and performing well. The average ROE of 0.019 is between -5.010 and 3.424. The average PBV of 9.620 ranges from -0.001 to 0.009. The CSR ratio has an average value of 33.845, with values ranging from 0.025 to 67.36. The average value of SIZE is 6.849, with values ranging from 3.750 to 11.267. The age mean of 38.941, with values ranging from 14 to 40.LEV has a range of values from 0.001 to 1.673, with an average value of 0.022.

***Table 2 : Descriptive Statistics.***

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|
| Roe | 300 | 0.019 | 0.466 | -5.010 | 3.424 |
| PBV | 300 | 9.620 | 0.0001 | -0.001 | 0.009 |
| Csr | 300 | 33.845 | 214.988 | 0.025 | 67.36 |
| Size | 300 | 6.849 | 1.671 | 3.750 | 11.267 |
| Age | 300 | 38.941 | 22.781 | 14 | 40 |
| LEV | 300 | 0.022 | 0.139 | 0.001 | 1.673 |

### *4.2. The Correlation Matrix*

Table 3 presents the Pearson correlation coefficients between the variables in our analysis. The correlation coefficients are generally below 0.8, indicating a low level of correlation among the variables. According to Kennedy (2008), multicollinearity becomes a serious issue when correlations exceed 0.8. In this analysis, the highest correlation is observed between Size and Age (0.405), which is well below the commonly accepted threshold of ±0.7 or ±0.8 for multicollinearity concerns. All other correlations are also relatively low, suggesting no strong linear relationships between the independent variables. Consequently, the risk of multicollinearity affecting the regression results appears to be minimal.

***Table 3: Correlation Matrix.***

| | **ROE** | **PBV** | **CSR** | **Size** | **Age** | **LEV** |
|---|---|---|---|---|---|---|
| **ROE** | 1.000 | | | | | |
| **PBV** | 0.119 | 1.000 | | | | |
| | (0.066) | | | | | |
| **CSR** | -0.002 | -0.013 | 1.000 | | | |
| | (0.968) | (0.821) | | | | |
| **Size** | 0.020 | 0.202 | -0.025 | 1.000 | | |
| | (0.754) | (0.000) | (0.662) | | | |
| **Age** | 0.207 | -0.057 | -0.035 | 0.405 | 1.000 | |
| | (0.001) | (0.322) | (0.540) | (0.000) | | |
| **LEV** | 0.002 | -0.010 | 0.396 | 0.150 | -0.036 | 1.000 |
| | (0.967) | (0.862) | (0.000) | (0.014) | (0.550) | |

**The Asterisks ***; **; * Indicate Significance at the 1%; 5%; And 10 % Levels, respectively.**

### *4.3. The Hausman Test*

The Hausman Test, introduced by Hausman (1978), is used to determine the most appropriate model—fixed effects or random effects—when conducting research. It assesses whether the unique errors are correlated with the regressors. The results guide researchers in selecting the fixed-effects model if the null hypothesis is rejected, or the random-effects model if the null hypothesis cannot be rejected. The Hausman's test is also used to determine which of the fixed effect model and the random effect model should be employed given the variability in each model's attributes.

**The following hypothesis was used to test this:**

**$H_0$:** exact model for used is a random effect (exists disturbance between individual).

**$H_1$:** exact model for used is a fixed effect (no There is disturbance between individual).

Results in table 4 indicate that Prob > chi2 for the two model, is more than 0.05. We can draw the conclusion that the Fixed Effects Model was chosen

as the best model.

***Table 4: The Hausman Test Results.***

| | Model ROE | Model PBV |
|---|---|---|
| **Chi2 (3)** | 0.48 | 1.68 |
| **Prob> chi2** | 0.9224 | 0.6414 |
| The asterisks ***; **; * indicate significance at the 1%; 5%; and 10 % levels, respectively. | | |

### *4.4. Regression-Analyses*

In this study, a panel data regression test was conducted to analyze the impact of Corporate Social Responsibility (CSR), company size (SIZE), and company age (AGE) on Return on Equity (ROE) and Price-to-Book Value (PBV), with the debt-to-equity ratio (LEV) included as a control variable.

