

Investigating the Relationship between Social Responsibility and Firm Performance: The Moderating Effect of Financial Leverage

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Abstract

Objectives: This study aims to examine the relationship between corporate social responsibility (CSR) and firm performance, focusing on the moderating effect of financial leverage among firms listed on the Tehran Stock Exchange (TSE). CSR is viewed as a strategic managerial decision through which organizations address social and environmental issues to generate a positive impact beyond their boundaries.

Methodology/Design/Approach: The study is applied in nature and adopts a causal (ex post facto) correlational design. The statistical population includes all firms listed on the TSE, from which 134 firms were selected using the systematic elimination sampling method. The research spans ten years from 2015 to 2024. The study employed multiple regression analysis to test the proposed hypotheses.

Findings: The results indicate a direct and significant relationship between CSR and financial performance. Moreover, financial leverage moderates this relationship, suggesting that higher debt levels can weaken or even reverse the positive impact of CSR on firm performance. Thus, while CSR contributes to enhanced firm performance, excessive leverage increases financial risk and alters this positive association.

Innovation: This study contributes to the growing body of literature on CSR by providing empirical evidence from an emerging market context. It highlights how financial leverage—representing a firm's financial risk—can shape the effectiveness of CSR in driving financial outcomes. The findings offer practical insights for managers and policymakers seeking to balance social commitments with sound financial strategies to ensure sustainable performance.

Keywords: Corporate Performance, Social Responsibility, Financial Leverage, Corporate Financing.

1. Introduction

The existence of strong and efficient financial markets, along with active and well-functioning financial institutions, is a key determinant of a country's economic growth and development. The primary objective of firms is to achieve optimal financial performance, making it crucial to examine the factors that can influence corporate performance. One such factor is corporate social responsibility (CSR). CSR refers to the alignment between an organization's activities and values in a way that reflects the interests of all stakeholders, including shareholders, customers, employees, investors, and the public, within the firm's policies and performance (Nikkar et al., 2017).

Social responsibility encompasses ethical considerations regarding a firm's behavior and decision-making in areas such as human resource management, environmental protection, occupational health, social relations, and interactions with suppliers and customers. Engaging in CSR activities not only enhances shareholder satisfaction but also positively affects the firm's reputation (Khajavi et al., 2011). Firms have an ethical obligation to create safe work environments, prevent environmental pollution, and produce healthy products. However, implementing such initiatives involves costs, and not all firms are willing to bear these voluntarily.

In contexts where CSR practices and their disclosure serve as criteria for firm accreditation and stakeholder satisfaction, firms that underperform in this area may struggle to attract capital. Conversely, firms that excel in CSR can enhance their credibility, improve stakeholder perception, attract new investment, expand production, and ultimately achieve higher profits and better financial performance.

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Financial leverage, which indicates the proportion of long-term debt used in capital formation, can influence a firm's ability to meet future obligations. Debt financing is often the most accessible form of investment funding, making leverage levels critical. Its interaction with other factors, such as CSR, can significantly affect firm performance. Given the inconclusive findings and diverse perspectives in the literature regarding the effect of financial leverage on the relationship between CSR and corporate performance, addressing this research gap highlights the necessity of the present study.

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2. Theoretical Foundations

Performance, in general, refers to the state or quality of executing tasks. Financial performance of a firm indicates how effectively the firm utilizes its assets to generate revenue. It is also used as a general measure to assess a firm's financial health over a specific period, and evaluating financial performance reflects the extent to which the firm has achieved the objectives outlined in its plans (Wahba & Elsayed, 2015). Financial performance encompasses shareholder returns, customer service, social responsibility (e.g., corporate citizenship, community engagement), and employee stewardship—the organization itself does nothing; rather, its managers perform assigned tasks, and the aggregation of these tasks constitutes organizational performance. Financial performance serves as an objective metric showing the degree to which an organization has used its assets to produce income (Golmohammadi et al., 2016). It is one of the most important indicators for evaluating a firm's overall performance and the achievement of predetermined goals. Financial ratios are commonly used to assess financial performance, providing shareholders with insights derived from a firm's financial statements (Dastgir et al., 2014).

