IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE OF PRODUCTION ENTERPRISES LISTED ON HO CHI MINH STOCK EXCHANGE (HOSE) - VIET NAM

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ABSTRACT

Purpose: The objective of this research was to analyze the approaches related to that the impact of each aspect of social responsibility on the financial performance of businesses of production companies listed on the Ho Chi Minh City Stock Exchange in Vietnam.

Theoretical framework: The Stakeholder Theory has explained and justified the need for implementing Corporate Social Responsibility (CSR) with stakeholders.

Results and conclusion: The results showed that the impact of each aspect of social responsibility on the financial performance of businesses, the regression results reveal that only the environmental responsibility index has a favorable effect on the Return on Assets (ROA) of the company. However, aspects of social responsibility towards employees, the community, and customers do not affect financial performance.

Research implications: The research results on the impact of corporate social responsibility on financial performance in the annual reports of production companies listed on the Ho Chi Minh City Stock Exchange in Vietnam indicate that social responsibility activities and information disclosure have a positive influence on profitability and contribute to the sustainable development of the company.

Originality/value: Additionally, the results also demonstrate that company-specific factors, such as company size and financial leverage, significantly impact the company's profitability.

Keywords: corporate social responsibility, production enterprises, Viet Nam stock exchange.
1 INTRODUCTION

The rapid development of the current socio-economic landscape necessitates that businesses focus not only on short-term profit goals but also on fulfilling their Corporate Social Responsibility (CSR) and fostering sustainability for the future (Klimovskik et al., 2023; Madaan et al., 2023; Nguyen Trong Hoai, 2014b). While CSR has been extensively studied and applied in developed countries, it remains a developing subject in Vietnam and warrants further comprehensive research (Nguyen et al., 2019). In recent years, Vietnam has actively integrated into the global economy through actions such as joining the WTO, signing 17 free trade agreements, and the Regional Comprehensive Economic Partnership (RCEP). Consequently, Vietnamese businesses face fierce competition in both the domestic and international markets. To adapt promptly, enhance competitiveness, and ensure long-term development, businesses must prioritize CSR. The relationship between CSR and financial performance is of particular interest, as it
determines the extent of investment in CSR activities by firms (Lin et al., 2015). Numerous studies in developed countries have explored the impact of CSR on financial performance, including works by Barnett and Salomon (2012), Frynas and Yamahaki (2016), and Okafor et al. (2021). In Vietnam, although there is substantial research on this topic, findings by Ho Viet Tien and Ho Thi Van Anh (2018) suggest that the relationship between CSR and firm performance is inconsistent and warrants further in-depth study for a comprehensive understanding in the future. Despite this, many companies in Vietnam have not been proactive in implementing CSR and tend to only adhere to regulations, with some avoiding it altogether. Manufacturing activities can have both positive and negative effects on the environment and the community. Furthermore, the manufacturing sector plays a vital role in the modernization and economic development of the country. With the aim of contributing valuable insights into the impact of CSR on the economic benefits of businesses in the context of Vietnam—a developing country with economic potential, this proposal suggests encouraging businesses to invest in and practice CSR to enhance financial performance in both the manufacturing sector and Vietnamese businesses as a whole.

2 THEORETICAL FRAMEWORK

The Stakeholder Theory, formulated by Freeman in 1984, posits that stakeholders are any groups that can influence or be influenced by a company. Specifically, stakeholders encompass owners, shareholders, employees, suppliers, customers, public interest groups, and the natural environment (Freeman, 1984; Clarkson, 1995). Freeman (1984) contends that stakeholders have distinct interests, positions, and power, contingent on the control of resources they hold. The primary stakeholder groups are those holding indispensable resources to ensure a company's continuous operation, with a high degree of mutual interdependence with the company concerning rights, interests, and demands (Dang Thu Ha, 2017). According to Parmar et al. (2010), the Stakeholder Theory has been applied in the field of production from two perspectives: the impact of production on stakeholders and the influence of stakeholders on production. Hence, Corporate Social Responsibility (CSR) has become a crucial component of modern businesses. Engaging in and investing in CSR can enhance the relationship between a company and its stakeholders, promote a conducive business environment, and contribute to excellent financial performance (Frynas and Yamahaki, 2016). In a similar vein, Hart (1995) argues
that in the future, the strategic capability and competitive advantage of businesses will emanate from their ability to create conditions for sustainable economic activities within the environment, based on the company's natural resource perspective (Klimovskik et al., 2023).

The Stakeholder Theory has explained and justified the need for implementing Corporate Social Responsibility (CSR) with stakeholders. The effectiveness of business operations can be assessed through the Balanced Scorecard (BSC) theory by Kaplan and Norton (1996). This theory considers the effectiveness of operations across four interconnected dimensions: financial performance, customer performance, internal process efficiency, and organizational learning and development effectiveness.

Good financial performance has a positive impact on a company's operations because it is a significant contributor to the company's success (Wiklund and Shepherd, 2005). According to Galant and Cadez (2017) and Nguyen et al. (2019), measures of financial performance fall into two primary categories: those based on accounting values and those based on market values.