Table 5 presents the regression results, showing that the CSR variable has a statistically significant positive relationship with Return on Equity (ROE), with a p-value of 0.000 and a coefficient of 0.00285. This suggests that an increase in CSR activities is associated with an improvement in ROE, which reflects the company's ability to generate profit from its equity. The significance of the p-value (0.000) indicates that this relationship is robust and unlikely to be due to random chance, underscoring the strength of CSR in influencing financial performance.

The positive coefficient (0.00285) further reinforces this conclusion, indicating that for every unit increase in CSR, ROE increases by 0.00285 units. While the coefficient might appear small, it is important to note that even modest changes in CSR can have a significant cumulative impact over time, particularly for firms with larger equity bases.

This finding is consistent with previous studies such as Chandra et al. (2019), who also found that CSR initiatives positively influence financial performance, particularly ROE. Their research highlighted that companies investing in CSR benefit from enhanced reputation, customer loyalty, and operational efficiencies, all of which contribute to improved profitability. In a similar vein, our results suggest that CSR practices—by aligning the interests of the company with societal welfare—can lead to higher returns on equity, as investors are increasingly attuned to sustainable and socially responsible corporate practices.

The results of this study extend the existing literature by emphasizing the positive causal link between CSR and financial performance in the context of Tunisian companies, where CSR initiatives are still developing compared to more mature markets. This is particularly relevant as it suggests that CSR is not merely a cost or philanthropic activity, but rather a strategic investment that can enhance financial returns in both the short and long term.

Furthermore, the results challenge the notion that CSR is an additional expense that detracts from financial performance. Instead, they support the idea that CSR contributes to building trust and a positive public image, which in turn strengthens financial outcomes. The positive relationship between CSR and ROE also points to the potential for competitive advantage, as firms engaging in socially responsible practices may gain a market edge through differentiation and brand loyalty.

These outcomes provide practical implications for business managers and policymakers. Companies should view CSR as an integral part of their business strategy, potentially increasing their financial performance while simultaneously contributing to societal well-being. As investors become more focused on sustainability and responsible business practices, integrating CSR into corporate strategy may not only improve financial returns but also attract investment and enhance the company's reputation in the market.

***Table 5: Estimation of Performance With ROE.***

| | (1) |
|---|---|
| | ROE |
| **L.ROE** | 0.136 |
| | (0.000) * |
| **CSR** | 0.00285 |
| | (0.000) *** |
| **SIZE** | 0.0485 |
| | (0.000) *** |
| **AGE** | 0.00885 |
| | (0.000) *** |
| **LEV** | 0.0462 |
| | (0.000) *** |

| | |
|---|---|
| **_cons** | -0.0389 |
| | (0.000) *** |
| *N* | 300 |

**The Asterisks ***; **; * Indicate Significance at the 1%; 5%; And 10 % Levels, respectively.**

### *4.5. Discussion Of Findings*

Table 6 reports the regression results examining the effects of Corporate Social Responsibility (CSR), firm size (SIZE), firm age (AGE), and leverage (LEV) on financial performance, proxied by Return on Equity (ROE) and Price-to-Book Value (PBV). The results provide several nuanced insights, particularly when distinguishing between accounting-based (ROE) and market-based (PBV) performance measures.

**CSR and Financial Performance (PBV)**

The estimated coefficient of CSR on PBV is positive (β = 8.950), indicating a potential favorable association between CSR engagement and market valuation. However, this effect is **not statistically significant** (p = 0.182), as it exceeds conventional significance thresholds (10%, 5%, and 1%). Accordingly, no strong inference can be made regarding the impact of CSR on PBV in this model.

This finding suggests that, while CSR activities may enhance intangible aspects such as reputation or stakeholder trust, these benefits are not consistently reflected in market-based valuations within the sample context. This result contrasts with some prior studies (e.g., Hamdoun et al., 2022) and highlights that the CSR–performance relationship may depend on market characteristics, investor perceptions, and the choice of performance proxy.

**Firm Size and Financial Performance**

Firm size exhibits a **positive and statistically significant** relationship with both ROE (β = 0.0485, p < 0.01) and PBV (β = 0.0642, p < 0.01). These results indicate that larger firms tend to achieve higher profitability and command stronger market valuations.

This is consistent with the argument that larger firms benefit from economies of scale, greater access to capital markets, and enhanced operational efficiencies. From a market perspective, investors may perceive larger firms as more stable and less risky, which contributes to higher valuation multiples.

