When CSR Matters: The Moderating Effect of Industrial Growth Rate on the Relationship between CSR and Firm Performance

Yu Jin Chang and Jae Wook Yoo

Abstract: Corporate social responsibility (CSR) has become a management strategy that simultaneously pursues societal and company sustainable development. Additionally, CSR is becoming a key strategy to secure competitiveness and sustainability by improving a company’s reputation and creating new business opportunities. Thus, expectations and demands for companies’ social impacts and sustainability from various stakeholders, such as shareholders, consumers, employees, and local communities, have begun to rise. This study focused on the distinctive factor of rapid economic growth, which characterizes Korean development, and analyzed the relationship between CSR and firm performance according to the industries’ growth rates. Regression analysis was conducted through multi-level analysis using data from a sample of 102 companies that prepared sustainability reports or ESG reports in Korea; the research results are as follows. First, CSR activities have a positive impact on firm performance. Second, when CSR activities increase, the firm performance increases faster for companies in the high-growth industry group than those in the low-growth industry group. Furthermore, we conducted additional analyses to examine the moderating effect of industry growth and found that companies in the high-growth industry group had higher overall CSR levels than those in the low-growth industry group. This study’s results provide meaningful implications for understanding how CSR affects a company’s economic performance and acts as a way to strike a balance between industrial development and fulfilling social responsibility.

Keywords: CSR; social responsibility; firm performance; economic growth; industry growth

1. Introduction

The coronavirus disease 2019 (COVID-19) pandemic, which originated in Wuhan, China in December 2019, significantly altered human society [1]. As reckless environmental destruction and global warming were pointed out as causes of the outbreak and spread of the virus, people began seriously considering the environment’s importance. It also served as an opportunity to reconsider various social problems facing global society, such as the occurrence of vaccine nationalism [2], in which a small number of countries monopolized vaccines to combat and prevent the spread of COVID-19. A crisis changes people and their thinking. Through the pandemic, humanity has realized that our lives are filled with happiness. However, we have also realized that the current economic structure is no longer sustainable, considering that social inequality has risen and polarization has deepened.

Even before COVID-19, discussions on corporate responsibility for environmental and social problems increased steadily [3]. At the Business Round Table (BRT) held in August 2019, CEOs of 183 companies representing the United States gathered to announce the "Statement on the Purpose of a Corporation" and declare stakeholder capitalism as the new paradigm for corporate management. They declared that the shareholder capitalism era had ended and argued that a sound industrial ecosystem should be established through...
interactions with various stakeholders [4]. Furthermore, the “World Economic Forum (WEF)”, led by Cloud Schwab, made the 2020 Davos Declaration titled “The Universal Purpose of Companies in the Era of the Fourth Industrial Revolution”. In that declaration, the WEF argued that a company’s purpose is to “create continuous value to be shared with all stakeholders and to create this value, the company must serve not only shareholders but also stakeholders, including employees, customers, suppliers, communities, and society as a whole” [5]. There were expectations that the BRT Declaration and the Davos Declaration would give momentum to changing corporate management’s purpose and method. The remaining issue was how to derive and realize a corporate social responsibility (CSR) strategy that reflects all stakeholders’ interests in a balanced way by spreading consensus and changing the system.

Over the past few decades, Korean society has achieved unprecedented rapid and significant growth through industrialization, the development of science and technology, and globalization [6]. This has not only greatly increased the country’s economic assets but also provided opportunities for business growth. However, this rapid economic growth has caused problems, such as environmental pollution, the depletion of natural resources, biodiversity destruction, human rights issues, income inequality, and polarization, raising social conflict and sustainability issues [7]. In particular, the economic structure centered on large Korean corporations, in which a small number of large corporations have played a leading role in economic development, has deepened the inequality between large corporations and SMEs, causing problems of social fairness and coexistence [8].

