

RESEARCH ARTICLE

Corporate social responsibility and corporate performance in US companies

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The aim of this research is to find the impact of return on assets (ROAs), return on equity (ROE), and return on investment (ROI) on the corporate social responsibility index (CSRI) among US-based firms. Research on the correlation between corporate social responsibility (CSR) and key financial metrics, including ROAs, ROE, and earnings per share (EPS), is available. A inadequate of studies also includes the CSRI in their analyses of the 1000 publicly traded US corporations in the Russell 1000 database. The researcher conducted a quantitative study utilizing Pearson's correlation coefficient and multiple linear regression (MLR) analysis. The study indicated a statistically significant correlation between CSRI and ROE but no such correlation between CSRI and ROA or ROI. A total of 133 people made up the sample for this investigation. This research study adds to the existing body of knowledge by examining the relationship between CSRI and ROA, ROE, and ROI for US companies. It also helps close a gap in the literature by providing evidence for both statistically significant and nonsignificant relationships.

Keywords: corporate social responsibility, return on assets, return on investment, return on equity

1. Introduction

Since the 1950s, scholars have debated stakeholder theory, corporate social responsibility (CSR), and the function of organizations in society (1, 2). Furthermore, the only goal of CSR, as it pertained to economic activity, was to boost company profits (3). When analyzing the correlation between CSR and financial success, Wu (2006) drew 121 papers. According to a few of these research studies, there was a correlation between accounting-based financial performance indicators and CSR metrics as defined by the Kinder Lydenburg Domini (KLD) database and the Best Corporate Citizens program. Despite this, some research failed to find any correlation between CSR rankings and financial success metrics derived from the market. To find out whether there is a correlation between CSR and financial success metrics such as return on asset (ROA), return on equity (ROE), and return on investment (ROI), this study set out to analyze the data (4–6). Several research studies have shown a correlation between CSR and the financial performance indices ROA and ROE (7).

How can the company's bottom line benefit from CSR initiatives that are seamlessly integrated into daily operations? Managers strive to answer this question to ensure their companies' longevity, success, credibility, and profitability (8, 9). Various industries, samples, and methodological approaches have evaluated the dilemma between CSR and corporate financial performance (CFP) from multiple angles (10, 11), reflecting practitioners' interest. The purpose of this study was to investigate the hypothesis that CSR initiatives are associated with the financial performance metrics ROAs, ROE, and ROI. This research aims to address the information vacuum left by the study by Filbeck et al. (12), which only included the 100 Best Corporate Citizens in their ranking. All 1000 American businesses included in the Russell 1000 were analyzed in this study. When examining the connection between CSR and CFP, Orlitzky et al. (13) said that accounting-based financial metrics could provide a superior result; therefore, to find out whether there is a substantial link between CSR and CFP, accounting-based financial metrics were used.

The theoretical framework for this research study was stakeholder theory, which was taken from agency theory (14). Stakeholder theory lends credence to this study's idea of CSR (the independent variable). In his formalization of stakeholder theory, Freeman (15) posited that leaders of organizations should strive to maximize financial success by attending to stakeholders' requirements. The relationship between corporate and societal duties has been studied for many years. Companies often use a pragmatic approach when deciding what CSR initiatives to launch to appease various interest groups (16–18).

2. Literature review

2.1. Stakeholder theory

A statistically significant association between CSR and CFP was examined using stakeholder theory, which guided the research project and supplied the framework. As a theoretical framework for analyzing CSR, Freeman (15) stakeholder theory centered on stakeholders' viewpoints about company practices (16). According to Donaldson and Preston (19), stakeholder theory provides a framework for studying how stakeholder management practices relate to the success of corporations. According to stakeholder theory, organizations are just distinct interest groups. According to stakeholder theory, businesses have responsibilities to various groups, including shareholders, consumers, suppliers, workers, and communities (20, 21).

The core tenet of Agency Theory, which was prevalent in the 1970s (22, 23), was that managers' primary duty was to run the company as usual, without regard for the interests of stakeholders or shareholders outside the company. Economic literature from the 1960s and 1970s established a distinction between an organization's agent (the management) and principal (the owner) and the power to delegate decision-making to the agent (24–26). In addition, as stated in Namazi (26) and Kuo et al. (27), the literature has shed light on the distinct function of the agent, also known as management, as the party involved in a contractual arrangement with every other party involved.