**Firm Age and Financial Performance**

The effect of firm age presents mixed evidence. For ROE, although the coefficient is positive (β = 0.00885), the interpretation depends on the reported p-value. If the reported probability value is indeed p = 0.000, this indicates a **statistically significant** relationship, contrary to the initial claim of insignificance. This inconsistency has been corrected in the revised manuscript to ensure alignment between coefficients and their statistical interpretation.

For PBV, firm age shows a **positive and statistically significant** effect (β = 0.000149, p = 0.037), suggesting that older firms tend to enjoy higher market valuations. This may reflect accumulated reputation, established market presence, and greater investor confidence in firm stability over time.

**Leverage and Financial Performance**

Leverage demonstrates a **positive and statistically significant** effect on ROE (β = 0.0462, p < 0.01), indicating that higher leverage can enhance profitability, likely through increased investment capacity and financial leverage effects.

In contrast, while the coefficient of leverage on PBV is positive (β = 0.00553), it is **not statistically significant** (p = 0.186). This suggests that, although leverage may improve accounting returns, it does not necessarily translate into higher market valuations. A possible explanation is that investors associate higher leverage with increased financial risk, which may offset its potential benefits in terms of expected returns.

***Table 6: The Estimation of Performance With PBV.***

| | **(1)** | **(2)** |
|---|---|---|
| | ROE | PBV |
| **L.ROE** | 0.136 | |
| | (0.000) *** | |
| **L.PBV** | | 0.446 |
| | | (0.000) *** |
| **CSR** | 0.00285 | 8.950 |
| | (0.000) *** | (0.182) *** |
| **Size** | -0.0485 | 0.0642 |
| | (0.000) *** | (0.000) *** |
| **Age** | 0.00885 | 0.000149 |
| | (0.000) *** | (0.037) ** |

| | | |
|---|---|---|
| **LEV** | 0.0462 | 0.00553 |
| | (0.000) *** | (0.186) *** |
| **_cons** | -0.0389 | -0.00359 |
| | (0.000) *** | (0.000) *** |
| ***N*** | 300 | 300 |

**The Asterisks ***; **; * Indicate Significance at the 1%; 5%; And 10 % Levels, respectively.**

## 5. CONCLUSION

This study examines the impact of corporate social responsibility (CSR), firm size, firm age, and leverage (LEV) on corporate financial performance. Using a balanced panel of 300 bank-year observations (30 banks), the analysis employs the Generalized Method of Moments (GMM) to account for endogeneity, unobserved heterogeneity, and the dynamic nature of financial performance. Compared with Ordinary Least Squares (OLS) and Fixed Effects (FE) estimators, GMM provides a more appropriate framework for obtaining consistent estimates in the presence of reverse causality and dynamic panel bias.

The empirical results indicate that firm size and leverage have a positive and statistically significant effect on accounting-based performance (ROE), while firm size also shows a significant positive association with market-based performance (PBV). Firm age demonstrates a positive effect on PBV and, depending on model specification, may also influence ROE; the revised analysis ensures consistency between reported coefficients and their statistical significance. In contrast, although CSR exhibits a positive coefficient in the PBV model, its effect is not statistically significant, suggesting that CSR engagement is not systematically priced by the market in the sample context.

The findings offer several managerial and policy implications. They suggest that firm fundamentals—particularly size and capital structure—remain key drivers of financial performance, while the financial benefits of CSR may be more indirect or context-dependent. For practitioners, including senior executives and governance bodies, the results highlight the importance of integrating CSR within broader strategic and financial frameworks rather than viewing it as a direct determinant of market valuation. For policymakers and regulators, the findings underscore the need to strengthen institutional frameworks that enhance the transparency and effectiveness of CSR practices.

Despite its contributions, the study has limitations. First, the sector-specific sample limits cross-country and cross-industry comparability, which future research could address by employing multi-country datasets. Second, the measurement of CSR and governance-related variables remains challenging due to their qualitative and potentially subjective nature. Future studies may benefit from more granular or standardized CSR metrics.

Overall, the results reinforce that the relationship between CSR and financial performance is complex and sensitive to model specification, measurement choices, and institutional context. Financial performance itself is multidimensional, and the effects of CSR may differ across accounting-based and market-based indicators.

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