1. Short-term accounting-based measures such as ROA (Return on Assets) and ROE (Return on Equity) are used to assess current financial performance as they reflect the company's profit-generating capability in past accounting periods. ROA and ROE are among the most frequently used metrics for evaluating financial performance (Boaventura et al., 2012). McGuire et al. (1988) also point out that accounting measures can provide valuable information to various stakeholders.

2. Long-term market-based measures like Tobin's Q indicate future financial performance and are considered more contemporary because they reflect the assessment of profit-generating potential as reflected in the company's market value. According to McGuire et al. (1988), market-based measures can help mitigate limitations associated with accounting-based metrics.

In summary, the Stakeholder Theory emphasizes the necessity of CSR implementation with stakeholders, while the Balanced Scorecard theory, as it pertains to financial performance, looks at four dimensions of financial performance. The financial performance is a crucial factor for a company's overall success, and it can be assessed using various accounting-based and market-based measures.
Research conducted over several decades has produced diverse findings regarding the impact of Corporate Social Responsibility (CSR) on a company’s financial performance (Da Silva et al., 2023; Soschinski & Junior, 2022). Most of these studies indicate that CSR has a positive influence on financial performance. For example, McGuire et al. (1988) found that companies with higher CSR levels tend to have better financial performance than those with lower CSR levels. Kapoor and Sandhu (2010) and Hou (2019) argue that businesses with higher CSR performance tend to achieve better financial performance because CSR activities enhance community awareness, meet customer needs, and improve stakeholder relationships, thus reducing costs and increasing productivity and financial efficiency. Good financial performance provides resources for business operations, research, and development. In addition, CSR efforts can enhance various other resources of a company, such as its reputation, trustworthiness, employee satisfaction, resulting in positive economic impacts (Lin et al., 2015; Phan et al., 2020; Alexander et al., 2023).

Similarly, Su et al. (2020) point out that for industries that heavily rely on resources and businesses in capital-intensive industries requiring substantial investment in raw materials and payments to business stakeholders, the increase in costs due to CSR implementation may affect investors' assessment of future profitability. Hien (2018) also highlights the advantages of the stakeholder approach, which facilitates policy planning, specific CSR activities, and helps researchers assess CSR activities and analyze their impact on business operations and financial performance. However, Nguyen et al. (2022) suggest that in Vietnam, where CSR is still relatively new and evolving, businesses primarily view it as community and charity activities. Therefore, the relationship between CSR and financial performance is not yet clearly established. Nonetheless, in the long run, CSR is expected to enhance a company's reputation and bring benefits.

In addition to positive or no relationship findings, some studies propose a U-shaped relationship. Barnett and Salomon (2012) and Han et al. (2016) suggest that differences in financial profitability in relation to CSR are linked to differences in company capacity, and the benefits of CSR need to accumulate over the long term.

Looking at them, the majority of previous research both from international sources such as Kapoor and Sandhu (2010), Awaysheh et al. (2020), Hou (2019), Su et al. (2020), and domestic studies such as Ho and Yekini (2014) and Nguyen et al. (2019), consistently indicate a positive relationship between corporate social responsibility (CSR) and
financial performance. Barnett and Salomon’s study (2012) suggests that companies with high CSR performance achieve the highest financial performance, and when companies engage in CSR, they accumulate the capacity to influence stakeholders to enhance their social investments into financial profitability. Similarly, Lin et al.’s research (2015) also demonstrates a positive impact of CSR on financial performance, which becomes more evident as CSR accumulates to a certain level. However, Le et al.’s study (2018) did not find a significant relationship between CSR implementation and financial performance.

Production is one of the critical sectors, playing a leading role in driving economic development, providing employment opportunities, and generating stable income for the labor force in our country. The manufacturing sector is considered a key element in the success of industrialization, modernization, and the prosperity of the nation. Therefore, how does the research model for the impact of Corporate Social Responsibility (CSR) on the financial performance of publicly listed manufacturing companies in the Vietnamese stock market affect this crucial sector? Drawing from stakeholder theory and the findings of previous research as discussed earlier, it can be expected that a company's CSR activities will have a positive impact on its financial performance. Hence, the hypothesis is set as follows:

\[ H1: \text{Corporate Social Responsibility (CSR) of a firm positively influences the financial performance of the company.} \]

In a more detailed examination of this relationship, Han et al.’s study (2016) found a connection between CSR implementation, environmental factors, and financial performance. Initially, it may incur costs, but in the long term, companies are expected to gain long-term profits. Busch and Friede (2018) observed that good CSR activities in both environmental and social aspects correlate with financial benefits for companies. Su et al. (2020) discovered a positive influence of contributions to CSR on environmental factors concerning a company's financial performance. Domestic studies by Ho Thi Van Anh (2018) and Nguyen et al. (2022) also identified that the environmental dimension of CSR has a negative impact on financial performance. The next hypothesis can be formulated as follows:

\[ H2a: \text{Corporate Social Responsibility (CSR) towards the environment has a positive impact on a firm's financial performance.} \]

Additionally, Anh (2018) incorporated the dimension of CSR related to employees into her research to investigate its impact on financial performance but did not
find a significant relationship between the two variables. Phan et al. (2020) identified a positive relationship between CSR practices in the workplace and financial performance. Su et al. (2020); Alexander et al. (2023) stated that a company's investment and expenditure on its employees have a positive significance on the profitability and value of companies in capital-intensive industries. Similarly, Nguyen et al. (2022) also found a positive impact of CSR related to employees on a company's financial performance. Based on these findings, it is anticipated that CSR activities concerning employees will have a positive influence on a company's financial performance. Therefore, the hypothesis can be formulated as follows:

H2b: Corporate Social Responsibility (CSR) towards employees has a positive impact on a firm's financial performance.

