Exploring the Organizational Culture’s Moderating Role of Effects of Corporate Social Responsibility (CSR) on Firm Performance: Focused on Corporate Contributions in Korea

Myeongju Lee 1 and Hyunok Kim 2,*

1 Sogang University Institute for Business Research, Sogang University, 35 Baekbeom-ro, Mapo-gu, Seoul 04107, Korea; silk@sogang.ac.kr
2 Sogang Business School, Sogang University, 35 Baekbeom-ro, Mapo-gu, Seoul 04107, Korea
* Correspondence: hokim@sogang.ac.kr; Tel.: +82-2705-8342

Received: 11 September 2017; Accepted: 16 October 2017; Published: 19 October 2017

Abstract: The purpose of this study was to examine the role of organizational culture in helping to translate corporate social responsibility (CSR) into firm performance. We employed arguments from the CSR strategy view to highlight the effectiveness of CSR and the contingency approach to explain the vertical fit between CSR and the organizational culture in a firm. Furthermore, we examined the moderating influence of organizational culture on the CSR–firm performance linkage. The results suggest that some organizational cultures moderate the relationship between CSR and financial outcomes, and that organizational culture may play an important role in enhancing a positive relationship between CSR and firm performance.

Keywords: CSR; firm performance; organizational culture; Korea; path analysis

1. Introduction

Research on corporate social responsibility (CSR) has gradually expanded, and the importance of CSR has been clarified [1]. Such CSR research has included investigations into the positive effects of CSR that aid in the pursuit of profits through social and economic performance [2].

As CSR activities are accompanied by additional corporate costs, not every CSR activity leads to a successful outcome [3,4]. There is ongoing academic interest in determining which economic benefits and disadvantages result from corporate participation in socially responsible activities [5]. Much of the research on CSR has reviewed the relationship between CSR and corporate financial performance [6,7]. Orlitzky et al. [8] conducted a meta-analysis of 52 major studies and reported limited positive (+) relationships between CSR and financial performance. According to a meta-analysis of empirical studies on CSR performance and corporate financial performance by Margolis et al. [9], overall, the relationships between them were statistically limited, but positive. More specifically, the analyzed studies reported a positive (e.g., [4]), negative (e.g., [10]), and null (e.g., [11]) relationship. Such mixed results lead to questions about whether a firm’s social activity can be easily determined based on their financial performance.

Even though such research has revealed that, in most cases, a positive relationship exists between CSR activities and financial performance, recently, the necessity for research on independent effects by dividing CSR types and performance variables has been identified. In addition, the need for a good fit between the organizational culture and CSR to achieve the goals has been recognized. Many researchers have pointed out the importance of considering situation variables to explain the intensity or direction of the relationship between CSR activities and corporate performance [5].
Although some research has been conducted on the relationship between CSR activities and organizational culture, the results have been inconsistent [12,13]. Some studies have reported a positive relationship (e.g., [4]), some have reported a negative relationship (e.g., [10]), and others a null relationship (e.g., [11]). Most studies have investigated the effects of organizational culture on CSR in Western contexts. Organizational culture represents a set of shared values and philosophy of management that is affected by social norms through management education. These shared values and beliefs are likely to be different across national contexts. This provides a good reason to conduct research in non-Western contexts. Furthermore, while conceptual research has been conducted on the relationship between CSR activities and organizational culture, the relationship between these two variables has not been verified in reality. In addition, research that has verified the limitations in the relationship between CSR activities and organizational culture as a single aspect of organizational culture has involved measuring and verifying without the use of a theoretical analysis framework. It is worth noting that most organizations can have several types of organizational culture. Quinn and Cameron [14] suggest that more than one dimension of culture can exist simultaneously within an organization, and Kalliath et al. [15] empirically tested this argument. It is necessary to conduct a comprehensive analysis of cultural dimensions.

Thus, the aim of the present study was to empirically analyze the effects of CSR activities and organizational culture on organizational performance by studying Korean companies. Dividing organizational culture by applying the competing values framework (CVF) allows one to examine the roles of organizational culture in the relationship between CSR activities and performance.