Several factors can influence corporate financial performance, among which corporate social responsibility (CSR) has received considerable attention in recent years (Wafa & Kabore, 2023). Conceptually, CSR faces challenges similar to defining social responsibility itself. The multiplicity of methods and dimensions of this complex concept makes it difficult to provide an objective measure of its components, which are largely subjective and often assessed based on ethical or social criteria. The initial definition of CSR dates back to the 1950s, encompassing three elements: firm, community, and responsibility (Dakhili & Ansi, 2012). Previous research defines CSR as the process of creating wealth, enhancing a firm's competitive advantage, and maximizing societal value, emphasizing the firm's commitment to employees, customers, the local community, and society at large, while contributing to

sustainable economic development (Fakhari et al., 2016).

CSR reflects the alignment between organizational activities and values, ensuring that the interests of all stakeholders—including shareholders, customers, employees, investors, and the public—are integrated into corporate policies and performance, often independently of the firm's direct profit motives (Nikkar et al., 2017). Over the past three decades, CSR and corporate social initiatives have received extensive attention, particularly in management and organizational economics literature (David et al., 2019). The benefits of CSR should be viewed dynamically, as it opens avenues for firms to enhance performance (Tesina et al., 2020). Hence, CSR is considered a strategic decision, enabling organizations to address social and environmental challenges and positively impact external stakeholders (Masoud & Vi, 2021).

Engagement in CSR raises key questions: How do social initiatives enhance financial performance? How should firms balance financial interests with public welfare and environmental protection? Does CSR generate costs, or can it improve financial performance? (Wafa & Kabore, 2023). The relationship between financial and non-financial performance remains debated, with advocates on both sides. Classical perspectives, such as Avisheh et al. (2020), argue that corporate responsibility is primarily to increase shareholder wealth, and social activities are the duty of individuals or society, not business organizations. This view suggests a negative or inconclusive relationship between CSR and financial performance, as social initiatives may incur costs that reduce competitiveness and profitability (Cao et al., 2018).

From an agency theory perspective, corporate social participation may reflect agency problems, where managers pursue personal interests through social investments or enhance their reputation at shareholders' expense. Involvement in social activities may lead to a net resource loss. Conversely, other scholars emphasize CSR's positive impact, arguing

that by meeting stakeholder expectations—including shareholders, employees, customers, suppliers, and the community—CSR can improve corporate reputation, ultimately enhancing financial performance and profits (Agudelo et al., 2019; Cao et al., 2019). Accordingly, many studies affirm that a firm's success depends on its relationships with stakeholders as a whole (Jamil Rashid, 2023).

Based on these theoretical foundations, the first hypothesis of the present study is as follows:

H1: There is a significant relationship between social responsibility and firm performance.

Leverage refers to the amount of debt used in a firm's capital structure. Financial leverage is a measure of financial risk that arises from fixed financial costs. The percentage of financial leverage is the ratio of the book value of the total liabilities to the book value of the total assets. From the point of view of the cost of capital, the cheapest sources of financing for the firm are long-term debts, and the financing of the desired financial resources for the implementation of the firm's plans or to reform the firm's financial structure can be from debt or equity (Dolo & Vaniki, 2018). Excessive use of equity increases the expected returns of shareholders and increases the firm's financing costs, and on the other hand, excessive use of debt, both short-term and long-term, increases the firm's financial risk and reduces its financial flexibility (Arab et al., 2021). Therefore, considering the importance of financial leverage and the amount of the firm's debt in financing, it can be said that financial leverage can affect the relationship between social responsibility and financial performance (Vafa & Kaboor, 2023). Therefore, the second hypothesis of the research is rough:

H2: Financial leverage affects the relationship between social responsibility and firm performance.

3. Research Background

Jin and Drozdenko (2010) studied the relationship between ethics, social responsibility, and organizational performance. They concluded that managers of organized firms exhibit higher levels of

social responsibility and ethical behavior compared to those in machine-based organizations.

Wang and Sarkis (2017) investigated the effect of social responsibility disclosure on firms' financial performance, using return on assets and the Q ratio as performance indicators. Their findings indicated that social responsibility disclosure positively affects both financial performance measures.

Wuttichindanon (2017) examined social responsibility disclosure among 451 firms listed on the Thailand Stock Exchange in 2014. The results showed that state-owned enterprises and large corporations were more inclined to report sustainability information.

Shahbaz Sheikh (2018) analyzed the effect of social responsibility disclosure on optimal capital structure, considering the moderating role of product market competition. He found that social responsibility disclosure negatively affects firm leverage only under high competition; under low competition, no significant effect was observed.

David et al. (2019), in a study of 320 Japanese firms between 2008 and 2016, examined the relationship between corporate social responsibility (CSR) and innovation capacity. Their findings revealed a nonlinear relationship: CSR enhances firms' innovation capacity, which ultimately improves operational and financial performance.