Anh's study (2018) examined the influence of the community-related dimension of CSR on financial performance but did not find a significant relationship between them. Research conducted by Chau et al. (2019), Su et al. (2020), and Nguyen et al. (2022) all indicate that contributions and activities directed towards the community contribute to improving a company's financial performance. Based on these results, it is expected that CSR related to the community will have a positive impact on a company's financial performance. Therefore, the hypothesis can be formulated as follows:

H2c: Corporate Social Responsibility (CSR) towards the community has a positive impact on a firm's financial performance.

Customers are a group of individuals who determine the purchase and use of a company's products. McWilliams and Siegel (2001) argue that customers' perception of products with CSR characteristics is influenced by their desire to buy products that are reasonably priced and meet their tastes and preferences. Ho (2018) incorporated the dimension of CSR related to customers into her research and found a positive impact on financial performance. Nguyen et al. (2022) also suggest that implementing CSR related to consumers tends to increase a company's financial performance. Based on these findings, it is expected that CSR related to customers will have a positive impact on a company's financial performance. Therefore, the hypothesis can be formulated as follows:

H2d: Corporate Social Responsibility (CSR) towards customers has a positive impact on a firm's financial performance.

In addition to examining the effects of CSR on stakeholders, studies also assess these effects in relation to control variables, even though they do not reflect the company's
CSR activities. However, they are included in the regression model to enhance the significance of the model. Each company has different scales and financial risk ratios, which can affect financial performance and a company's CSR activities. Therefore, these variables are introduced as control variables: (1) Company size: Company size in this study is represented by the natural logarithm of total assets. Larger companies typically have more resources and advantages to implement CSR compared to smaller companies. Furthermore, larger companies engage in and disclose CSR information to enhance their credibility and public image. Additionally, large companies engage in CSR to address pressures from various stakeholders. Previous research by Nguyen et al. (2019) found a positive impact of company size on CSR activities. Research by Chau et al. (2019) showed that company size is positively related to business production efficiency. Hou's (2019) study discovered a positive correlation between company size and CSR activities but a negative relationship with a company's financial performance. However, research by Ho and Yekini (2014) found that companies of all sizes can engage in CSR, not solely depending on the company's size; (2) Financial leverage: Financial leverage is the ratio of total debt to total assets of the company. Companies with low debt and strong financial positions tend to invest more in CSR activities than companies with high debt levels and financial risks. Previous research by Ho and Yekini (2014) found that companies with low debt and strong financial positions invest more in CSR practices than companies with high debt levels. Hou's (2019) study determined that financial leverage has an inverse relationship with a company's financial performance. Chau et al. (2019) also noted that financial leverage negatively affects both CSR activities and business outcomes because a company with high debt levels represents financial burden, limiting the resources available for CSR activities.

![Research Model (1)](source: Proposed research model)

Figure 1. Research Model (1)
To test the hypothesis regarding the impact of corporate social responsibility on a firm's financial performance, two regression models are employed as follows. Model (1) is utilized to examine the influence of the overall corporate social responsibility index on a firm's financial performance.

\[ \text{ROA}_i = \beta_0 + \beta_1 \text{CSR\_Total}_i + \beta_2 \text{Size}_i + \beta_3 \text{Lev}_i + \epsilon_i \]  (1)

Model (2) is employed to analyze the impact of individual dimensions of corporate social responsibility on a firm's financial performance.

\[ \text{ROA}_i = \beta_0 + \beta_1 \text{CSR\_Environment}_i + \beta_2 \text{CSR\_Employee}_i + \beta_3 \text{CSR\_Community}_i + \beta_4 \text{CSR\_Customer}_i + \beta_5 \text{Size}_i + \beta_6 \text{Lev}_i + \epsilon_i \]  (2)

In which:

- The dependent variable of the model is "ROA\_i," where "ROA\_i" represents the Return on Assets (ROA) of firm i, indicating profitability on the firm's equity.
- The independent variables of the model consist of:
  - "CSR\_Total\_i": CSR total score of firm i.
  - "CSR\_Environment\_i": CSR environmental score of firm i.
  - "CSR\_Employee\_i": CSR employee score of firm i.
  - "CSR\_Community\_i": CSR community score of firm i.
  - "CSR\_Customer\_i": CSR customer score of firm i.
  - "Size\_i": Size of firm i, measured by the natural logarithm of total assets.
  - "Lev\_i": Financial leverage of firm i, measured by the ratio of total liabilities to total assets.
- "\beta_0" is the intercept coefficient.
- "\beta_1," "\beta_2," "\beta_3," "\beta_4," "\beta_5," "\beta_6" are regression parameters, measuring the magnitude and direction of the independent variables' impact on the dependent variable.
- "\epsilon_i" represents the error term.
3 METHODOLOGY

Sample size determination: Determining the sample size is essential to ensure that the information from the sample can be extrapolated to the population without the need to survey the entire population, thereby maintaining the characteristics of the sample and the data's representativeness for the entire population (Vo & Huynh, 2015).