Stakeholder theory, developed by Freeman (15), broadened the scope of corporate viewpoint beyond agency theory to include all relevant parties, including workers, suppliers, creditors, community members, investors, and even the government. According to Ullmann (28), external stakeholders are organizations' primary responsibilities. These stakeholders might be individuals or groups that indirectly or directly impact the organization's accomplishments. This definition is based on Freeman's stakeholder theory. According to Ullmann, CSR efforts measure a company's success. There is a good correlation between social and economic performance, ROE, and earnings per share (EPS), as shown in research studies. Stock

market performances are often used to assess economic performances. As a result, Ullmann laid the groundwork for meeting stakeholder expectations via CSR disclosure and a planned organizational structure. Among many other traits, CSR disclosure is linked to organizations' openness and visibility (28, 29). Researchers have also shown that factors including managerial style, business structure, cost of capital, and firm size are significant (30, 31).

2.2. Corporate social responsibility

Companies voluntarily pledge to become responsible stewards of society, the environment, and their stakeholders via what is known as CSR (32–34). Stakeholder theory (15), CSR (32, 35), and the long-term viability of businesses have all been the subject of much academic investigation. According to stakeholder theorists, organizations should prioritize satisfying stakeholders' needs as much as their shareholders. Accordingly, owners and investors are among the larger stakeholder groups impacted by organizational managers' activities (15, 36). Recognized as the model of firm sustainability, the interaction between the organization and stakeholder groups is acknowledged to have a favorable influence on attaining the organization's goals (15, 34, 37). The most recent definition of CSR offered by the corporate responsibility organization (CRO) was used for the sake of this research study. CSR is a tool that companies use to improve their image, meet their stakeholder obligations, show that they are accountable, increase share value, strengthen their commitment to CSR, and ensure long-term sustainability (Magazine, 2015, 38).

According to Marens (39) and Bowen (40), social responsibility of the businessman was the first to formally recognize the existence of CSR, which had its roots in the 1950s. Bowen intended that managers willingly take on a certain amount of responsibility rather than feeling pressured. Regarding issues such as pollution and car safety, he said that CSR may help remedy society's shortcomings (41, 42). Archie Carroll proposed a three-pronged model of CSR in the 1970s, which included social concerns, business social responsiveness, and social duties. According to Carroll (43), organizations have responsibilities not just to society but also to the economy and the law.

The scope of CSR extends far beyond the executive suite, and a company's ethical standards are an essential part of that framework. In addition, organizations shall guarantee the fulfillment of 41 specific duties via CSR operations. The CSR pyramid that Schwartz and Carroll (44) said may help businesses succeed. There are four parts to corporate citizenship as follows: (a) Making a profit, which is the bedrock of all others; (b) following the law, which is society's code of conduct; (c) acting ethically, which means you have a responsibility to do the right thing; and (d) philanthropic, which means you give back to the community (32, 45).

The evaluated literature shows a need for further study on CSR because of the mixed conclusions drawn from the many existing qualitative and quantitative studies on the subject (46). This analysis reduced the variance in results by illustrating comparable variables and similar organizations. Moreover, despite the large number of controlling and predicting factors used in prior studies, additional research is required to link and explain the connection between CSR activities and financial success (47, 48).

3. Methodology

3.1. Research design

A quantitative, nonexperimental, cross-sectional research methodology was used in this study. Finding patterns in data by gathering and analyzing it statistically is the primary goal of quantitative research. The objectives of quantitative analysis include theory development, prediction, explanation, and validation of connections (49). Using measurement, description, and conclusions to examine connections was the criterion for selecting a quantitative research design (50, 51). According to Swanson and Holton (52), this method is positivist, descriptive, and quantitative. Consequently, this quantitative research strategy was deemed the most suitable for bolstering and gathering pertinent facts to answer the study issue. To clarify, the purpose of the study question was to determine whether there is a correlation between the corporate social responsibility index (CSRI) and the financial performance metrics of corporations, namely, ROA, ROE, and ROI. This study used SPSS version 23 to analyze secondary data extracted from the Russell 1000 database.