Tasnia et al. (2020) investigated the impact of taxes on the relationship between social responsibility and stock price volatility using data from 37 U.S. banks (2013–2017). They concluded that CSR legitimizes banks' activities but can increase costs, leading to stock price fluctuations. Higher taxation amplifies this effect, prompting shareholders to reconsider investments, and the interaction between taxes and CSR positively influences stock volatility.

Masoud and Vij (2021) analyzed 310 annual reports from 95 state-owned enterprises (2010–2018) to examine factors affecting CSR disclosure. Content analysis indicated that disclosures were mostly descriptive, focusing on charity and donations. Regression analysis showed that firm size, age, type of

services, and manager characteristics were positively and significantly related to CSR disclosure.

Eesa et al. (2021) explored the role of CSR disclosure in enhancing the transparency of sustainability reporting. They concluded that CSR disclosure contributes to higher transparency in accounting information.

Wafa Kabore (2023) found an inverse relationship between CSR and financial performance, with financial leverage moderating this relationship.

Rahman et al. (2024) examined CSR and green financing behavior, showing that CSR positively influences green finance adoption and promotes sustainable tourism. Tax incentives and subsidies encourage firms to participate more in green finance.

Odo et al. (2024) reviewed ethical supply chain management, highlighting the balance between profit, CSR, and environmental monitoring. They emphasized that integrating ethical practices strengthens sustainability, competitiveness, and shareholder trust.

Fakhari et al. (2016) found that CSR disclosure improves investment efficiency among 90 active firms listed on the Tehran Stock Exchange between 2009 and 2014.

Namazi and Moghimi (2018) studied innovation and CSR as moderators of financial performance in various industries on the Tehran Stock Exchange. They found that CSR significantly enhances financial performance, particularly in the mineral, pharmaceutical, chemical, and plastic industries.

Kordestani et al. (2018) showed that CSR disclosure positively affects return on assets, earnings per share, and economic value added, while reducing the cost of capital. No significant effect was found on market value added or stock return rates.

Ghayur et al. (2019) examined CSR, ethical reputation, and brand equity, highlighting the mediating role of customer trust. CSR positively impacts ethical reputation and brand equity, with trust strengthening this relationship.

Jamei and Najafi (2019) investigated CSR disclosure and audit fees, concluding that limited CSR

disclosure reduces audit risk and fees due to the lack of specific legal requirements for CSR.

Mehravar and Kargar (2020) studied the effect of information technology on the relationship between innovation strategies and CSR among Tehran Stock Exchange firms. They found that IT strengthens the link between R&D strategy and CSR, but not between management practices or technology strategies and CSR.

Hassas Yeganeh et al. (2020) analyzed CSR reporting and corporate value, concluding that CSR reports positively correlate with firm value, reflecting their economic, social, ethical, and environmental aspects.

Mohammadi and Karimi (2021) found that macroeconomic variables such as inflation, exchange rate, and interest rate significantly affect stock price synchronization, while CSR measures do not.

Mirmohammadi Shaktai and Shahriari Rad (2023) examined financial leverage and investment decisions, finding that leverage negatively affects investment, while information asymmetry positively influences this relationship.

Hekmat and Keshavarz Mirzamohammadi (2023) investigated profitability, CSR, and financial risk. They found that management fees of investment funds influence profitability more than other variables, while CSR did not show a significant effect on profitability, fees, or financial risk in Iranian portfolio management firms, though foreign comparisons suggest CSR can positively impact profitability.

4. Research Methodology

The present research is of an applied nature and also methodological, as it investigates events after their occurrence and is of the causal and post-event correlation type. The statistical population of this study comprises firms listed on the Tehran Stock Exchange (TSE), and the study period spans from 2015 to 2024. Firms were selected through systematic elimination to form the final sample.

The selection criteria included the following: the firms' financial year should end in March and remain

unchanged during the 10-year review period; the firms must disclose the information required for the research, and this information should be publicly available. Additionally, subsidiaries of banks, insurance firms, and investment firms were excluded from the sample. By applying these criteria, 134 firms were included in the final sample. Considering the 10 years, the total observations amounted to 1,340 firm-years.

Since the dependent variable of this research is qualitative (coded 0 and 1), the most appropriate regression method is logistic regression, which does not require preliminary tests typically necessary for linear regression, such as stationarity, Chow test, Hausman test, heteroskedasticity, or serial correlation tests. After performing the logistic regression, the model's prediction accuracy and the Hausman-Lemeshow test are reported to evaluate the model fit (Aflatooni, 2017).