The study employs the multivariate regression analysis method to examine the impact of corporate social responsibility (CSR) on financial performance. According to Nguyen Dinh Tho (2011), to achieve good results in regression analysis, the sample size should satisfy the formula: \( n \geq 8m + 50 \);

Where: \( n \) is the minimum required sample size, and \( m \) is the number of independent variables in the model. The theoretical basis suggests that the number of independent variables in the model is 7, so the minimum required sample size for the study should be \( n \geq 106 \). The total number of firms investigated in the sample is 126 firms, which ensures good representativeness of the study's data.

Data Collection Method: The study collected data from the annual reports, sustainable development reports, and audited financial reports for the year 2021 of publicly listed manufacturing companies on the HOSE stock exchange. The list of companies was selected from the list of manufacturing companies listed on the HOSE stock exchange, which was obtained from the website http://finance.vietstock.vn/. The annual reports, sustainable development reports, and audited financial reports were also downloaded from the Vietstock website and the official websites of the respective companies. The study applied purposive sampling to access these companies. According to the regulations for information disclosure by the Vietnam Stock Exchange, the annual reports for the previous year are typically published by companies from April to June of the following year. Therefore, to ensure the collection of all necessary report information, this study focused on analyzing the reports for the year 2021. Vietstock used the NAICS industry classification system to categorize economic sectors for the convenience of organizing and managing information and providing reports on industries and listed companies. This system shares many similarities with the Economic Sector Classification of Vietnam 2018 issued by the Prime Minister, as both were developed based on United Nations documentation on international standard industry classification. Therefore, collecting data through this website ensures comprehensive and contextually relevant
statistics for the country. The complete list includes 126 companies after eliminating inactive ones for the year 2021. Companies had to meet the following criteria:

- The company's financial year ends on December 31 each year without any changes during the study period.
- The business operations remain continuous throughout the research duration.
- All documents are publicly disclosed on the electronic websites or information portals listed by the Hochiminh Stock Exchange.

Content Analysis Method: Content analysis is one of the commonly used approaches for studying CSR. It is a method employed to investigate the impact of CSR and CSR reporting on financial performance, as demonstrated by various authors, both domestically and internationally, such as Abbott and Mosen (1979), Kapoor and Sandhu (2010), Ho and Yekini (2014), Ho (2018), and Nguyen et al. (2022). Content analysis is based on the examination of information published in a company's annual reports.

The annual report is considered an authoritative document representing the company. It provides information related to the company's CSR activities in various aspects, including the environment, community, employee policies, and customer care. Nowadays, publicly listed companies diligently adhere to the periodic information disclosure regulations of the Hochiminh Stock Exchange, making it more accessible to obtain annual reports of listed companies.

Abbott and Monsen (1979) recognized that although there are some limitations, the method of measuring CSR involvement through the analysis of information self-disclosed by companies in their annual reports offers advantages. It is a suitable approach for assessing a company's CSR level and identifying the impact of CSR participation on a company's profitability. This aspect serves as the driving force behind the application of the content analysis method in this research.

CSR: The study is based on inheriting a questionnaire of corporate social responsibility (CSR) criteria from Ho (2018) and employs the non-weighted measurement method from Kapoor and Sandhu (2010). The CSR criteria questionnaire, initially formulated by Ho (2018) for assessing various dimensions of corporate social responsibility, has been combined with the "GRI-4 Guidelines" and criteria from the research conducted by Amran and Usman (2015). This CSR criteria questionnaire was validated through a survey of annual reports from listed companies on the Hochiminh
Stock Exchange. As a result, this questionnaire can evaluate criteria related to investment activities and the implementation of CSR in the following areas: the environment (using 8 criteria), employees (using 6 criteria), the community (using 5 criteria), and customers (using 4 criteria).

Subsequently, the author scores each aspect of CSR by examining annual reports and cross-referencing them with the criteria specified for each dimension of social responsibility as defined in the questionnaire. The scoring process is binary, similar to the methods used by Abbott and Monsen (1979), Kapoor and Sandhu (2010), Nguyen et al. (2022), where a criterion mentioned in the report receives a value of 1, and conversely, a criterion not mentioned in the report is assigned a value of 0.

This scoring system allows the author to aggregate both the total CSR score and the individual scores for each dimension of the company's CSR efforts. The total CSR score for the company (CSR_total) is calculated by summing the scores for all questions and dividing by the total number of questions in the questionnaire. This means that all criteria are considered equally important.

The CSR scores for each dimension are the average scores of all component questions within that dimension.

Financial Performance: There are various methods to measure a company's financial performance. However, most previous studies have commonly used indicators such as Return on Assets (ROA) and Return on Equity (ROE) to gauge financial performance, as these indicators are easy to calculate and possess high universality. This study utilizes ROA as a representation of a company's financial performance because it reflects the efficiency of a company's asset utilization. ROA takes into account both equity and debt capital and is widely recognized as a measure of operational efficiency across various strategic areas.