Accordingly, the government, and non-governmental organizations (NGOs), are calling for a shift to a new management paradigm for a sustainable society and business development by reforming the economic structure centered on large corporations and establishing cooperative relationships for mutual growth. Thus, CSR is no longer a company’s strategy to evade regulations and minimize losses but a management strategy to pursue the sustainable development of both the company and society. CSR is becoming key to securing competitiveness and sustainability by improving a company’s reputation and creating new business opportunities [9].

However, various conflicting opinions have been presented as to whether CSR activities help improve economic and social value [10–12]. There are many studies that have generally suggested a positive effect of CSR on growth [13–16]; but, most of these studies focus on companies in developed countries. In many cases, studies claiming that the impact of CSR on growth is insignificant or negative have been focused on companies in developing countries [17–20]. In the case of developing countries, it may be because they have focused on economic development rather than corporate responsibility. However, companies in developing countries may have different impacts of CSR activities on firm performance depending on the characteristics of each industry; so, it will be necessary to examine the relationship between CSR and firm performance considering industry characteristics. Therefore, this study focuses on Korean companies that have shifted from developing countries to developed countries and provides implications to help overcome the limitations of existing studies that have presented conflicting results by empirically analyzing the differences between CSR and firm performance, according to differences in growth rates by industry. We hope that this study will serve as a source of meaningful basic data for sustainable economic development, social value creation, and corporate growth.

2. Literature Review and Hypotheses Development

2.1. CSR and Firm Performance

The notion of CSR has been discussed since the 1950s. Carroll’s [21] “pyramid of corporate social responsibility” is widely regarded as modern CSR’s most common form. CSR refers to the concept that companies have economic goals as well as social and environmental responsibilities [22]. Additionally, it aims to promote company actions that enhance social benefits and fulfill responsibilities for sustainable development. Until the early 20th century, the assumption that CSR negatively impacted a company’s financial
performance and that ethical investments had the potential to reduce financial returns was widely accepted [21]. However, in the 1970s, ethical immorality in maintaining South Africa’s Apartheid regime became a famous example of companies’ contributions and self-improvements [23]. Since then, many studies have presented the claim that CSR improves firm performance. However, the literature still does not show consistent results because of conflicting claims that CSR activities increase costs, reducing firm performance, or, conversely, that they increase firm performance.

The studies that claim CSR activities negatively affect firm performance are as follows. Aligned with the theoretical basis of the agency theory [24], this argument asserted that when managers spend excessively on CSR while pursuing private benefits or career management, the cost increases and, consequently, firm performance decreases. Ghoul et al. [25] conducted an empirical analysis of the impact that CSR activities can have on the cost of equity capital for US companies. It was found that companies with high CSR scores exhibited lower costs of equity capital. Specifically, the cost of equity capital decreases more significantly than in other industries when companies in tobacco or nuclear fuel industries engage in CSR. Goss and Roberts [26] studied the effect of CSR on bank loan interest rates for US companies. When a company with a bad financial situation engages in CSR activities, the company’s loan interest rate rises and financial institutions, such as banks, have a negative perception of discretionary CSR. Barnea and Rubin [27] analyzed the relevance of CSR to firm performance. They based their theoretical basis on agent theory and argued based on the empirical analysis that if managers overspend on CSR to pursue self-interest or manage careers, they will increase agent costs, resulting in a decrease in firm performance. Surroca and Tribo [17] analyzed 22 different countries and found a negative relationship between social performance and return on assets using Tobin’s Q. Brammer et al. [28] analyzed the relationship between CSR performance and financial performance for UK firms. Financial performance was measured as stock price return and CSR performance was measured using three comprehensive performance indicators: environment, employment, and community service. The results showed a negative relationship between CSR performance and stock return.