5. Research Regression Models

Regression models based on the research of Sahraoui Kabore (2023) are presented as follows:

5.1. Regression Model of Testing the First Research Hypothesis

$$ROA_{it} = \alpha_0 + \alpha_1 CSR_{it} + \alpha_2 Growth_{it} + \alpha_3 MTB_{it} + \alpha_4 Age_{it} + \alpha_5 SIZE_{it} + \varepsilon_{it}$$

5.2. Regression Model of Testing the Second Research Hypothesis

$$ROA_{it} = \alpha_0 + \alpha_1 CSR_{it} + \alpha_2 LEV_{it} + \alpha_3 (CSR_{it} \times LEV_{it}) + \alpha_4 Growth_{it} + \alpha_5 MTB_{it} + \alpha_6 Age_{it} + \alpha_7 SIZE_{it} + \varepsilon_{it}$$

5.3. Operational Definitions of Research Variables

5.3.1. Dependent Variable: Corporate Performance (ROA)

Following the research of Vafa and Kabur (2023), financial performance is used to measure the firm's

performance, which is derived from *the ratio of net profit to total assets of the firm*.

5.3.2. Independent Variable: Corporate Social Responsibility (CSR)

Corporate social responsibility (CSR) has been considered as an independent research variable. To measure CSR, the criterion developed by the KLD Institute was used, following the methodology of Mishra et al. (2011), Hajiha & Sarfaraz (2014), and Namazi & Moghimi (2018).

The KLD Institute annually ranks organizations based on social and environmental criteria. CSR is divided into four dimensions: social participation, employee relations, environment, and product characteristics, with each dimension having its own strengths and weaknesses. The measurement method is as follows: if a firm discloses its strengths and weaknesses, each is assigned a score of one (1). By separating weaknesses from their respective strengths, a net score for each dimension is calculated. Finally, the overall CSR score for the firm is obtained by summing the scores across all four dimensions (Namazi & Moghimi, 2018).

The following table presents the indicators related to the dimensions of CSR, and the necessary information has been extracted from the firms' board of directors' reports. The general model is as follows:

$$CSR-S = CSR-COM-S + CSR-EMP-S + CSR-ENV-S + CSR-PRO-S$$

In relation to the above:

CSR-S: Social Responsibility Score

CSR-COM-S: Social Participation Disclosure Score calculated from the difference of its specific strengths and weaknesses as follows:

$$CSR-COM-S = \sum \text{Strengths} - \sum \text{Concerns}$$

CSR-EMP-S: Employee Relationship Disclosure Score

CSR-ENV-S: Environmental Disclosure Score

CSR-PRO-S: Product Feature Disclosure Score

All the above-mentioned cases are obtained through the above relationship (Hajiha & Sarfaraz, 2014).

Table (2): Dimensions of Social Responsibility with Their Strengths and Weaknesses

Dimensions of Responsibility	Strengths	Weaknesses
Social Participation	Charitable Giving and Innovative Contributions (Assistance to Non-Profit Organizations and Participation in Public Initiatives)	Negative economic impact (negative impact on quality of life, factory closure) and non-payment of taxes
Employee Relations	Sharing cash benefits and retirement benefits	Poor health and safety, and a reduced workforce
Environment	Clean energy (using less fuel or pollution) and controlling air pollution, and reducing greenhouse gases	Hazardous waste generation and payment of fines due to the role of waste management
Product Feature	Product Quality & Product Safety	Paying a penalty for product safety and paying a penalty for negative advertising

5.3.3. Moderating Variable: Financial Leverage (LEV)

If the direction or strength of the relationship between the independent and dependent variables changes significantly at different levels of a third variable, this third variable is called a **moderating variable**. In this context, a moderating variable in a correlation analysis framework is considered as a third variable that significantly alters the zero-order correlation between the independent and dependent variables (Souri, 2011). **Financial leverage** is calculated as the ratio of total liabilities to total assets of the firm (Vafa & Kaboor, 2023).

5.3.4. Control variables of the research

Following the research of Vafa and Kabur (2023), the following control variables are included in the model:

- **Sales Growth:** Calculated as the difference between current-period sales revenue and the previous period's sales, divided by the sales of the previous period.
- **Firm Age:** Measured as the natural logarithm of the difference between the year of the firm's establishment and the year under consideration.
- **Firm Growth (MTB):** Defined as the ratio of market capitalization to the book value of shareholders' equity.
- **Firm Size (SIZE):** Measured as the natural logarithm of total assets.