Many studies, both within and outside the country, have adopted ROA as a financial performance indicator, including McGuire et al. (1988), Kapoor and Sandhu (2010), Barnett and Salomon (2012), Ho and Yekini (2014), Lin et al. (2015), Phan et al. (2020), Okafor et al. (2021), and Nguyen et al. (2022). ROA indicates a company's ability to generate profit from its assets, showing how much profit a dollar invested in assets can generate. Profitability ratios reveal the relationship between actual profit and production costs, demonstrating the management's competence in utilizing the company's available
resources. Therefore, ROA can reflect the internal decision-making processes and managerial effectiveness of the company.

In the context of the young and developing Vietnamese market, where smaller-scale businesses can be susceptible to manipulation, accounting-based performance indicators provide stability and a better reflection of the company's performance. A strong ROA is characterized by sustained growth over time, indicating that the company efficiently utilizes its assets and knows how to reinvest for increased profitability. Consequently, ROA is a suitable metric to represent the financial performance of Vietnamese companies.

Pearson Correlation Coefficient (r): According to Hoang Trong and Chu Nguyen Mong Ngoc (2005), the Pearson correlation coefficient is used to measure the strength of the linear relationship between two quantitative variables.

Conducting a Pearson correlation test indicates a strong linear relationship between two variables, which leads to analyzing their relationship through regression models. Simultaneously, analyzing the correlation coefficient serves as the basis for detecting multicollinearity in the research model. The study performs multiple linear regression models with the following equations:

\[
\text{ROA}_i = \beta_0 + \beta_1 \text{CSR_total}_i + \beta_2 \text{Size}_i + \beta_3 \text{Lev}_i + \epsilon_i \quad (1)
\]

\[
\text{ROA}_i = \beta_0 + \beta_1 \text{CSR_R_env}_i + \beta_2 \text{CSR_R_emp}_i + \beta_3 \text{CSR_R_com}_i + \beta_4 \text{CSR_R_cus}_i + \beta_5 \text{Size}_i + \beta_6 \text{Lev}_i + \epsilon_i \quad (2)
\]

Pooled OLS Model: This model does not control for the specific characteristics of each selected company. In this model, assumptions about autocorrelation, heteroscedasticity, and differences in space and time for each observed variable are not considered. This is the simplest case where we disregard the time and space dimensions of panel data and estimate the usual Pooled OLS model:

\[
Y_{it} = \beta_0 + \beta_1 X_{1it} + ... + \beta K X_{Kit} + u_{it} \quad (2.5)
\]

In which:
• Yit: The dependent variable for observation i at time t.
• X1it, ..., XKit: Independent variables for observation i at time t.

The raw estimate is the OLS estimation based on the dataset obtained from the subjects over time. Therefore, it assumes that coefficients across time and between cross-sectional units are the same (Gujarati, 2011). Consequently, the likelihood of autocorrelation is very high. Assuming constant coefficients and uniform coefficient estimates for all observed subjects are challenging assumptions to meet. Therefore, this method may affect the true relationship between variables. Heteroscedasticity is a phenomenon where the variances of the estimation errors are not equal. The classical regression model has a crucial assumption that the error terms (ui) in the overall regression equation have constant variances. Panel data, which is collected at the same point in time, typically exhibits varying error term variances. While varying error term variances do not alter the bias and consistency of OLS estimates, these estimates are no longer the most efficient. The Breusch-Pagan test and the White test can determine whether there is heteroscedasticity in the model. Under the null hypothesis H0 that the error term variances do not vary, if the p-value is \( \geq 0.1 \), we accept the null hypothesis H0 (Gujarati, 2011).

4 RESULTS AND DISCUSSION

In general, the level of CSR implementation and disclosure of CSR activities by businesses is still relatively low. Most companies incorporate their CSR reporting within their annual reports. Although a significant number of companies engage in CSR and disclose information, the execution and quantity of information are inconsistent across various dimensions. The average CSR score for the sampled companies is 0.674. Out of the 126 companies included in the study, only four companies achieved the highest scores: PetroVietnam Fertilizer and Chemicals Corporation (stock code: DCM), Dien Quang Lamp Joint Stock Company (stock code: DQC), Bien Hoa Sugar Joint Stock Company (stock code: SBT), and Vinamilk Joint Stock Company (stock code: VNM).

Furthermore, 45 companies within the study sample, accounting for 35.7%, incorporate sustainability reports into their annual reports. This figure, although significant, is still relatively modest. This could be attributed to the relatively new nature of CSR in Vietnam, with businesses just beginning to embrace it. The companies in the manufacturing sector often have a more pronounced impact on the environment and
society due to their high demand for raw materials and labor. Therefore, companies in these sectors tend to engage in CSR and community activities more frequently compared to those in other industries.