However, the positive stance on CSR argues that it is difficult for a company to achieve sustainable growth unless conflicts of interest among various stakeholders are alleviated. The studies following this viewpoint are as follows. Boubaker et al. [13] analyzed how social responsibility affects the level of financial crisis risk using a sample of 1201 listed US companies from 1991 to 2012. Companies with a higher level of CSR can achieve a more attractive business environment and better financial stability by lowering the level of financial risk. Hou [29] investigated the relationship between CSR and corporate financial performance (CFP) in Taiwan and found that companies fulfilling their social responsibility achieved better financial results than those not pursuing CSR initiatives. Gregory et al. [14] studied the relationship between firm performance according to CSR level and corporate profits. Firm performance was found to be high in companies with high levels of social responsibility and profits. This implies that socially responsible activities increase firm performance and the sustainability of profits; so, investment in socially responsible activities ultimately increases shareholders’ long-term profits. Scholtens [15] verified the relationship between CSR and stock return using the distributed-lag model. The results showed that the return on stock price has a significant correlation with social responsibility information. Tsoutsoura [16] studied the relationship of CSR with financial performance using the KLD and Domini Social Index 400, a representative SRI index in the United States, as a proxy variable for social responsibility information. A significant positive relationship between CSR and financial performance, return on equity (ROE), return on assets (ROA), and return on sales (ROS) was identified. Porter and Kramer [30] argued that the social cost used to realize CSR has a positive effect on a company’s image improvement and shows that the company’s competitiveness is improved.

Korea has achieved rapid economic growth and, in recent years, there has been a significant increase in the awareness of social responsibility and sustainability in Korean
With growing interest and demands regarding environmental issues, social inequality, and human rights, companies have also recognized their responsibility and role in addressing these issues. In this atmosphere, companies voluntarily pursue CSR and emphasize social value creation. Korean consumers tend to refrain from purchasing products from companies they perceive as not fulfilling their social responsibilities. Unethical practices by companies can lead to a loss of consumer trust, cause damage to brand image and reputation, and result in decreased sales and losses for the company. In the long term, it can also affect a firm’s performance and sustainability. Companies are sensitive to CSR and strive to fulfill their social responsibilities while considering their performance and sustainability. Thus, we present the following hypothesis based on the claim that CSR creates a positive impact on firm performance:

Hypothesis 1: CSR will have a positive (+) impact on firm performance.

2.2. CSR According to Industry Growth

We track why companies are more likely to benefit from CSR in high-growth industries than low-growth ones.

The first factor is the paradigm shift of companies. As social responsibility has emerged as one of the important corporate paradigms worldwide, companies are conducting management activities that simultaneously pursue the goals of social value and economic feasibility for sustainable development. Previously, many companies considered growth as the top priority in the industrialization process and often sacrificed social values. This resulted in negative social impacts, such as environmental pollution, the deterioration of working conditions, and human rights violations [32]. However, as the industry grows, the perception of accompanying social issues has changed significantly and the trend of requiring companies to undertake social responsibility activities has become stronger [33]. This results from increased expectations and demands for corporate social impact and sustainability from stakeholders, including shareholders, consumers, employees, and local communities. As the industry develops, consumer demands for green and social products, ethical management awareness, and business opportunities are increasing; companies can improve corporate value through social activities, such as process development for eco-friendly products and social contribution promotion. CSR was passive in countries that achieved rapid quantitative growth in the past. As a representative example, China became the world’s largest producer and consumer in 2009 through a rapid growth rate of nearly 10% on average over the past 30 years. However, during this period, China was exposed to serious CO₂ emissions and environmental pollution [34]. To solve these problems, the Chinese government enacted the “New Enterprise Law” from the 2nd Hu Jintao administration in 2006, strengthening the obligations for sustainable growth and social responsibility of Chinese companies [35]. In 2013, during the first term of the Xi Jinping administration, the “New Environment Law” was institutionalized [36]. In addition, it was emphasized that companies should fulfill their social responsibility obligations by focusing on eco-friendliness in both the production and main development direction of the production cluster.