Descriptive Findings

The main measure of central tendency is the mean, which represents the equilibrium point and center of gravity of the distribution. It serves as a good indicator of the centrality of the data. For example, the mean value for the leverage variable is 0.52, indicating that most of the data are concentrated around this point.

Dispersion parameters are used to assess the degree of variability among observations or their spread relative to the mean. One of the most important measures of dispersion is the standard deviation. In this study, the standard deviation is 4.12 for firm growth and 0.15 for firm performance, indicating that these two variables exhibit the highest and lowest variability, respectively. The minimum and maximum values further illustrate the range of each variable.

According to the results obtained in Table 4, it can be seen that the significance level of the Jarque-Bera test for the remaining sentences for the research model is more than 5%, which indicates that the model disruption sentences are normal.

The results in Table 5 show that the significance level of the test in the research model is less than 5% and indicate the existence of variance heterogeneity in the disturbance sentences, which has been solved in the final estimation of the models by implementing the GLS command and also using the facilities of the standard powerful tool in Ives 12 software.

According to the results of Table 6, it can be seen that the significance level of the serial autocorrelation test in the research model with a significance level of less than 5% indicates the existence of serial

autocorrelation in the model that has been identified in the final model (Aflatoni, 2018).

According to the results obtained in Table 7, it can be seen that the significance level of the variables in the validity test is less than 5% and indicating the reliability of the variables.

According to the results obtained in Table 8, it can be seen that the significance level of the Chow test for

the research hypothesis test model is less than 5% and indicates the acceptance of the panel data model that needs to be presented to ensure the Hausman test, which is presented below (Platouni, 2018).

According to the results obtained in Table 9, it can be seen that the significance level of the test in the test model of the research hypothesis is less than 5% and indicating the acceptance of fixed effects.

Table (3): Descriptive Statistics of Research Variables

Variable Name	Mean	High	Low	Stdev
ROA	0.15	0.56	-0.18	0.15
CSR	2.49	7.00	1.00	1.37
LEV	0.52	1.05	0.094	0.21
Growth	0.40	1.80	-0.38	0.46
Age	3.67	4.18	2.83	0.34
SIZE	15.16	19.9	11.9	1.65
MTB	4.95	15.3	1.02	4.12

Table 4. Jarque-Bera Test Results for Model Residuals

Hypothesis (model)	Test Statistics	Significance level
The first research model	0.96	0.61
The second research model	0.32	0.85

Table 5: Results of Variance Variance Test

Test Model	Test Statistics	Significance level
The first research model	162.12	0.0000
The second research model	215.09	0.0000

Table (6): Results of the Serial Autocorrelation Test

Test Model	Test Statistics	Significance level
The first research model	460.3	0.0000
The second research model	395.4	0.0000

Table 7: Durability Test (Levin, Lin, and Chu) Research Variables

Variable Name	Test Statistics	Sig
ROA	-13.9500	0.0000
CSR	-22.7644	0.0000
LEV	-13.6236	0.0000
Growth	-12.9506	0.0000
Age	-5.03631	0.0000
SIZE	-7.22183	0.0000
MTB	-15.5354	0.0000

Table 8: F. Limmer Test

Test Model	Test Statistics	Sig
The first research model	11.001	0.0000
The second research model	8.337	0.0000

Table 9: Hausman Test

Test Model	Test Statistics	Sig
The first research model	44.993	0.0000
The second research model	36.774	0.0000

Table 10: The result of the first hypothesis test of the research

Variables	Coef	Stdev	T Statistic	Sig	VIF
CSR	0.010	0.002	4.20	0.0000	1.00
Growth	0.074	0.008	8.45	0.0000	1.18
MTB	0.002	0.0008	2.92	0.003	1.13
AGE	0.36	0.18	1.97	0.048	1.01
SIZE	0.023	0.008	2.71	0.006	1.07
AR(1)	0.37	0.15	2.46	0.013	-
C	-1.47	0.62	-2.37	0.017	-
Determination Coefficient	0.82				
Watson Camera	2.09				
Statistic F	27.961				
Significance level	0.0000				

The results presented in Table 10 indicate that social responsibility has a direct and positive relationship with the firm's financial performance, with a coefficient of 0.010 and a significance level below 5% (0.000). Therefore, the first hypothesis of the research is accepted at the 5% error level.