Table 1. Descriptive Statistics of Corporate Social Responsibility (CSR) Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CSR total of the company</td>
<td>126</td>
<td>0.674</td>
<td>0.151</td>
</tr>
<tr>
<td>2 CSR with the environment</td>
<td>126</td>
<td>0.742</td>
<td>0.180</td>
</tr>
<tr>
<td>3 CSR with employees</td>
<td>126</td>
<td>0.769</td>
<td>0.152</td>
</tr>
<tr>
<td>4 CSR with the community</td>
<td>126</td>
<td>0.646</td>
<td>0.304</td>
</tr>
<tr>
<td>5 CSR with customers</td>
<td>126</td>
<td>0.429</td>
<td>0.229</td>
</tr>
</tbody>
</table>

Source: Data analysis results, 2023.

Based on the scores for each dimension, the results indicate that publicly listed manufacturing companies disclose CSR activities most frequently in the areas related to the environment and labor. Following these are activities related to the community and customers. This can be understood as manufacturing companies often have a significant impact on the environment, necessitating transparent disclosure of environmental protection activities to demonstrate environmental consciousness and compliance with government regulations regarding environmental protection.

Additionally, the manufacturing sector is a significant employer, and having comprehensive policies related to human resources can attract and provide job security to employees in the long term. However, information concerning the community and customers is less frequently prioritized for disclosure by companies in 2021.

Table 2 presents the results of a robust regression model on the impact of the total CSR score on a firm's financial performance.

Table 2: Robust Regression Estimates of Model (1)

| Independent Variables | B     | Standard Errors | t     | P > |t| |
|-----------------------|-------|-----------------|-------|-----|---|
| Constants             | -0.199* | 0.117          | -1.71 | 0.090 |
| CSR_total             | 0.112*** | 0.030          | 3.72  | 0.000 |
| Size                  | 0.008*  | 0.004          | 1.75  | 0.083 |
| Lev                   | -0.085** | 0.032         | -2.61 | 0.010 |
| F                     | 11.87   |                |       |     |
| Prob>F                | 0.000   |                |       |     |
| R²                    | 0.2350  |                |       |     |

Notes: ***, **, *: Indicates statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Data analysis results, 2023.
The coefficient of determination $R^2$ in the regression model is 0.2350, indicating that approximately 23.5% of the variation in the financial performance (ROA) of manufacturing companies can be explained by the linear relationship between the dependent variable and the independent variables, as well as the control variables in the model.

The result of the analysis of variance shows a Prob>F value of 0.000, which is less than 0.01, indicating that the regression model is appropriate for the collected dataset, and the financial performance, as the dependent variable, has a relationship with at least one of the independent variables in the model.

Looking at the table above, it becomes evident that the independent variable CSR_total and the control variables, such as company size and financial leverage, have an impact on the financial performance of the company. Specifically:

1. The CSR_total variable of the company has a positive effect on ROA and is significant at the 1% level (p-value = 0.000). This means that an increase of 1 unit in the CSR_total score of the company, while holding other factors constant, leads to an 11.2% increase in the return on assets (ROA).
2. The control variable Size (company asset size) has a positive effect on ROA and is significant at the 10% level (p-value = 0.083). This implies that a 1% increase in the company's asset size, while other factors remain constant, results in a 0.8% increase in ROA.
3. The control variable Lev (financial leverage) has a negative effect on ROA and is significant at the 5% level (p-value = 0.010). This suggests that a 1% increase in financial leverage leads to an 8.5% decrease in ROA.

Based on the results of the analysis, we can conclude that we accept the hypothesis H1: Corporate Social Responsibility (CSR) positively affects the financial performance of the company.

Continuing from the results of research model 1, the following presents the findings of research model 2, which will analyze the impact of each aspect of corporate social responsibility (CSR) on financial performance. Table 3 provides the results of the multivariate regression model estimating the effects of CSR on the environment, CSR on employees, CSR on the community, and CSR on customers concerning the financial performance of the company.
Table 3: Robust Regression Results for Model (2)

| Independent Variables | B   | Standard Errors | t     | P > |t| |
|------------------------|-----|-----------------|-------|-----|---|
| Constants              | -0.209 | 0.131         | -1.59 | 0.115 |
| CSR_env                | 0.0657*** | 0.025          | 2.65  | 0.009 |
| CSR_emp                | 0.0129 | 0.035        | 0.37  | 0.710 |
| CSR_com                | 0.022 | 0.017         | 1.26  | 0.209 |
| CSR_cus                | 0.007 | 0.030         | 0.25  | 0.807 |
| Size                   | 0.008* | 0.005         | 1.67  | 0.097 |
| Lev                    | -0.087** | 0.035      | -2.52 | 0.013 |
| F                      | 6.04  |                |       |      |
| Prob>F                 | 0.000 |                |       |      |
| R²                     | 0.2414 |                |       |      |
| Observations           | 126   |                |       |      |

Note: ***, **, *: Indicates statistical significance at the 1%, 5%, and 10% levels, respectively.
Source: Data analysis results, 2023.

The coefficient of determination $R^2$ in the regression model is 0.2414, indicating that approximately 24.14% of the variation in the ROA of manufacturing companies can be explained by the linear relationship between the dependent and independent variables in the model. The analysis of variance results in an $F$-test value of 6.07 with a significance level (Sig.) of 0.000, suggesting that the regression model is suitable for the collected dataset, and the financial performance dependent variable has a relationship with at least one of the independent variables in the model.