The objectives of this study were as follows: first, to verify the effects of CSR activities on firm performance; second, to empirically examine the effects of organizational culture on the relationship between CSR and firm performance; and third, to examine the relationship between CSR activities and performance in a sample of Korean companies. From the strategic perspective, CSR activities could become a source of new competitiveness by creating new opportunities and encouraging company innovations. In some cases of organizational cultures, the strategy would be to consider the suitability of the organizational cultures for adopting the CSR activities in question, which can eventually lead to the improvement of firm performance.

2. Literature Review and Hypotheses

2.1. CSR and Performance

First, we will review and explore the concept of CSR. CSR has been discussed in management scholarship for many years [2]. The concept of CSR emerged in the mid-twentieth century and has had different interpretations over time. The existing research has utilized various definitions of CSR. Carroll [16] offered a refined framework by articulating the scope of CSR as economic, legal, ethical, and discretionary responsibilities. For the purposes of this study, CSR is defined as “a business organization’s configuration of the principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships” ([17], p. 693). Gallardo-Vázquez et al. [18] suggested different dimensions—social, economic, and environmental—by analyzing the cause–effect relations with performance and competitive success. Turker [19] provided a four-dimensional structure of CSR, including CSR to social and nonsocial stakeholders, employees, customers, and government of CSR reflecting the responsibilities of a business to various stakeholders. Firms carry out their social responsibilities by engaging in activities such as philanthropic contributions [20]. Also, donation is a significant part of CSR in Korea [21], as Korean firms’ CSR mainly concerns charitable social contribution budgets [20].

Paralleling the increasing popularity of CSR in management, many scholars have examined whether CSR can increase an organization’s financial performance. These arguments are explained mainly by the following three theories: stakeholder theory [22], neo-institutional theory [20], and strategic perspective [23]. Regarding the perspective of stakeholder theory, according to
Donaldson and Preston [22], when companies reflect on the interests of diverse concerned parties, such as workers, consumers, and suppliers, then corporate performance, including economic profits, can be improved in the long term. The neo-institutional theory can be applied to CSR because it emphasizes isomorphism for securing social legitimacy in accordance with the organizational code of conduct [24]. Campbell [25] argued that consumers, civic groups, and governments emphasize CSR and companies use these requests as a tool to achieve social legitimacy. The strategic perspective posits that corporate social contributions have positive effects on corporate performance [23]. Scholars who have researched CSR from the strategic perspective have suggested that CSR activities may be a source of competitive advantage (e.g., [20,23]).

As previously mentioned, a number of studies have examined the CSR–financial outcome linkage (e.g., [5,8]), but the relationship has exhibited mixed results. In other words, it is possible that CSR affects organizational performances differentially depending upon the contingencies associated with its implementation. Several studies have identified the critical roles of contingency variables in the CSR–financial outcome relationship [5,8,11]. In this paper, we suggest that an organizational culture that is vertically aligned with a firm’s orientation toward CSR will serve to moderate the relationship between CSR and financial performance. In particular, this study explored the moderating role of organizational culture in that linkage.

On the basis of the organizational culture research [26], we argue that the success of a firm’s CSR initiatives is largely contingent upon the extent to which its organizational culture is designed to align the behaviors of human resources with the CSR-related goals and objectives of the firm. As such, we believe that the extent to which CSR initiatives are translated into financial outcomes will be partly determined by the degree to which the organizational culture is vertically aligned with the CSR initiatives that a firm chooses to implement.

All things considered, organizational culture may play a role in the CSR–firm performance relationship. We expand upon this view below by providing a theoretical framework aimed at explaining why organizational culture might moderate the relationship between CSR and financial performance.

2.2. CSR and Culture

As the concept of organizational culture is shared among organizational members, it exists at various levels, such as groups or departments [27]. The concept of organizational culture is mainly defined by shared value, but scholars have various definitions. Culture is a collective factor that forms the behavior and social system of the members in the society. Organizational culture is a concept that collectively refers to the values, beliefs, ideologies, customs, norms, traditions, knowledge, and skills shared by the members of the organization [27]. Many studies have been conducted on the basis of the assumption that organizational culture has important social characteristics that affect the behaviors of individuals and groups [26]. Influencing workers’ attitudes and behaviors [28] relies on agreement on collective values and beliefs, and a sense of belonging, similar to being part of a family [29]. Therefore, the type of culture can influence the way employees think about and understand CSR within an organization [30]. This nature of CSR should align with an organization’s culture to promote the organization’s performance. In this paper, we will explain the influence of conformity between personnel and the organizational culture on achievement by classifying organizational culture according to Quinn’s CVF [31], which can explain a diverse organizational culture.