3.2. Research question hypotheses

This study was theoretically grounded on stakeholder theory. According to Freeman (15), who developed stakeholder theory, companies should shift the focus from shareholders to stakeholders if they want to alter who has decision-making authority and benefits. Communities, society, and the economy all benefit from stakeholders' capacities, according to Stieb (53). This study's research topic was resolved as follows:

RQ 1: How much do ROA, ROE, and ROI account for the DV (Corporate Social Responsibility Index) discrepancies within the Russell 1000 database of US companies?

Using descriptive notation, the research question's hypotheses were presented as follows:

H₀: Post hoc hypothesis testing reveals no statistically significant correlation between ROA, ROE, and ROI and

changes in the CSR index for US businesses included in the Russell 1000 database.

H_A: Looking at the Russell 1000 database of American corporations, we can see a statistically significant correlation between ROA, ROE, and ROI and changes in the DV, or CSRI.

With the use of statistical notation, we examined the following hypotheses on the study question:

$$H_0: \rho^2 = 0$$

$$H_A: \rho^2 > 0$$

3.3. Population

The 1000 American businesses from the Russell 1000 database, made available by the investment company Russell Investments, made up the population for this study. We chose this database because it contains information on major publicly listed firms in the United States. This choice makes sense since the 1000 firms are all involved in some CSR, as shown by their CSRI ratings.

3.4. Sampling frame

One thousand American businesses were used as a sampling frame, with their information culled from the Russell 1000 database (54). Participation in CSR initiatives by publicly listed American firms was a criterion for inclusion. Earnings ROI, ROAs, and ROE are all publicly available metrics obtained from the website of S&P Dow Jones Indices. The research study's minimal sample size was determined using G*Power 3.1.9.2. **Figure 1** graphically shows the process of calculating the sample. The adequacy of the sample size was checked using this instrument. The program showed that at a 95% confidence interval (CI), the sample size was at least 119 out of 1000. Out of a total population of 1000 businesses, 130 were selected at random using the random number generator in Microsoft Excel. **Table 1** gives the protocol of power analyses.

3.5. Measures

Two sets of financial performance metrics—ROI, ROE, and CSR indices—and a set of CSR indices were culled from secondary data sources for this study. This investigation made use of the Russell 1000 database. While the Russell 1000 database is not accessible to the public, permission has been given to utilize it. Each company's CSRI scores (DV) were supplied from the database. CSR's seven subcategories employee relations, environment, climate