From the above results, it is evident that only the variable "CSR with the environment" (CSR_env) and the control variables "Company Size" and "Financial Leverage" have an impact on the financial performance dependent variable (ROA). In contrast, the variables "CSR with employees" (CSR_emp), "CSR with the community" (CSR_com), and "CSR with customers" (CSR_cus) do not have statistically significant effects on ROA. Specifically:

The "CSR with the environment" variable (CSR_env) has a positive impact on ROA and is statistically significant at the 1% level (p-value = 0.009). This result signifies that an increase of 1 unit in a company's CSR score related to the environment, while holding other factors constant, leads to a 6.57% increase in the return on assets (ROA).

The variables "CSR with employees" (CSR_emp), "CSR with the community" (CSR_com), and "CSR with customers" (CSR_cus) are not statistically significant at the 10% level in this case.

The control variable "Company Size" (Size) has a positive impact on ROA and is statistically significant at the 10% level (p-value = 0.097). This result indicates that a 1% increase in the company's size will lead to an 0.8% increase in the return on assets (ROA), while holding other factors constant.
The control variable "Financial Leverage" (Lev) has a negative impact on ROA and is statistically significant at the 5% level (p-value = 0.013). This result implies that a 1% increase in financial leverage will result in an 8.7% decrease in the return on assets (ROA).

Based on the above analysis, we can accept the hypothesis: H2a: CSR with the environment has a positive impact on the financial performance of the company.

Additionally, the study rejects the following hypotheses: H2b: CSR with employees has a positive impact on the financial performance of the company. H2c: CSR with the community has a positive impact on the financial performance of the company. H2d: CSR with customers has a positive impact on the financial performance of the company.

According to the regression model results, the variables "Total CSR of the company" (CSR_total) and "CSR with the environment of the company" (CSR_env) have an impact on the return on assets (ROA) in the model. With a coefficient of $\beta=0.112 > 0$, the "Total CSR of the company" positively affects the financial performance of listed manufacturing companies on the Ho Chi Minh City Stock Exchange. This result supports the hypothesis H1, suggesting a positive relationship between a company's CSR efforts and financial performance. It can be explained that when companies engage in CSR activities, they can improve their relationships with stakeholders, thereby creating sustainable value for the company. Companies in the manufacturing sector often use many resources, raw materials, and labor to produce goods. Therefore, these companies can both create value for stakeholders and have an impact on the environment and the community. From the statistical data, it is clear that companies have recognized the importance of social responsibility and actively participate in these activities. The better a company performs CSR, the more transparent they are in their annual reports and sustainability reports. Non-financial information about CSR also plays a crucial role, demonstrating a company's commitment and creating value for stakeholders beyond the company. Companies investing in CSR and transparent CSR information support both social welfare and sustainability, as well as demonstrate a company's pursuit of responsibilities and sustainable values beneficial to the environment and stakeholders. Based on the Resource-Based View (RBV) perspective, CSR efforts can develop a company's resources such as high-quality human resources, brand, trust, and more. This helps companies build credibility, differentiation, attract investors, customers, and labor.
force, ultimately contributing to increased revenue, competitiveness, and profitability. This result aligns with findings from Kapoor and Sandhu (2010), Ho and Yekini (2014), and Ho Thi Van Anh (2018).

Second, the variable "CSR with the environment of the company" (CSR_env) is the most influential variable on the return on assets (ROA) in model (2). With a coefficient of $\beta = 0.0657 > 0$, the variable "CSR with the environment" positively affects the financial performance of listed manufacturing companies on the Ho Chi Minh City Stock Exchange. This result supports hypothesis H2a, indicating a positive relationship between a company's CSR towards the environment and its financial performance. Hypothesis H2a is found to be consistent with the theory of stakeholders. It can be explained that companies are influenced by the environment during their operations, including factors such as weather, natural disasters, and resources. At the same time, they also have negative impacts on the environment. Vietnam is one of the countries affected by climate change, posing threats to social welfare and sustainable development. Therefore, when companies perform well in environmental responsibility and fully disclose this in their annual reports, it positively impacts financial performance. This result aligns with the findings of Han et al. (2016), Busch and Friede (2018), and Ho Thi Van Anh (2018).

Third, the variable "CSR with employees" (CSR_emp) is a variable that does not impact the financial performance of companies in model (2). This result does not provide support for hypothesis H2b. Based on the statistical data, information about responsibility towards employees is one of the information groups that are widely disclosed in annual reports and sustainable development reports, with a rate of 99.21%. Listed companies have recognized the importance of employee responsibility to engage in positive activities and fully disclose labor-related policies. However, this information is almost mandatory for disclosure, so companies usually refer to these criteria quite extensively. In addition, the number of companies in the research sample is limited compared to the total number of listed companies. Implementation of salary policies, bonuses, insurance contributions, and labor safety is also a requirement under the law. Therefore, the evaluation criteria for social responsibility towards employees show less variation compared to other criteria. Due to the influence of the pandemic in 2021, internal information dissemination was restricted in companies that had not yet established an effective internal communication system. Some welfare activities were also restricted to cut costs and support businesses
during difficult times. These factors might explain why social responsibility towards employees did not have an impact on the return on assets (ROA) of the companies.