Quinn and Rohrbaugh [31] emphasized the multi-dimensionality of organizational culture by identifying four different styles. Cameron and Quinn [32] used a CVF for organizational culture, placing flexibility and control on the vertical axis, and internal orientation and external orientation on the horizontal axis. On the vertical axis, the organizational type is divided into an internally oriented organization that emphasizes internal integration and coordination for the maintenance of the existing organization and an externally oriented organization that focuses on the interaction and adaptation with the external environment. On the horizontal axis is the organization that focuses on stability
and control, and on the other side, the organization that places value on flexibility and autonomy. The competitive value model derives four organizational cultures that pursue different competitive values based on these two axes [32]. To ensure the manageability of the scope of the research, the four types of organizational culture were employed in this study: clan culture, adhocracy culture, market culture, and hierarchy culture.

Next, we will briefly explain the types of categories in the competing values model. Clan culture emphasizes flexibility and discretionary power, focusing on family relationships within the organization as a culture with internal directionality, shared values and targets, cohesiveness, and participation. In this culture, teamwork and employee participation programs are more important than the procedures and rules that are applied according to a hierarchy. Since the participation of the members of the organization has important effects on the effectiveness of the organization, confidence and intimacy among the members, human relationships, the unity of the group, cooperation among members when problems occur, concern for people, and participatory characteristics such as decision-making are relatively strong.

Due to the focus on relationships among people, we propose that organizations with a clan culture will emphasize employee improvement for corporate sustainability. In the clan culture, individuals’ goals are congruent with organizational goals based on their trust in the organization, and members feel that the organization is taking care of them [33]. In addition, clan culture can create a positive attitude toward the organization because it induces workers’ participation in CSR activities [28]. Positive job attitudes of members will strengthen positive effects on the performance of the company. Also, clan culture creates equal opportunities for people and workplace diversity. It adopts strong and clearly defined socially responsible practices, such as affirmative action. The focus on employee improvement also means that the organization invests in people for the firm’s sustainability [34]. The effectiveness of CSR and its performance will be further enhanced in the clan culture organization. Because high CSR indicates how workers are treated within the organization [35], if the culture of the organization emphasizes the participation of the members, the effectiveness of CSR can be expected to be higher.

**Hypothesis 1 (H1).** Clan culture will moderate the relationship between CSR and firm performance such that high levels of clan culture will enhance the positive relationship between CSR and firm performance.

Adhocracy culture emphasizes flexibility and discretion and is defined as an organizational culture with the character of external directionality, which is creative and developmentally responsive to changes in the organizational environment [31] with a focus on acquiring new business and developing new tasks. An organization with an adhocracy culture seeks change in accordance with changing external markets, faces risks, and tries to gain resources to survive in the market [32].

In adhocracy culture, the immediate and voluntary response of members to external change is important. Therefore, we assert that organizations dominated by an adhocracy culture will focus on innovation to accomplish their purpose of corporate sustainability. CSR helps to build up a reputation for producing and providing products and services with high quality standards [8]. The positive reputation and image created by the CSR activity can signal to the market and customer that the product and service are reliable. These reputations help firms build trust with customers and markets. It can help to reduce the failure of innovative new products that lack product information, especially in the early stages of launch [36,37]. Therefore, the effects of CSR on firm performance will be greater in organizations where adhocracy culture dominates than in firms where adhocracy culture is not dominant. In contrast with the past, the organizational direction of the CSR activities in response to changes in the management environment, which represents the social responsibility of the company, is that the members of the CSR organization receive the CSR activities in a very friendly manner and interpret them positively. This can be expected to have positive effects on firm performance.
Hypothesis 2 (H2). Adhocracy culture will moderate the relationship between CSR and firm performance such that high levels of adhocracy culture will enhance the positive relationship between CSR and firm performance.