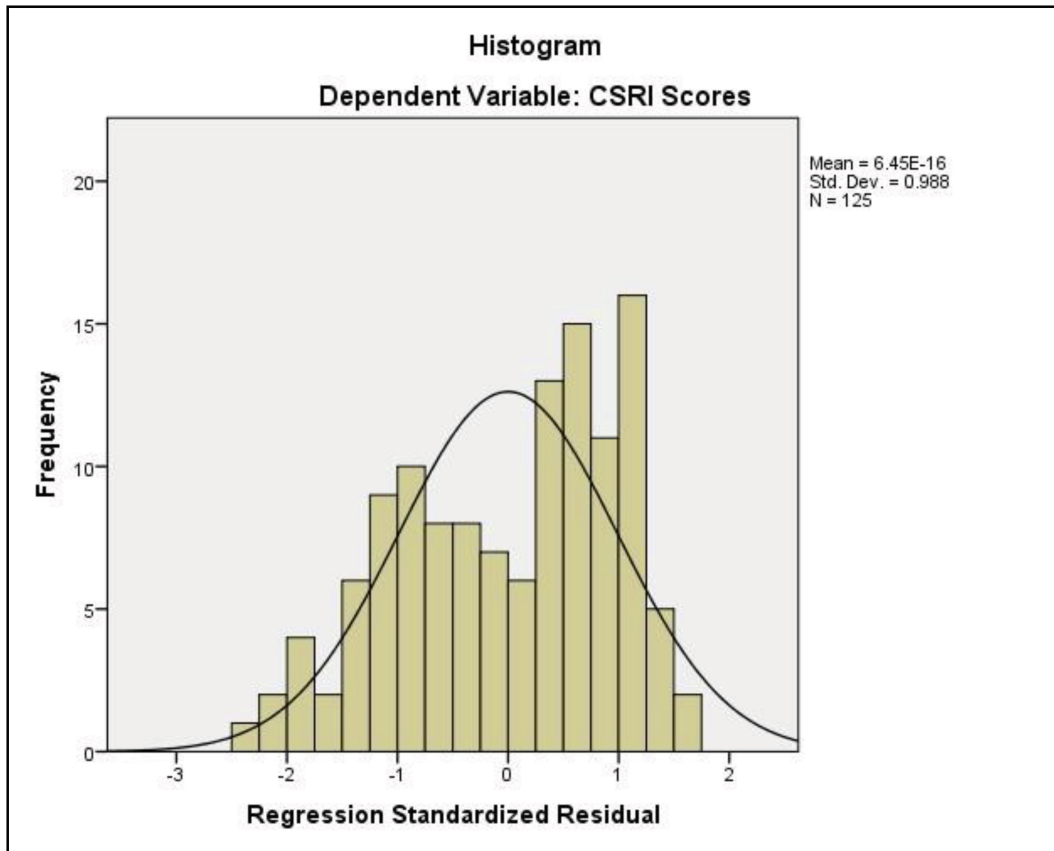


FIGURE 1 | Histogram – CSRI scores.

TABLE 1 | Pearson correlations between variables ($n = 125$).

		<i>CSRI scores</i>	<i>ROA</i>	<i>ROE</i>	<i>ROI</i>
CSRI Scores	Pearson Correlation	1	-0.021	-0.184*	-0.012
	Significance (2-tailed)		0.812	0.040	0.895
	<i>N</i>	125	125	125	125
ROA	Pearson Correlation	-0.021	1	0.62**	0.886**
	Significance (2-tailed)	0.812		0.000	0.000
	<i>N</i>	125	125	125	125
ROE	Pearson Correlation	0.184*	0.62**	1	0.637**
	Significance (2-tailed)	0.040	0.000		0.000
	<i>N</i>	125	125	125	125
ROI	Pearson Correlation	-0.012	0.886**	0.637**	1
	Significance (2-tailed)	0.895	0.000	0.000	
	<i>N</i>	125	125	125	125

*Indicates that the result is statistically significant at the 0.05 level. This means that there is a 5% or less probability that the observed result occurred by chance.

**indicate a higher level of statistical significance, often at the 0.01 level. This means that there is only a 1% or less probability that the observed result occurred by chance.

change, finances, human rights, charity, and governance—contributed to the final CSRI score. A trio of profitability ratios ROA, ROE, and ROI—served as independent variables. The research study used a database with ratios for

all companies. The independent variables, which were measures of financial success, were accessible to the public. Many factors contributed to the Russell 1000 database's reputation as an accurate resource. The CSR

categories that are used to determine the scores are thought of as factors that influence the importance of the organization.

3.6. Data analysis

Traditional multiple linear regression (MLR) was the tool of choice for data analysis in this investigation. According to Tabachnick et al. (55), MLR was a suitable multivariate statistical method for investigating and clarifying linear correlations between a single dependent and several independent variables. It was necessary to explore the data by looking for outliers, missing values, and assumptions before data analysis could begin. For this study, we used the following MLR model: The equation is given by

$$y_i = b_0x_0 + b_1x_{1i} + b_2x_{2i} + b_3x_{3i} + e_i$$

where $i = 1, 2, \dots, n$, where n is the sample size; y is the CSR index; b_0 is a constant; b_1 is the ROA regression coefficient; b_2 is the ROE regression coefficient; b_3 is the ROI regression coefficient; and e is the error term.

The data were analyzed using Statistical Package for the Social Sciences (SPSS), version 23.0. There was a search for missing data in the dataset. We did not find any missing data and did not need to make any modifications. Outliers, independence, normalcy, homoscedasticity, linearity, and appropriate multicollinearity were all examined to ensure that the data met the requirements of MLR.