All control variables—including sales growth, firm growth, firm age, and firm size—also exhibit a significant relationship with the dependent variable, with significance levels below 5%. The coefficient of determination (R^2) is 0.82, indicating that the independent and control variables together explain 82% of the variation in the dependent variable, demonstrating high validity for the research model.

Additionally, the Durbin-Watson statistic is 2.09, which falls within the acceptable range of 1.50 to 2.50, suggesting that there is no severe autocorrelation among the residuals. The collinearity statistics are

below 5, indicating the absence of strong multicollinearity among the research variables. Finally, the F-statistic is significant at a level below 5%, confirming that the research model has a good overall fit.

The results presented in Table 11 indicate that the interaction between social responsibility and financial leverage has a negative effect on the firm's financial performance, with a coefficient of -0.024 and a significance level below 5% (0.0008). Given the negative coefficient, the influence is inverse. Therefore, the second hypothesis of the study is supported at the 5% significance level.

All control variables, except firm size, exhibit a significant relationship with their respective dependent variables at a significance level below 5%. The coefficient of determination (R^2) is 86%, indicating that the independent and control variables in the model

collectively explain 86% of the variation in the dependent variable, reflecting the high validity of the research model in this context.

Additionally, the Durbin-Watson statistic is 2.09, which falls within the acceptable range of 1.50 to 2.50, suggesting no strong autocorrelation among the

regression residuals. Furthermore, multicollinearity tests indicate that there is no severe correlation between the independent variables. Finally, the F-statistic, with a significance level below 5%, confirms that the research model has a good overall fit.

Table 11: The result of the second hypothesis test of the research

Variables	Coef	Stdev	T Statistic	Sig	VIF
CSR	0.002	0.004	0.54	0.58	1.01
LEV	-0.50	0.033	-15.2	0.0000	1.36
CSR×LEV	-0.024	0.007	-3.36	0.0008	1.37
Growth	0.060	0.007	7.64	0.0000	1.27
MTB	0.003	0.0008	4.90	0.0000	1.19
AGE	0.43	0.15	2.85	0.004	1.01
SIZE	0.001	0.007	0.16	0.86	1.17
AR(1)	0.29	0.14	1.98	0.047	-
C	-1.13	0.49	-2.30	0.021	-
Determination Coefficient	0.86				
Watson Camera	2.098				
Statistic F	37.215				
Significance level	0.0000				

6. Discussion and results of the research

As mentioned above, the main purpose of this study is to investigate the relationship between corporate social responsibility (CSR) and firm performance, with a focus on the moderating effect of financial leverage. The benefits of CSR for firms should be understood dynamically, as it opens opportunities for enhancing performance. Accordingly, CSR is considered a strategic decision through which committed organizations can address social and environmental issues while positively impacting stakeholders outside the organization. Today, CSR has become an essential practice that can also improve financial performance. Statistical results indicate a direct relationship between CSR and the financial performance of firms. Specifically, as the level of managerial commitment to CSR increases, the financial performance of the firm improves. The relationship between financial and non-financial performance, however, remains debated

among researchers. Classical proponents, such as Avisha et al. (2020), argue that a corporation's primary responsibility is to increase shareholder wealth and that social activities are the responsibility of individuals or society, not business organizations. In contrast, Latapi Agudelo et al. (2019) emphasize the positive impact of CSR on financial performance, noting that meeting the expectations of stakeholders—including shareholders, environmental advocates, employees, customers, suppliers, and the community—enhances the firm's reputation, which in turn leads to higher net financial performance and increased profits. Similarly, Jameel & Rashid (2023), Cao et al. (2018), and Parandin et al. (2023) assert that a firm's success depends on its relationships with all stakeholders. The findings of the present study align with these results, supporting the positive influence of CSR on firm performance.

Financial leverage reflects the amount of debt utilized within a firm's capital structure and represents

a measure of financial risk arising from fixed financial obligations. The leverage ratio is calculated as the book value of total liabilities divided by the book value of total assets, from the perspective of the firm's cost of capital. Firms may adjust their capital structure by raising funds through either debt or equity. Excessive reliance on equity increases the expected returns of shareholders and raises the firm's financing costs, whereas excessive debt—whether short-term or long-term—increases financial risk and reduces financial flexibility.

The statistical results further reveal that the interaction between financial leverage and CSR can have a negative effect on firm performance. In other words, as corporate debt levels increase, the positive impact of CSR on performance diminishes. Introducing financial leverage into the relationship between CSR and firm performance can even transform this positive association into a negative one (2023).