Market culture emphasizes goal achievement and is focused on the organization’s productivity, performance, and profit; control and order within the organization; and external directionality [32]. Rather than examining the internal elements of the organization, market culture focuses on harmony with the external environment, where external factors, such as suppliers and customers, are the main concern. It also focuses on the organization’s position in relation to external competitors by continually grasping customer needs and expectations and providing better services [32]. Organizations with market culture pay attention to their competitive position with external competitors by continuously understanding customer needs and expectations and providing better service. In a market culture with this nature, an organization will be able to promote the improvement of company performance by utilizing CSR activities for the benefit of external stakeholders. It is anticipated that by providing CSR activities for stakeholder interests, which are core values of the market culture, the company performance will improve.

In addition, CSR is regarded as one of the activities that externally enhances the positive reputation of the company in the market culture, enhancing the self-esteem of its members as a means of distinguishing it from other companies [38] and increasing affective commitment [39] can lead to high performance. As a result, members of the organization share the core values of the firm and enhance their understanding [40], which will have a positive impact on the firm performances. Therefore, we propose that market culture will place greater emphasis on firm performance in terms of seeking corporate sustainability. This insight of corporate sustainability means that there is a growing awareness on the part of leaders that there are benefits to be gained from voluntary socially responsible activities that can be managed by reducing costs and increasing production efficiency. Based on this discussion, we set the following hypothesis.

Hypothesis 3 (H3). Market culture will moderate the relationship between CSR and firm performance such that high levels of market culture will enhance the positive relationship between CSR and firm performance.

Hierarchy culture emphasizes stability and control, internal maintenance, and maintaining order through regulations. This culture also advocates the pursuit of predictability, efficiency, and accuracy of procedures in management [41]. In hierarchy culture, there is little discretion in business, carefully maintaining top-down communication, standardization, formalization, and efficiency, and prescribed procedures are emphasized [32]. Hierarchy culture emphasizes internal sustainability along with the need for stability and control, and regulations and order by rule become the core values of the organization. In a hierarchy culture with such characteristics, companies’ CSR activities are not done in response to environmental changes. A hierarchical culture will try to preserve the current state of the enterprise by maintaining organizational rules and order rather than adapting to new environmental changes. In hierarchical culture, workers are not engaged in CSR activities, and executives of hierarchical culture organizations are less interested in their needs than stakeholders’ needs [12], and—in the long term with stakeholders such as workers and customers—less concerned and less responsive to community development [42]. We predict that an organization with a hierarchy culture will place great emphasis on short-term economic performance [43]. The ultimate goal of CSR is to pursue profits by minimizing costs and maximizing productivity. While efficiency is valued in a hierarchical culture, it is defined as the standardization of products, services, and processes in order to reduce costs, maximize production, and pursue economic outcomes [43]. An organization with a hierarchy culture might face conflicts between economic performance and socially responsible activity. Therefore, even if a company is engaged in CSR activities, it may be difficult to operate them properly in an organization where a hierarchical culture dominates. Therefore, it can be expected that the interaction of CSR activities with hierarchical culture will negatively affect organizational performance.
Hypothesis 4 (H4). Hierarchy culture will moderate the relationship between CSR and firm performance such that high levels of hierarchy culture will decrease the positive relationship between CSR and firm performance.

3. Methods

3.1. Sample and Procedures

The panel data employed in this study were drawn from the Human Capital Corporate Panel Survey (HCCP) [44] conducted by the Korean Research Institute for Vocational Education and Training (KRIVET). These panel surveys consisted of a corporate survey (organization level) and an employee survey (individual level). For the corporate survey, the panel data included external factors, such as industry and strategy, management and human resources (HR) policies, the structure of the workforce, financial performance, and unionization. The employee survey asked about employee attitudes, perceptions of organizational culture, the top management team, company policies, and the role of HR.

The dataset in this study was collected from various industries, such as food, drink, clothing, rubber, metal, electrical equipment, computer manufacturing, publishing, electronics, automobile, financial, and information technology (IT). We matched the data from HCCP to the Korea Information Service (KIS), which provides annual reports that included information about the firm’s operation activities and financial performance in South Korea.