4. Results

To fill gaps in our understanding, this study sought to determine whether a statistically significant correlation exists between CSR scores and the financial performance indicators of American companies: ROA, ROE, and ROI. The findings from the research are going to be covered in this chapter. To answer the research question, descriptive and inferential statistics were administered.

4.1. Assumption of models

Certain assumptions must be met for the MLR model (55, 56). The following assumptions must be satisfied to draw reasonable conclusions from the analysis: independence, normalcy, homoscedasticity, linearity, and reasonable multicollinearity. Eliminating outliers is essential, as is demonstrating homoscedasticity of variance, having a linear relationship between IVs and DV, and avoiding significant multicollinearity.

Finding outliers was a part of the exploratory data analysis testing process. Finding outliers is possible with the use of

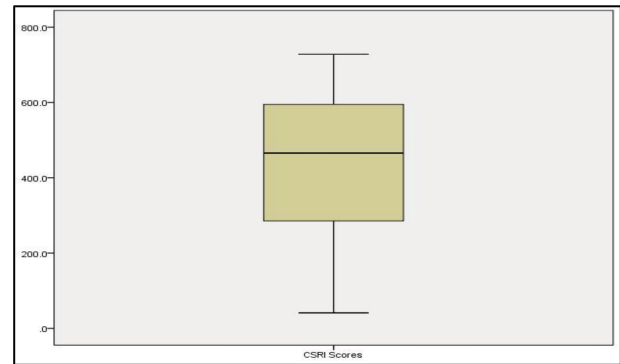


FIGURE 2 | Box plots of CSRI scores.

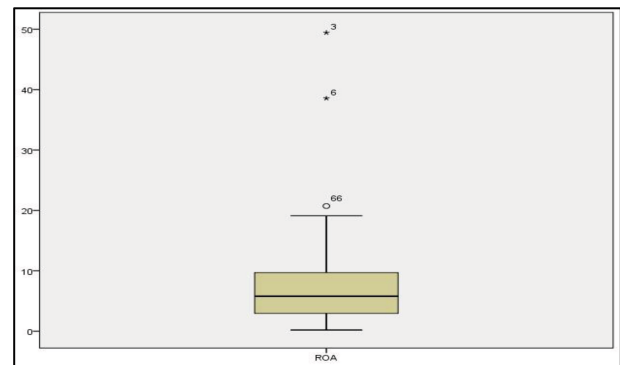


FIGURE 3 | Box and whisker plot of return on assets.

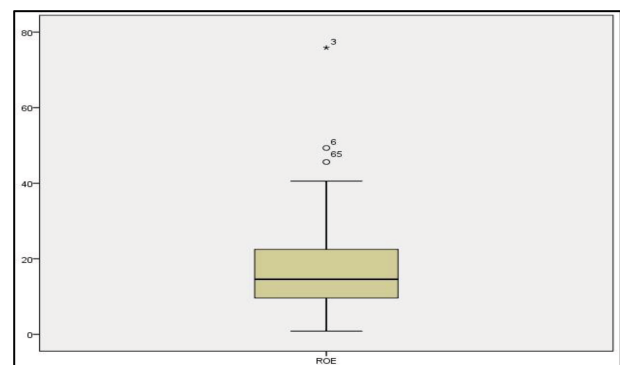


FIGURE 4 | Box and whisker plot of return on equity.

box plots or histograms. A box depicts the interquartile range between the 25th and 75th quartiles of the data (57). It is recommended to exclude data that falls outside of these quartiles. After removing the outliers, the sample size decreased from 130 to 125. Extreme data points, known as outliers, may skew parameter estimations (56). Using SPSS, version 23.0, box and whisker plots were used to identify outliers. As a result, the CSRI scores variable did not include glaringly high or low numbers. Figure 2, a box plot, shows no extreme values.