Another key reason for expecting higher returns on CSR performance in high-growth industries is organizational capabilities (e.g., creation) [37]. Low-growth industries are more likely to be populated by mature companies selling standardized products [38]. Under these conditions, organizational structures can be expected to be hierarchical, inflexible, and bureaucratic [39]. Adopting policies and procedures to embody social responsibility within such organizations will be difficult as they will require the relaxation of organizational structures and norms. Hou et al. [40] verified that creative industries (e.g., content media-related industries, such as film, publishing, and broadcasting) with a horizontal organizational structure lead to performance growth. CSR was found to have a significant positive effect on the creative industry’s financial performance.
Based on these arguments, we infer that the greater the growth in the industry, the higher the possibility that companies can improve firm performance through CSR. Therefore, we propose the following hypothesis:

**Hypothesis 2:** Higher industry growth will have a moderating effect on the relationship between CSR and firm performance.

The research model is shown in Figure 1.

![Research model](image)

**Figure 1.** Research model.

### 3. Materials and Methods

#### 3.1. Independent Variable

This study’s independent variables are CSR at the firm level and industrial growth rate at the industry level. As a surrogate variable for CSR, the social activity index recorded in the company’s sustainability report was used. Additionally, the industry growth rate was measured using the Compound Annual Growth Rate (CAGR) formula. An industry’s growth rate reflects the anticipated changes in the domestic market for that industry in the future; industries with high growth rates are considered attractive markets for companies. While turnover and total asset return can be used as growth indicators in the current period, accurately forecasting future changes can be difficult. In contrast, CAGR is a model that utilizes industry growth’s geometric mean over the past few years, assuming that the industry has maintained a consistent annual growth rate [41]. The CAGR provides a standardized measure and is calculated as follows:

\[
\text{Compound Annual Growth Rate, CAGR} : \left( \frac{S_t}{S_{t_0}} \right)^{\frac{1}{t-t_0}} - 1
\]

In the formula above, \( t_0 \) represents the beginning point while \( t \) represents the final point. \( S_t \) refers to the market size at the beginning and \( S_{t_0} \) refers to the market size at the final point.

#### 3.2. Dependent Variable

This study employed Tobin’s Q, a measure of firm performance. It is calculated by dividing the assets’ market value by their replacement cost. However, a modified formula proposed by Chung and Pruitt [42] approximates Tobin’s Q as the ratio of the equity’s market value plus the liabilities’ book value to the book value of total assets. This revised formula offers advantages such as capturing the relationships between managerial equity ownership, firm performance, various factors related to tender offer gains, investment opportunities, and financial decisions. Tobin’s Q is commonly used as an indicator of company value and firm performance from the investor perspective [43,44].

#### 3.3. Control Variable

Several control variables were introduced to examine the explicit relationship between the independent and dependent variables. This study’s control variables included the number of employees, company size, foreign ownership percentage, year characteristics, and industry characteristics. Company size has an impact on both firm performance [45].
and CSR [46]. It is a significant factor that determines the profitability and value of a company and larger companies are expected to have relatively higher levels of CSR and firm performance compared to small and medium-sized enterprises (SMEs). Foreign investors provide external perspectives and information on domestic companies and alleviate information asymmetry between companies and investors [47]. The participation of foreign investors can play a role in promoting CSR; so, it is used as a control variable. The year goes through many changes, including economic, social, and political, depending on the time of year. Using year characteristics as a control variable, we can more accurately grasp the relationship with other variables without limiting the research results influencing a specific year. Each industry has its own characteristics and unique business environment. By using industry characteristics as control variables, differences between different industries can be accounted for. For example, manufacturing and service industries may have differences in management methods, environmental issues, and stakeholder demands; so, these differences can be reflected by controlling industry characteristics. These control variables were used to increase the result’s validity, rule out the influence of other factors, and more accurately determine the relationship between cause and effect.