7. Practical Suggestions

According to the test of the first hypothesis, corporate managers can strengthen their positions as senior executives by enhancing the social performance dimensions of their firms. In organizations with high social engagement, financing conditions are also improved, which, in turn, can lead to enhanced overall firm performance.

Based on the second hypothesis test, firms with low leverage are advised to actively utilize their credit and pursue targeted debt financing, such as green bonds or sustainability-related loans. Issuing bonds for financing environmental or social projects—like developing sustainable products or installing pollution control equipment—typically carries lower interest rates than conventional bonds because capital is attracted to ESG-focused initiatives. Using debt for social responsibility, when the firm can manage it efficiently, signals to the market a strong commitment to sustainability without increasing bankruptcy risk. This positive interaction can enhance stock value,

improve credit ratings, and ultimately strengthen financial performance.

Investors can make more informed and confident decisions by evaluating a firm's social initiatives and reviewing disclosed programs related to debt financing.

Furthermore, regulatory bodies such as the Ministry of Silence and the Stock Exchange Organization can encourage firms to enhance their social performance by recognizing and rewarding firms that actively engage in social initiatives. They can also promote social responsibility through training programs, practical guidance, and resources, thereby supporting organizations in expanding their social impact and benefiting both stakeholders and society at large.

References

- A.R., HOSSEINI, S.Z., & GHOLAMREZAPOUR, MOHAMMAD. Investigating the Relationship between CEO Power and Corporate Financial Leverage. *FINANCIAL MANAGEMENT STRATEGY*, 9(34), 123-140.
- Ahmadpour, Ahmad & Farmanbardar, Maryam (2015). Investigating the Relationship between Corporate Social Responsibility Information Disclosure and Product Market Competition. *Financial Accounting Quarterly*, Vol. 7, No. 26, pp. 103-124.
- Dakhili, H., Ansi, H. (2012). "The Link between Corporate Social Responsibility and Financial Performance: The Case of the Tunisian Firms." *Journal of Organizational Knowledge Management*. 38(2): PP: 1-11.
- Dastgir, Mohsen, Arab Salehi, M., Amin Jafari, R., & Akhlaghi, H. (2014). The Effect of Intellectual Capital on a Firm's Financial Performance. *FINANCIAL ACCOUNTING AND AUDITING RESEARCH*, 6(21), 1-36.
- David C. Broadstock, Roman Matousek, Martin Meyer, and Nikolac G. Tzeremes (2019), Does corporate social responsibility impact firms' innovation capacity? The indirect link between

- environmental & social governance implementation and innovation performance. Journal of Business Research. Journal homepage: www.elsevier.com/locate/jbusres. 15(3), pp. 1-12
- Dulu, Mary, Winnie, Amir. (2018). Deviation of Financial Leverage from Target Leverage and Cost of Equity. JOURNAL OF FINANCIAL ACCOUNTING KNOWLEDGE, 5(3 18), 153-181.
- Fakhari, Hossein & Rezaei Pitehnoei, Yasser & Norouzi Mohammad (2016). The Effect of Corporate Social Disclosure on Investment Efficiency. Journal of Financial Management Strategy, Alzahra University, Vol. 4, No. 15, pp. 85-106.
- Ghayur, Dr. Seyed Morteza, Rajoui, Dr. Morteza, Valizadeh Moghaddam, Tahereh, & Rais Al-Sadati, Seyed Farhad (2019). The Relationship between Social Responsibility and Ethical Reputation and Brand Equity: An Analysis of the Mediating Role of Trust. Journal of Ethics in Science and Technology, Vol. (14), pp. 121-128.
- GOLMOHAMMADI SHOURAKI, MOJTABA, & POURHEYDARI, Omid. The Effect of Stakeholder Management on the Firm's Financial Performance. JOURNAL OF APPLIED RESEARCH IN FINANCIAL REPORTING, 5(8), 25-50.
- Hajiha, Zohreh & Sarfaraz, Bahman (2015). Investigating the Relationship between Corporate Social Responsibility and Cost of Equity in Firms Listed in the Tehran Stock Exchange. Empirical Research in Accounting, Vol. 4, No. 14, pp. 105-123.
- Hassas Yeganeh, Yahya & Sohrabi, Hossein Ali & Side-diving, Moham2020).2020) The Relationship between Social Responsibility Reporting and Corporate Value. Financial Accounting and Auditing Research, Vol. (12), No. 45. pp. 1-20.
- Hekmat, Hanieh & Keshavarz Mirzamohammadi, Farn (2023). Evaluation of Profitability, Social Responsibility, and Financial Risk. Financial Research Journal, 25(2), 321-342.
- Jalili, Saber, and Ghaisari, Farzad (2014). Investigating the Relationship between Earnings Quality and Social Responsibility of Firms Listed in Tehran Stock Exchange, Audit Knowledge, Vol. (14), No. 57. pp. 1-19.
- Jamei, Reza & Najafi, Ghasem (2019). Investigating the Relationship between Corporate Social Responsibility Disclosure and Audit Fees. Journal of Financial Accounting Knowledge, Vol. 6, pp. 137-161.
- Jin, G. K., & Drozdenko, R. G. (2010). Relationships among perceived organizational core values, corporate social responsibility, ethics, and organizational performance outcomes: An empirical study of information technology professionals. Journal of Business Ethics, 92, (25):341-359.
- Kordestani, Gholamreza, Ghaderzadeh, Seyed Karim & Haghighat, Hamid (2018).The Effect of Social Responsibility Disclosure on Accounting, Economic, and Market Criteria of Corporate Performance Appraisal. Journal of Accounting Advances of Shiraz University, Vol. (10), No. 3(74), pp. 181-210.
- Mashiyat Tasnia, Syed Musa Syed Jaafar AlHabshi, and Romzie Rosman. (2020). The impact of corporate social responsibility on stock price volatility of US banks: a moderating role of tax. Journal of Financial Reporting and Accounting. Doi 10.1108/JFRA-01-2020-0020.
- Masoud & Vij 2021).) Factors influencing corporate social responsibility disclosure (CSR) by Libyan state-owned enterprises (SOEs), Cogent Business & Management (8). (1). pp. 859-850.
- Mishra, Dev R., Sadok El Ghoul, Omran Guedhami, and Chuk C.Y.Kwok (2011). Does Corporate Social Responsibility Affect the Cost of