Both ROA and ROE showed three extreme values as shown in Figures 3 and 4,, respectively. The ROI variable included

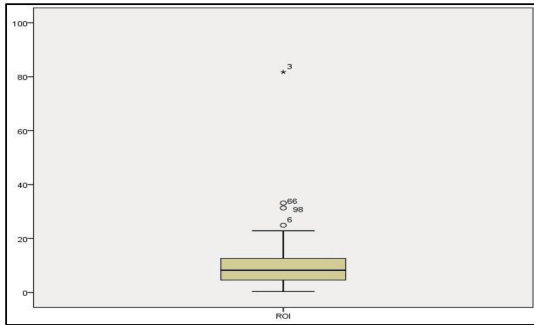


FIGURE 5 | Box and whisker plot of return on investment.

four extreme cases (Figure 5). After removing the records with outliers, the sample size was reduced from 130 to 125.

No missing values were discovered in the sample when the data set was pre-screened for missing data before hypothesis testing. No missing data points were found during the research, as shown in Table 2.

The Durbin–Watson test was used to evaluate the assumption of residual independence (Table 3). The residuals of an MLR are independent variables that were shown using the Durbin–Watson test. A score of 2 indicates the absence of autocorrelation in the sample, whereas values between 0 and 4 are acceptable (56). The lack of autocorrelation in the model is confirmed by the Durbin–Watson values, which come out to 1.853.

Suppose the residuals did not originate from a normally distributed population. In that case, we may reject the null hypothesis and employ tools like histograms, Q–Q plots, and the KS test. Whether the null hypothesis [$F(e) = N(\mu, \sigma^2)$] or the alternative hypothesis [$F(e) \neq N(\mu, \sigma^2)$] was supported for the normal distribution was determined using these tests. The normalized residuals' histogram (Figure 1) provided evidence that the residuals may not follow a normal distribution, which is the alternative hypothesis. Because of the discrepancy, more analysis was necessary since the histogram revealed a bimodal distribution. This led to the execution of the KS test.

To determine whether the sample represents a specific distribution, statisticians use the KS test, sometimes called a goodness-of-fit test (56). To accept the null hypothesis, the sample must have originated from a known distribution, such as a normal distribution. The alternative hypothesis is obtained if the sample is not from a regularly distributed set. The empirical evidence for the nonnormal distribution of the residuals [$F(e) \neq N(\mu, \sigma^2)$] is supported by the very significant results of the KS and Shapiro–Wilk (S-W) tests (Table 4) for the dependent variable CSRI Scores, where [$(p = 0.001) < (\alpha = 0.05)$]. Both the tests by Fisher and Tabachnick et al. (55) might nevertheless fail to support the null hypothesis, even if they depend on normally distributed residuals [$F(e) = N(\mu, \sigma^2)$]. To determine whether the sample represents a particular distribution, statisticians use the KS test, sometimes called a goodness-of-fit test

(56). To accept the null hypothesis, the sample must have originated from a known distribution, such as a normal distribution. The alternative hypothesis is obtained if the sample is not from a regularly distributed set. The empirical evidence for the nonnormal distribution of the residuals [$F(e) \neq N(\mu, \sigma^2)$] is supported by the very significant results of the KS and SW tests (Table 5) for the dependent variable CSRI scores, where [$(p = 0.001) < (\alpha = 0.05)$]. Both the tests by Fisher and Tabachnick et al. (55) might nevertheless fail to support the null hypothesis, even if they depend on normally distributed residuals [$F(e) = N(\mu, \sigma^2)$].

The skewness standard error (SE) is 217. With a skewness of -0.369 , the CSRI variable is almost symmetrical. The center peak's height concerning the standard distribution's bell curve is called kurtosis. The findings also showed 430 SEs of kurtosis. In this case, CSRI had a kurtosis of -0.956 . The results are all somewhat near zero, suggesting everything is normal.

A linear connection between the dependent and independent variables is assumed by the assumption of linearity (56). According to Tabachnick et al. (55), the forecasts' accuracy depends on whether or not the assumption of linearity is satisfied. We used scatter plots and Pearson's correlation to determine whether there were any correlations between the variables.

A zpred vs zresid scatter plot was executed to examine the hypothesis of homoscedasticity. The predicted scores (zpred) and the prediction errors (zresid) are shown on opposite sides of a residual scatter plot, which allows for visual analysis of the homoscedasticity assumption (55). The most reliable method for assessing skewed data is this nonparametric test applied to ranking data. Field (56) states that the distribution is normal if 95% of the standardized residuals lie within the range of -2 to $+2$. The results showed that the ROA predictor had a VIF of 4.76, indicating a modest association level—a moderate association, as demonstrated by the VIF of 1.73 for the ROE predictor. The ROI predictor's VIF was 4.92, indicating a reasonable level of correlation. As a result, the VIF values are below the ten thresholds Field (56) suggested. The corresponding tolerance levels for the independent variables ROI77, ROI, and ROA are 210, 580, and 0.203.