3.4. Data

When developing a methodology, it is good practice to evaluate corporate social responsibility according to international standard [ISO 26000 Social Responsibility] issues [48]. The CSR data of this study referred to the social responsibility indicators of previous studies [49]. This study used data from a sample of 102 companies that had prepared sustainability reports or ESG reports, per the Global Reporting Initiative (GRI) standards [50]. Data were collected over 18 years, from 2002 to 2020, resulting in a total of 1190 cases of CSR data. The collected CSR data included various indicators, such as training hours, contribution costs, volunteer hours, continuous years of service, resignation rate, union coverage rate, disability employment rate, new employee employment rate, employment growth rate, return to work rate after parental leave, number of parental leaves, supply chain purchase amount, and number of supply chains. We directly accessed the companies’ websites to collect the CSR data, reviewed their sustainability or ESG reports, and extracted the relevant annual social information figures. The data collection process took approximately one year, from May 2020 to April 2021. Out of the 102 companies initially included in the sample, 87 companies with 728 samples were included in the analysis after excluding 15 financial and unlisted companies. The sample’s financial data were collected from the TS-2000 database. The sample included companies from diverse industries, such as rubber and plastic, tobacco, metal, purpose machinery, wholesale and retail, petroleum refining, leisure and personal services, food manufacturing, engineering and related technical services, transportation and warehouse, transportation equipment, pharmaceutical products, electrical equipment, automobile, information and communication (I and C), comprehensive construction, public corporation, and chemical substance. The chemical manufacturing industry accounted for the most, with 12 firms, followed by electric equipment manufacturing with 9 firms, and the I and C industry with 7 firms. The remaining industries had 3 to 5 companies each, showing a relatively even distribution. Exceptionally, the tobacco industry is a monopoly in Korea and, therefore, a single firm.

3.5. Analysis Method

In verifying the moderating effect of the industry growth level on the impact of CSR on firm performance, a multi-level model that can analyze variables at different levels, as well as relationships within the same level, was applied and the statistical program HLM 8.0 was used. Thus, this study first calculated the intra-class correlation (ICC) to consider the hierarchical structure of the data and judged whether multi-layer analysis was appropriate for verifying the hypothesis in this study. ICC means the correlation coefficient between two different observations belonging to the same group; it is an indicator that reflects the extent to which the assumption of independence is violated [51]. Essentially, the ICC measures
the proportion of variance in the dependent variable that can be attributed to differences between groups relative to the total variance. The ICC score is distributed between 0 and 1 and the lower the score, the smaller the difference between groups in the dependent variable category [52]. In general, when the ICC is 0.05 or higher, there is a difference between the groups [53] and applying a multi-level model is considered appropriate. This study met the requirements as the ICC was 0.22. The variance and validity analysis results for deriving this study’s ICC are shown in Table 1. ICC can be derived as follows: by dividing the variance between the groups of firm performance by the sum of the variance between groups and the variance within groups of firm performance. The variance at the firm level is 0.82 and the intra-group correlation coefficient is $\text{ICC} = 0.22 = 0.23/(0.23 + 0.82)$, indicating that the group level explains 22% of the total variance.

Table 1. Variance and validity analysis results of firm performance.

<table>
<thead>
<tr>
<th>Firm-Level Variance</th>
<th>Industry-Level Variance</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.82</td>
<td>0.23</td>
<td>0.22</td>
</tr>
</tbody>
</table>

The formula from this research model is as follows:

Model 1 (Firm level):
$$\text{TOBIN's } Q_{ij} = \beta_0 + \beta_{1j} \times (\text{CSR}_{ij}) + r_{ij}$$

Model 2 (Industry level):
$$\beta_0 = \gamma_{00} + \gamma_{01} \times (\text{GROWTH}_j) + u_0$$
$$\beta_{1j} = \gamma_{10} + \gamma_{11} \times (\text{GROWTH}_j) + u_{1j}$$

Mixed Model:
$$\text{TOBIN's } Q_{ij} = \gamma_{00} + \gamma_{01} \times \text{GROWTH}_j + \gamma_{10} \times \text{CSR}_{ij} + \gamma_{11} \times \text{GROWTH}_j \times \text{CSR}_{ij} + u_0 + u_{1j} \times \text{CSR}_{ij} + r_{ij}$$

4. Research Analysis Result

4.1. Extract the CSR Variables

The results of an exploratory factor analysis conducted to extract three abbreviated variables for CSR are presented in Table 2. Principal component analysis was utilized to estimate factor loadings and the varimax method was employed for rotation. In cases where the factor loading values were excessively low or logically unsuitable for a specific factor, those variables were eliminated and a fresh factor analysis was performed. Considering the final factor analysis results, the “CSR factor” was increased when employees had more volunteer hours, long service years, a high collective agreement ratio, a high employment rate for persons with disabilities, and a high parental leave return rate.