We found matches for 164 of the original sample of 200 firms. To reduce problems related to causality, firm performance \((t + 2)\) was lagged by two years from the year CSR \((t)\) was measured; thus, CSR from the 2013 KIS and organizational culture from the 2013 HCCP were merged with the 2015 firm performance from the KIS. A survey was conducted for firms with more than 100 employees and capital of over 300 million. Of the 164 firms in the sample, 151 are manufacturing firms, 12 are service-based firms, and the others are financial institutions. An average of 26 employees per firm responded to the questionnaire. A total of 4269 respondents participated in the questionnaire. The average age of the respondents was 38.91 years, 32% of the respondents were unmarried, most of them were full-time employees (99%), 68% of them were college graduates, and the average tenure was 11.48 years. The final matching data totaled 164 corporations and 4269 employees in manufacturing, financial, and other industries.

3.2. Measures

3.2.1. Firm Performance

We used financial firm performance as a dependent variable. There are three different approaches—the market-based approach (such as investor returns), the accounting-based approach, and the perceptual approach—to measuring a firm’s financial performance [8]. Accounting-based measures, such as return on assets (ROA), sales, sales per employee, sales growth, and earnings per share (EPS), represent management’s discretionary allocations of resources to different managerial decisions. Among these firm performance measurement methods, we measured the firm performance by selecting sales per employee. Independent financial data were collected from the KIS database. A high sales-per-employee ratio means that the firm can be operated efficiently with fewer employees [39]. The measure of sales per employee has been commonly regarded as a proxy for labor productivity [45–49] in management literature. The use of profit per employee to measure performance reflects its intention to measure the performance of a firm that is associated with employees [49].

CSR and organizational culture provide employees with shared norms and values. Those shared norms and values may have a positive impact on performance by shaping employees’ shared mental model of the work situation. Therefore, CSR and organizational culture enhance behavioral consistency among employees and individual productivity. In this context, Hartnell et al. [26] categorized organizational performance related to organizational culture into three categories: employee attitudes such as organizational commitment, operational performance such as innovation, and financial
performance including growth and profitability such as sales per employee. Therefore, we measured corporate performance as sales per employee.

3.2.2. CSR

There is a lack of consensus regarding the construct of CSR, since CSR is involved in different areas of business, such as HR, marketing, and strategy. Moreover, CSR is understood differently in diverse cultural contexts, and therefore the issues that must be dealt with and the meanings of CSR are quite distinct when compared across cultures [50]. Thus, Gallie [51] and Connolly [52] suggested that CSR be interpreted as “an essentially contested concept” that is “internally complex” and “relatively open”. This situation inevitably leads to measurement issues. As a result, a wide range of methods have been developed to measure CSR. CSR is measured through a forced-choice survey [53]; the content analysis of annual reports [54]; the use of reputational indices, such as the Fortune reputational and social responsibility index [55] and the Kinder, Lydenberg, Domini (KLD) index [4]; and philanthropic donations [56]. Philanthropic donations have relatively high levels of correlations with firm performance [8] and can be observed by employees more easily than other CSR activities. This attribution is likely to contribute to enhancing the awareness of a firm’s CSR initiatives, which in turn leads to the development of a more positive employee attitude toward the firm. According to cognitive categorization theory [57], when employees observe value-driven behaviors of the executives, they think of these behaviors in accordance with the prototypes they have. If the executives proactively implement CSR, employees can judge their executives as visionary leaders. This interpretation contributes to categorizing the executives or the firm as socially responsible. If employees categorize their executives as socially responsible, this perception will lead to the development of a more positive employee attitude toward the firm [58]. Sully de Luque et al. [59] showed that attitudes to the CEO’s stakeholders influence the employee’s increased work effort and eventually have a positive impact on firm performance.