- Capital?. *Journal of Banking & Finance*, Vol. 35, 9, pp. 2388-2406.
- Mohammadi, Mohammad, and Karimi Deldar, Behnam (2021). Investigating the Effect of Uncertainty and Social Responsibility Disclosure Indicators on Stock Price Synchronization in Firms Listed in the Tehran Stock Exchange. *New Research Approaches in Management and Accounting*. Issue (60), Volume (9), pp. 75-98.
- Murtada Taha Eesa, Sadeq Hadi Muhi, and Jasim Idan Barrak (2021), Evaluating the Impact of Accounting Disclosure of Social Responsibility in Enhancing the Transparency of the Sustainable Report, 10 (5), pp. 177-293.
- Namazi, Mohammad, and Fatemeh Moghimi (2018). The Effect of Innovation and the Moderating Role of Social Responsibility on the Financial Performance of Firms in Different Industries. *Journal of Accounting and Auditing Review*, Vol. 25, No. 2, pp. 289-310.
- Nikkar, Javad & Hamidi, Elham & Jalili, Akram (2017). The Effect of Corporate Social Responsibility on Adhesion Behavior. *Empirical Research in Accounting*, Vol. (6), No. 23, pp. 1-28.
- Ramadhan, M., & Danibrata, A. (2022). Elemen-Elemen yang Terkait dengan Customer Satisfaction. *E Jurnal Manajemen TSM*, 2(2).
- Shahbaz Sheikh (2018). CEO power, product market competition, and firm value. *Research in International Business and Finance*, <https://doi.org/10.1016/j.ribaf.2018.04.009>.
- Shahriari Rad, Fahimeh (2023). Investigating the Moderating Effect of Information Asymmetry on the Relationship between Financial Leverage and Investment Decisions. *Journal of Management and Accounting Research*, 8(4), 386-409
- Wafa Sahraoui, Rimvie Enoc Kaboré (2023). Relationship between corporate social responsibility and performance: The moderating effect of financial leverage. *Journal of Management Science*, Volume 6, No. 4, October 2023, pp. 605-614
- Wang, Z. & Sarkis, J. (2017). Corporate social responsibility governance, outcomes, and financial performance, *Journal of Cleaner Production*, 162, 1607-1616.
- Werner, W. J. (2009). corporate social responsibility initiatives addressing social exclusion in Bangladesh. *Journal Health Popul Nutr*, 27 (4): 545-562.
- Wuttichindanon, Suneerat (2017), "Corporate social responsibility disclosure choices of report and its determinants: Empirical evidence from firms listed on the Stock Exchange of Thailand, *Kasetsart Journal of Social Sciences*, 38, pp. 156-162.