Table 2. Extracted environmental factors.

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteer hours</td>
<td>0.659</td>
</tr>
<tr>
<td>Continuous years of service</td>
<td>0.755</td>
</tr>
<tr>
<td>Union coverage rate</td>
<td>0.738</td>
</tr>
<tr>
<td>Disability employment rate</td>
<td>0.585</td>
</tr>
<tr>
<td>Return to work rate after parental leave</td>
<td>0.531</td>
</tr>
</tbody>
</table>

4.2. Descriptive Statistics and Correlation Analysis

Descriptive statistics and correlation analyses were conducted on the variables used to test the research hypotheses. Table 3 displays the variables’ descriptive statistics utilized in the empirical analysis; whereas, Table 4 presents the results of the correlation analysis.
Table 3. Descriptive statistics analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training hours</td>
<td>67</td>
<td>42</td>
<td>3</td>
<td>323</td>
</tr>
<tr>
<td>Contribute cost</td>
<td>20,740,000</td>
<td>56,540,000</td>
<td>4,000,000</td>
<td>536,000,000</td>
</tr>
<tr>
<td>Volunteer hours</td>
<td>7</td>
<td>6</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Resignation rate (%)</td>
<td>0.06</td>
<td>0.06</td>
<td>0.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Continuous years of service</td>
<td>11</td>
<td>4</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Union coverage rate (%)</td>
<td>0.52</td>
<td>0.32</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>New employee recruitment rate (%)</td>
<td>0.12</td>
<td>0.10</td>
<td>0.00</td>
<td>0.53</td>
</tr>
<tr>
<td>Disability employment rate (%)</td>
<td>0.02</td>
<td>0.01</td>
<td>0.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Employment growth rate (%)</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.05</td>
</tr>
<tr>
<td>Return to work rate after parental leave</td>
<td>0.86</td>
<td>0.19</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Industrial growth (%)</td>
<td>0.01</td>
<td>0.04</td>
<td>−0.09</td>
<td>0.06</td>
</tr>
<tr>
<td>Asset(log)</td>
<td>16</td>
<td>1</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>Employee</td>
<td>11,600</td>
<td>9200</td>
<td>169</td>
<td>310,000</td>
</tr>
<tr>
<td>Foreign Equity (%)</td>
<td>0.24</td>
<td>0.16</td>
<td>0.00</td>
<td>0.65</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>1.12</td>
<td>1.01</td>
<td>0.07</td>
<td>6.74</td>
</tr>
</tbody>
</table>

Table 4. Correlation analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>−0.102</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.150</td>
<td>0.502</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.071</td>
<td>0.492</td>
<td>0.397</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>−0.074</td>
<td>0.349</td>
<td>0.076</td>
<td>0.096</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.394</td>
<td>−0.192</td>
<td>0.004</td>
<td>0.374</td>
<td>0.401</td>
<td>1</td>
</tr>
</tbody>
</table>

Note1: CSR = 1, Asset = 2, Employee = 3, Foreign equity = 4, Industrial growth = 5, Tobin’s Q = 6. Note2: * p < 0.05, ** p < 0.01, *** p < 0.001.

4.3. Regression Analysis Results

Table 5 shows this study’s empirical analysis results. Model 1 is the result of Hypothesis 1, which verifies CSR’s effect on firm performance. The analysis found that CSR has a positive effect on firm performance. Essentially, it was confirmed that an increase in CSR factors is closely related to an increase in firm performance. This supports existing research [16–21] stating that companies can gain a competitive advantage by emphasizing social responsibility and actively responding to social and environmental issues.