Mitchell et al. [60] considered charitable donations to be a voluntary discretionary act of the firms. The reason for this is that donations can have a positive impact on performance in terms of the firm’s strategy, but this is not something that is urgent or necessary, thus donations can be considered voluntary rather than mandatory behaviors of the executives [53]. Schwartz [61] suggested that the donations of firms represent not only the firm’s expectation of increased economic benefits, but also its philanthropic motive. Charitable giving has been widely used as a measure of CSR, because it can be stably collected and be reliable [2]. Many previous studies (e.g., [62–66]) have measured CSR by charitable giving. Hess et al. [67] argued that the most common form of corporate philanthropy is direct cash donations, which would be particularly well suited in Korea.

The awareness of CSR in Korea is still in its early stage of development, and most firms in Korea implement CSR on their stakeholders through charitable donations. Korea’s 1997 financial crisis was an important incident for Korean CSR [20]. During this period, the government required transparent management and active CSR practice [20]. According to the surveys of both KOTRA (Korea Trade-Investment Promotion Agency) and media such as HERI (Hankyoreh Economic Research Institute), and HRI (Hyundai Research Institute), the previously hidden political donation budget has been turned into an official, transparent CSR budget, and most of these CSR budgets have been used as monetary donations. These government pressures related to the protection of stakeholder interests have had a great impact on corporate business, so most Korean firms have implemented a short-term perspective CSR in order to defend themselves against enormous pressures [20]. This short-term perspective CSR of Korean companies has made companies focus on donations or short-term events [68]. The corporate governance structure of most Korean companies is characterized by the “owner-controlled” feature, in which the CEO is heavily influenced by major shareholders or founding owners. In this context, CEOs would prefer CSR activities with tax benefits that would benefit major shareholders or owners to CSR activities without tax benefits. In the white paper, which was published by the Federation of Korean Industries in 2011, on corporates and foundations’ social responsibility
for the top 500 companies in Korea, it was found that donations still accounted for 68.8% of social contribution activities in 2011. For these reasons, we measured the total donation amounts disclosed in the annual reports for CSR.

3.2.3. Organizational Culture

The construct of organizational culture adopted here is composed of four dimensions in accordance with Quinn and Rohrbaugh’s [31] CVF: clan, adhocracy, market, and hierarchy. This study employed the modified measures of Deshpandé et al. [69], which had already been adopted from Cameron and Freeman [70]. Each dimension of culture contained three questions about cultural characteristics and strategic emphasis [71]. A five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5) was used for 12 indicators (see Table 1).

| Construct          | Item                                                                 | α  
|--------------------|----------------------------------------------------------------------|------
| Clan culture       | My company has a family-like atmosphere                             | 0.945 |
|                    | My company considers solidarity and a feeling of oneness as important|      |
|                    | My company considers working as a team as important                  |      |
| Adhocracy culture  | My company encourages change and innovation                          | 0.860 |
|                    | My company fairly compensates innovation                            |      |
|                    | My company gives more incentive to creative persons than sincere ones|      |
| Market culture     | My company emphasizes competition and outcome excellence             | 0.870 |
|                    | My company believes ability related to a task is the most important requirement for employees | |
|                    | My company evaluates employee performance on the basis of actual outcomes | |
| Hierarchy culture  | My company emphasizes formalization and structure                    | 0.699 |
|                    | My company takes a one-way, top-down approach to communication       |      |
|                    | My company emphasizes formal status and roles in the organization    |      |

Table 1. Scale items and construct reliability.

Organizational culture was aggregated within each firm to capture the entire organizational culture. Even though this construct was measured by employee responses, the analysis was performed at the organizational level by aggregating the individual responses within each firm. To enhance the accuracy of the data aggregation process, we checked inter-rater agreement on the organizational culture variables by calculating intra-class correlations (ICC(1), ICC(2)). For clan culture, the mean ICC(1) was 0.027 (0.024–0.030, F-value < 0.000) and the mean ICC(2) was 0.817 (0.800–0.837, F-value < 0.000). For adhocracy culture, the mean ICC(1) was 0.025 (0.013–0.033, F-value < 0.000) and the mean ICC(2) was 0.789 (0.690–0.849, F-value < 0.000). For market culture, the mean ICC(1) was 0.022 (0.015–0.026, F-value < 0.000) and the mean ICC(2) was 0.775 (0.711–0.815, F-value < 0.000). Finally, for hierarchy culture, the mean ICC(1) was 0.017 (0.011–0.027, F-value < 0.000) and the mean ICC(2) was 0.789 (0.647–0.818, F-value < 0.000). James [72] and Schneider, White, and Paul [73] suggested an ideal ICC(1) value of approximately 0.12 and an ICC(2) value of 0.60; therefore, our estimates are acceptable. Next, we checked the normality of the four aggregated cultural factors, and the skewness and kurtosis coefficients were within the range of ±1, and ±7 [74].