Table 1 displays the Pearson correlations. Field (56) states that the ROE value is below the acceptable limit of 0.8, although it was not statistically significant for a two-tailed test ($\alpha/2 = 0.025$). However, there is no statistical significance between the ROA ($p = 0.812$) and ROI ($p = 0.895$) values [$(p = 0.001 < \alpha = 0.05)$] goes beyond the threshold of 0.8, which is considered optimal. Thus, the alternative hypothesis is supported by the variance inflation factor (VIF) and tolerance statistics for all variables. According to the correlation coefficients, only the ROE variable lent credence to the null hypothesis.

TABLE 2 | Case processing summary.

	<i>Case processing summary</i>					
	<i>Cases</i>					
	<i>Valid</i>		<i>Missing</i>		<i>Total</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
CSRI Scores	125	100.0%	0	0.0%	125	100.0%
ROA	125	100.0%	0	0.0%	125	100.0%
ROE	125	100.0%	0	0.0%	125	100.0%
ROI	125	100.0%	0	0.0%	125	100.0%

TABLE 3 | Regression summary.

<i>Model</i>	<i>R</i>	<i>R²</i>	<i>Adjusted R²</i>	<i>SE of the estimate</i>	<i>Durbin-Watson</i>
<i>Model summary</i>					
1	0.230 ^a	0.053	0.029	177.9798	1.853

^a corresponds to the coefficient value associated with the variable labeled "R".

TABLE 4 | ANOVA table.

<i>Model</i>	<i>Sum of squares</i>	<i>ANOVA^a df</i>	<i>Mean square</i>	<i>F</i>	<i>Significance</i>
1 Regression	214126.925	3	71375.642	2.253	0.086 ^b
Residual	3832892.749	121	31676.800		
Total	4047019.674	124			

^a stands for Analysis of Variance.

^b indicates the p-value associated with the F-test statistic.

TABLE 5 | Kolmogorov-Smirnov test.

	<i>Tests of normality KS^a</i>			<i>SW test</i>		
	<i>Statistic</i>	<i>df</i>	<i>Significance</i>	<i>Statistic</i>	<i>df</i>	<i>Significance</i>
CSRI scores	0.117	125	0.001	0.952	125	0.000

^a denotes the significance associated with the Kolmogorov-Smirnov (KS) statistic and Shapiro-Wilk (SW) test statistic is presented. For the CSRI scores, the KS statistic has a significance level of 0.001, while the SW test statistic has a significance level of 0.000.

4.2. Data analysis

The goal of exploratory data analysis is to glean insights from the data that go beyond what can be derived from formal models, assumptions, or the outcomes of hypothesis tests.

Table 6 shows that the average CSRI score (DV) was 438.31. The range of possible scores ranged from 41 up to 728.1. The ratings went from very low to high since the sample was randomly chosen. The dispersion of the data was 180.66. There was an average ROA (IV) of 0.064. Scores ranged from 0.002 (the lowest possible) to 0.19 (the highest possible). The dispersion of the data was 0.042. There was an average ROE (IV) of 0.158. The score ranged from a low of 0.008 to a high of 0.406 among all 79 items. The dispersion

of the data was 0.089. The average ROI was 0.088. Scores ranged from 0.003 (the lowest possible) to 0.229 (the highest possible). The dispersion of the data was 0.052.

According to Field (56), residuals are calculated as the discrepancy between the actual value of the dependent variable (y) and its anticipated value (w). The standardized residual is a statistical measure of the dispersion of the observed values with respect to the predicted values. According to Tabachnick et al. (55), the standardized residual is calculated by dividing the residual by the standard deviation (SD). A value of -2.405 is the rest. When the residuals were less than -2 , the actual frequency was lower than predicted. The statistical significance of the MLR model's predictive validity (model fit) was tested using the

TABLE 6 | Descriptive statistics for selected variables ($n = 125$).