Table 5. Regression analysis results.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Null Model</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.135 (6.521 ***)</td>
<td>0.392 (4.589 ***)</td>
<td>0.355 (3.229 ***)</td>
<td>0.344 (4.002 ***)</td>
</tr>
<tr>
<td>Asset(log)</td>
<td>−0.325 (−7.448 ***)</td>
<td>−0.311 (−7.223 ***)</td>
<td>−0.310 (−7.220 ***)</td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>0.004 (1.236)</td>
<td>0.003 (1.191)</td>
<td>0.003 (1.184)</td>
<td></td>
</tr>
<tr>
<td>Foreign Equity</td>
<td>0.036 (12.221 ***)</td>
<td>0.036 (12.209 ***)</td>
<td>0.033 (10.828 ***)</td>
<td></td>
</tr>
<tr>
<td>CSR</td>
<td>0</td>
<td>0.365 (8.767 ***)</td>
<td>0.325(7.854 ***)</td>
<td>0.278(6.477 ***)</td>
</tr>
<tr>
<td>Industry growth × CSR</td>
<td>0.161 (2.005 *)</td>
<td>0.146 (1.984 *)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>σ²</td>
<td>0.82289</td>
<td>0.52766</td>
<td>0.53004</td>
<td>0.53080</td>
</tr>
<tr>
<td>τ</td>
<td>0.23206</td>
<td>0.16845</td>
<td>0.17212</td>
<td>0.17004</td>
</tr>
<tr>
<td>Deviance</td>
<td>1794.06</td>
<td>1214.28</td>
<td>1210.33</td>
<td>1199.41</td>
</tr>
</tbody>
</table>

Note: * p < 0.05, ** p < 0.01, *** p < 0.001.
Model 3 is Hypothesis 2’s verification result; it analyzed the moderating effect of industry growth on the relationship between CSR and firm performance. The analysis confirmed that industry growth significantly moderated the relationship between CSR and firm performance ($\beta = 0.088, p < 0.01$). Specifically, it was found that when the CSR value increases, the Tobin Q increases faster for companies in the high industrial growth group than those in the low industrial growth group. When this is diagrammed, it looks like Figure 2 below.

![Graph of moderation effect.](image)

**Figure 2.** Graph of moderation effect.

### 4.4. Further Analysis (t-Test Analysis)

To validate Hypothesis 2, additional analysis was conducted to investigate whether there were variations in CSR levels based on industry growth. The analysis involved dividing the groups into “high-growth industries” and “low-growth industries” and classifying the industries into manufacturing, I and C services, and distribution sectors. The industry growth rates were then separated into upper and lower groups and t-test analysis was performed to examine the differences in CSR levels based on industry growth. The analysis results can be found in Table 6.

**Table 6.** Difference analysis according to competition within the industry.

<table>
<thead>
<tr>
<th>Industry Growth</th>
<th>Mean</th>
<th>SD</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>High</td>
<td>0.20</td>
<td>0.99</td>
<td>5.787</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>−0.23</td>
<td>0.96</td>
<td></td>
</tr>
</tbody>
</table>

Note: High-growth industry group N: 390, low-growth industry group N: 338.

The analysis of CSR differences based on industry growth groups yielded the following results. On average, the group with higher industry growth demonstrated a higher overall level of CSR compared to the group with lower industry growth. As industries grow, social issues, such as environmental pollution, aging populations, shareholder rights, and employment problems, arise, along with a diversification of stakeholders [54]. In growing industries, the speed of response to stakeholders becomes critical and it is inferred that higher CSR enhances response agility and facilitates the identification of additional business opportunities, such as welfare foundations, environmental monitoring projects, and entrepreneurial ventures. These results support Hypothesis 2, which investigated the moderating effect of industry growth.
5. Discussion

The objective of this study was to identify and investigate the impact of the relationship between industry growth, CSR, and firm performance in Korea. In previous decades, Korea experienced high industry growth rates, which has led to a growing interest in CSR and firm performance. Accordingly, this study investigated the impact of Korean companies’ CSR on firm performance and further verified the moderating effect of industry growth. This study’s results are as follows.