3.2.4. Controls

We controlled for prior firm performance (t + 1), prior CSR (t − 1), unionization (0 = no, 1 = yes), industry (manufacturing, financial, and others), firm type (1 = firms belonging to KOSPI (Korea Composite Stock Price Index), 2 = firms belonging to KOSDAQ (Korean Securities Dealers Automated Quotation), 3 = privately traded firms), and firm size (measured as four intervals of the number of employees: 0–300, 300–999, 1000–1999, and over 2000). Several variables, such as unionization, industry, firm type, and firm size, were transformed into dummy variables. Prior firm performance and prior CSR were assessed using the natural logarithm.
3.3. Analytic Strategy

3.3.1. Confirmatory Factor Analysis

We conducted a confirmatory factor analysis (CFA) on the organizational culture variable indicators to confirm the construct validity [75]. We compared four different factor models. To determine whether the factor models had a proper fit, we followed the suggestion of Hu and Bentler [76], who recommended that the comparative fit index (CFI) and the Tucker Lewis index (TLI) be above 0.90 and the standard root mean square residual (SRMR) be below 0.08. Akaike information criterion (AIC) and Bayesian information criterion (BIC) are also an indicator of the goodness of the proposed model when maximum likelihood estimation (MLE) is used. The absolute values of these indicators are meaningless, but useful when comparing different models. The model with the lowest value of AIC and BIC is the most acceptable model among comparable models. We also followed Browne and Cudeck [77], who suggested that the root mean square error of approximation (RMSEA) be below 0.05.

The first model was a one-factor model, which fit the data badly ($\chi^2 = 175.568$, $df = 27$, AIC/BIC = 269.278/464.570, RMSEA = 0.183 (90% confidence interval (CI), 0.158–0.209), CFI/TLI = 0.913/0.787, SRMR = 0.098). Two-factor and three-factor models did not have an acceptable fit either. The four-factor model was the only one with a proper fit as the CVF suggested ($\chi^2 = 23.721$, $df = 21$, AIC/BIC = 129.431/343.322, RMSEA = 0.028 (90% CI, 0.000–0.074), CFI/TLI = 0.998/0.995, SRMR = 0.040). The CFA results are presented in Table 2. We carried out a likelihood-ratio test to determine whether the fit differed significantly across models. The chi-square difference between the three-factor and four-factor models was statistically significant; therefore, the four-factor model was better than the three-factor model ($\chi^2_d = 37.217$, $df_d = 3$, $p < 0.000$). The result of the chi-square difference test indicated that the four-factor model was the most suitable model for the data.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>AIC/BIC a</th>
<th>RMSEA b</th>
<th>CFI/TLI c</th>
<th>SRMR d</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-factor model</td>
<td>175.568</td>
<td>269.278/464.570</td>
<td>0.183(0.158-0.209)</td>
<td>0.913/0.787</td>
<td>0.098</td>
</tr>
<tr>
<td>Two-factor model</td>
<td>106.407</td>
<td>202.117/400.509</td>
<td>0.137(0.111-0.165)</td>
<td>0.953/0.880</td>
<td>0.062</td>
</tr>
<tr>
<td>Three-factor model</td>
<td>60.938</td>
<td>160.649/365.240</td>
<td>0.097(0.067-0.127)</td>
<td>0.978/0.940</td>
<td>0.052</td>
</tr>
<tr>
<td>Four-factor model</td>
<td>23.721</td>
<td>129.431/343.322</td>
<td>0.028(0.000-0.074)</td>
<td>0.998/0.995</td>
<td>0.040</td>
</tr>
</tbody>
</table>

a AIC/BIC = Akaike information criterion/Bayesian information criterion; b RMSEA = root mean square error of approximation; c CFI/TLI = comparative fit index/Tucker Lewis index; d SRMR = standard root mean square residual.