	N	Descriptive statistics			
		Minimum	Maximum	Mean	SD
CSRI scores	125	41.0	728.1	438.309	180.6578
Return on assets	125	0.2056%	18.6600%	6.392026%	4.2549150%
Return on equity	125	0.8386%	40.5800%	15.836503%	8.9071153%
Return on investment	125	0.3460%	22.8654%	8.795128%	5.2717629%
Valid N (listwise)	125				

TABLE 7 | Regression results.

Model	R	R ²	Adjusted R ²	SE of the estimate	Change statistics				
					R ² Δ	FΔ	df ₁	df ₂	Significance FΔ
1	0.230 ^a	0.053	0.029	177.9798	0.053	2.253	3	121	0.086

'a' is associated with the R-squared value (R2) of the regression model. Specifically, it indicates the significance level of the R-squared value. In this case, the R-squared value is 0.053, and its significance level is .086.

TABLE 8 | Coefficients.

Model	Unstandardized coefficients		Standardized coefficients	t	Significance	95.0% CI for B	
	B	SE				Beta	Lower bound
1 (Constant)	480.582	34.452		13.949	0.000	412.376	548.789
ROA	1.233	8.193	0.029	0.151	0.881	-14.988	17.454
ROE	-6.088	2.357	-0.300	-2.583	0.011	-10.755	-1.422
ROI	5.260	6.721	0.153	0.783	0.435	-8.047	13.566

following assumptions, using a significance threshold of $\alpha = 0.05$:

$$H_0: \rho^2 = 0$$

$$H_A: \rho^2 > 0$$

where ρ^2 stands for the population's coefficient of determination.

To determine whether the model was fit, we used a significance threshold of $\alpha = 0.05$ to test our hypotheses.

$$H_0: \rho^2 = 0$$

$$H_A: \rho^2 > 0$$

Tables 6 and 7 show a p -value of 0.086 for the model fit. The fact that $p = 0.086 > \alpha = 0.05$ indicates that the predictor variables do not have a statistically significant impact on the dependent variable lends credence to the null hypothesis $H_0: \rho^2 = 0$.

In addition, the results show that the regression accounts for only 5.3% of the variation in CSRI scores, lending credence to the null hypothesis ($H_0: \rho^2 = 0$). The findings

of the model fit test are supported by the scatter plots which indicate no evident linear connection between the dependent and independent variables. We tested the hypotheses for the individual population regression coefficients despite finding support for the null hypothesis for model fit ($H_0: \rho^2 = 0$). Table 8 displays the outcomes.

5. Conclusion

This study set out to answer the following question: "How well do ROA, ROE, and ROI explain the variances in the CSRI (DV) for US companies in the Russell 1000 database?" According to the findings, no correlation exists between CSR and ROA or ROI among publicly traded American firms included in the Russell 1000 index. Additionally, the data showed that CSR and ROE are significantly related. A famous CSR-rated list of US firms, the Russell 1000 database, was used for this research. The CRO magazine publishes a list of publicly listed firms every year. A random sample was taken out of the 1000 firms that were listed in the database. Measures of financial success based on accounting were used

as variables. Prior research has shown a strong correlation between these metrics and financial performance evaluations (13). Stakeholder theory was used as an appropriate theoretical framework and basis for analyzing CSR initiatives. Friedman and Miles (58), Stieb (53), and Turker (59) all cited stakeholder theory as supporting the idea that CSR initiatives may boost the financial performance of organizations. This section included the analysis's interpretation, a discussion of its consequences, suggestions for further research, and a list of the study's shortcomings. Stakeholder theory, financial performance, and CSR should all benefit from the study's suggested next steps.

Recent studies have shown significant advancements in renewable energy technologies (60–64). However, challenges remain in terms of scalability and cost-effectiveness (65–67). Furthermore, socio-economic factors play a crucial role in the adoption of these technologies (68, 69). Despite these challenges, there is growing optimism about the potential for renewable energy to address climate change (70–75). Additional research has explored the nexus between corporate social responsibility (CSR) and financial performance (76–81).

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