First, it was confirmed that firm performance improved as CSR increased, supporting Hypothesis 1. This supports prior research [13–16,29,30] and means that by proactively participating in creating social value and solving social problems, companies can generate profits and improve economic performance. Therefore, companies should consider CSR as an important management strategy element. The results highlight CSR’s importance, which companies can integrate into their business strategies to enhance competitiveness and achieve sustainable growth. By developing and implementing business models and strategies that consider CSR, companies can increase social value while generating profits.

Second, the moderating effect of industry growth was confirmed in terms of the relationship between CSR and firm performance. Essentially, when the CSR value increases, the company performance of companies in the high-growth industry group increases faster than those in the low-growth industry group. This suggests that CSR can more effectively contribute to firm performance in economically active industries. Additionally, to support the research results, CSR differences based on industry growth groups were analyzed. The high-growth industry group appears to have a higher overall level of CSR than the low-growth industry group, supporting Hypothesis 2. Economically active industries generally provide more opportunities and resources and form the basis for competition and innovation. Companies can create a positive image in this environment and strengthen stakeholder relationships through CSR. In addition, companies need to consider CSR as a core element of their business strategy as CSR can have a greater impact on industries that focus on economic performance. These implications suggest that companies in economically active industries should focus more on CSR. By creating social values and realizing sustainable management through CSR, companies can be highly evaluated both economically and socially. Therefore, companies should recognize the importance of CSR and financial growth while strengthening competitiveness and enhancing social values by strategically incorporating CSR into management activities. Furthermore, through the support and cooperation of government and social organizations, CSR’s effectiveness in economically active industries can be maximized. This presents a positive prospect for providing opportunities for sustainable development and cooperation to both businesses and society.

6. Conclusions

6.1. Implications

The academic implications of this study are as follows. Theories in the field of strategic management have emphasized the importance of external environmental factors, along with the influence of internal factors, on a company’s strategy and performance. From this perspective, they explain the process of strategic management that explains a company’s performance by integrating resource-based theory, which emphasizes the influence of a company’s internal resources, and industrial structure theory, which emphasizes the influence of the external environment. In contrast, previous studies in the field have focused on analyzing the influence of a single level (corporate or industrial environment) that affects corporate performance; but, this is difficult to view as research from an academic perspective that integrates resource-based theory and industrial structure theory. There may be limitations in terms of deriving implications that are appropriate for actual corporate situations. This study goes beyond the limitations of previous studies and suggests the importance of developing a research model and empirical analysis that analyze the interaction effects of the internal and external factors of a company.
The practical implications of this study are as follows. For decades, CSR has been mainly applied in developed countries. Developing countries tend to prioritize immediate economic development; so, they have not paid much attention to CSR. However, according to the results of this study, conducted as a sample of Korean society, which was transformed from a developing country to a developed country with a rapid economic leap, it was confirmed that CSR activities in high-growth industries have a significant impact on firm performance. These results suggest that CSR can play an important role in corporate growth strategies, not only in developed countries but also in fast-growing developing countries. In addition, although it has been recognized that CSR activities must differ in content and importance depending on the industry characteristics, these results will also be meaningful in terms of suggesting that the growth rate of the industry is another factor to consider.

6.2. Limitations
This study had the following limitations. First, the relationship between CSR and firm performance is influenced by various factors and their interactions. While this study focused on the role of industry growth as a moderating variable, there are other important factors (e.g., management strategies, corporate culture, competitive environment, etc.) that can influence this relationship. Conducting more comprehensive research that considers these complexities could lead to diverse research outcomes in the future. Second, results may also vary depending on how CSR and firm performance are measured. The indicators used in this study may not cover all aspects; more comprehensive and diverse indicators should be introduced in future studies.

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