Fourth, the variable "CSR with the community" (CSR_com) is a variable that does not impact the financial performance of companies in model (2). This result does not provide support for hypothesis H2c of the research. From the descriptive statistical data, this is an aspect that many companies also disclose, and the disclosure rate is quite high. This indicates that companies and stakeholders are interested in this aspect in annual reports. The regression results for CSR with the community and ROA show that even though companies contribute and engage in community activities, it does not affect the profitability or financial performance of the company. This may be because companies often demonstrate their community responsibility through activities that support disadvantaged and vulnerable individuals in society, and contribute to charitable, humanitarian, and philanthropic programs. The funding for these activities is usually derived from the company's profits, so depending on the company's financial situation, they may conduct these activities to the extent they can afford each year. In addition, some companies with environmental-related activities tend to prioritize environmental protection responsibilities, and some companies face production difficulties, increased costs, and reduced profits, so they may temporarily reduce their community activities. Therefore, the community responsibility aspect does not show a direct link to profitability.

The final factor, "CSR with customers" (CSR_cus), is a variable that does not influence the return on assets (ROA) in model (2). This result does not provide support for hypothesis H2d in the model. The reason for this could be due to the limitations imposed by the pandemic situation in 2021, which restricted the ability to carry out customer care activities and engage with customers and partners. Therefore, companies may not have fully implemented information about new products, offers, and support to enhance customer and partner satisfaction. In addition, the impact of the pandemic led to changes in consumer spending habits and trends, with a focus on essential products and healthcare. As a result, activities reflecting responsibility towards consumers in some industries may have attracted less consumer interest and product usage. According to descriptive statistics, this is an aspect that businesses have not prioritized in their annual reports. Some companies provide limited information and labeling on products, with only 17.5% providing complete product information and labeling, and only 28.2% focusing on
customer satisfaction. These factors may have contributed to the unclear relationship between consumer responsibility and profitability during the study period. This research outcome contradicts the findings of Ho (2018) and Nguyen et al. (2022). Nevertheless, companies should continue to maintain consumer responsibility activities because these activities influence purchasing intentions and motivations.

Table 4: Research Hypotheses Conclusion

<table>
<thead>
<tr>
<th>No</th>
<th>Hypothesis</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H1: There exists a positive relationship between corporate social responsibility (CSR) and a company's financial performance.</td>
<td>Accepted</td>
</tr>
<tr>
<td>2</td>
<td>H2a: There exists a positive relationship between CSR regarding the environment and a company's financial performance.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Data analysis results, 2023.

5 CONCLUSION

The main purpose of this research is to investigate the impact of corporate social responsibility (CSR) on the financial performance of companies in Vietnam. The study provides an overview of the theoretical foundation of CSR and its impact on the financial performance of publicly-listed manufacturing companies on the HOSE stock exchange. From this, it is evident that practicing CSR contributes to sustainable development, and this sustainable development is reflected through CSR. To empirically verify this, the research collected secondary data from the annual reports and sustainability reports of 126 companies in 2021. CSR is measured using a content analysis method and a scale proposed in the research by Ho (2018), incorporating elements from the "GRI-4 Guidelines" and the study by Amran and Usman (2015). The independent variables in the model are derived from the scale, including the total CSR index, CSR with the environment, CSR with employees, CSR with the community, and CSR with customers. The dependent variable, financial performance, is measured by the return on assets (ROA).

Using the robust standard errors regression method, the results show that the total CSR index and CSR with the environment have a causal relationship with a company's profitability. The total CSR index has a positive relationship with financial performance at a significance level of 99%. This indicates that CSR activities and information disclosure have a positive impact on profitability and contribute to the sustainable development of the company. When analyzing the impact of each aspect of CSR on a company's financial performance, the regression results show that only the CSR index
related to the environment has a positive impact on a company's ROA. On the other hand, aspects of CSR related to employees, the community, and customers do not significantly affect financial performance. Additionally, the results also indicate that firm-specific factors (company size, financial leverage) have a significant influence on a company's profitability.

In terms of research, these findings contribute additional empirical evidence to the positive relationship between corporate social responsibility (CSR) and financial performance of companies in Vietnam. These results align with previous research findings. The results confirm the positive impact of the overall CSR index, thus providing support for stakeholder theory. In other words, when businesses prioritize social responsibility, especially concerning the environment and various stakeholders such as employees, customers, and the community, it contributes to boosting a company's profitability, fostering harmonious relationships with stakeholders, building a positive corporate image, and creating significant value for society. These findings hold practical significance by encouraging companies, especially those with an emphasis on environmental responsibility, to work towards sustainable development in order to achieve higher profits and provide information to regulatory authorities for monitoring and managing CSR activities and disclosures of companies.
REFERENCES


https://itvc-global.com/nhan-thuc-chung-iso-14001-s22.htm


https://www.hsx.vn/Modules/CMS/Web/ViewArticle?id=46a6dd59-2cd5-4ef7-b12a-4c30778140c4&fid=c5b6b7cf3a9b4307ab689bcf2e8b8990