3.3.2. Path Analysis

Anderson and Gerbing [75] advocated the simultaneous estimation of the measurement and structural models in structural equation modeling (SEM). However, in order to analyze our proposed model, we had to conduct a latent variable interaction analysis. MacCallum and Austin [78] advised that a small sample size can cause problems that might increase the estimation parameters in complex models. To test this assumption, we analyzed our research model using both SEM and path analysis with composite scores. When conducting our analysis using the latent variable interaction method in SEM, the values of the parameters were relatively high and not trustworthy as compared to the result of the path analysis, due to the comparatively small sample size. For this reason, we employed path analysis to test our research model.

4. Results

Descriptive statistics and correlations are presented in Table 3. The sales-per-employee ratio was positively correlated with CSR and organizational culture. In this study, the dimensions of organizational culture were positively related to each other, indicating that organizational cultures can exist simultaneously within one organization [69]. In the CVF model, there is not a single kind
of organizational culture exclusively in one firm, but rather multiple cultures can exist at the same time. Therefore, most firms have several types of cultures simultaneously, and certain kinds of cultures are dominant. In this study, the dimensions of organizational culture were positively related to each other, indicating that organizational cultures can exist simultaneously within one organization. The correlations among organizational culture types were manifested in the meta-analytic results of Hartnell et al. [26]. Hartnell et al. [26] argued that caution is needed in measuring and testing the narrow set of cultural types. To help focus on this nature of organizational culture, we estimated the full model including four cultural dimensions to test our hypotheses within one model.

Table 3. Descriptive statistics and correlations.

<table>
<thead>
<tr>
<th>M</th>
<th>S.D</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sales per employee(\log_{10})</td>
<td>13.136</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 CSR(\log_{10})</td>
<td>11.220</td>
<td>2.394</td>
<td>0.267 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Clan culture(_{t})</td>
<td>3.326</td>
<td>0.352</td>
<td>0.239 **</td>
<td>0.250 **</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Adhocracy culture(_{t})</td>
<td>3.553</td>
<td>0.375</td>
<td>0.267 **</td>
<td>0.233 **</td>
<td>0.695 **</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Hierarchy culture(_{t})</td>
<td>3.502</td>
<td>0.276</td>
<td>0.197 *</td>
<td>0.166 *</td>
<td>0.436 **</td>
<td>0.541 **</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Market culture(_{t})</td>
<td>3.525</td>
<td>0.335</td>
<td>0.201 *</td>
<td>0.237 **</td>
<td>0.730 **</td>
<td>0.630 **</td>
<td>0.652 **</td>
<td></td>
</tr>
<tr>
<td>7 Sales per employee(\log_{10})</td>
<td>12.099</td>
<td>0.802</td>
<td>0.850 **</td>
<td>0.233 **</td>
<td>0.216 **</td>
<td>0.108 *</td>
<td>0.158</td>
<td>0.054</td>
</tr>
<tr>
<td>8 CSR(\log_{10})</td>
<td>10.989</td>
<td>2.452</td>
<td>0.220 **</td>
<td>0.779 **</td>
<td>0.227 **</td>
<td>0.289 **</td>
<td>0.187 *</td>
<td>0.253 **</td>
</tr>
</tbody>
</table>

\(N = 164, * p < 0.05, ** p < 0.01.\)

The results of the hypothesis testing are presented in Table 4. As mentioned above, we included all variables in the cultural dimensions that predicted firm performance. The model fit indices showed a relatively good fit (\(\chi^2 = 8.812, df = 6, AIC/BIC = 3406.537/4100.907, RMSEA = 0.053(90\% CI, 0.000–0.123), CFI/NNFI = 0.992/0.952, SRMR = 0.041). The indices of the proposed model indicated a good fit, and the R-square of sales per employee was 0.824; hence, this model provided a good fit for the data.

Table 4. The effects of corporate social responsibility (CSR) on firm performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Log of Sales Per Employee Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>3.467 *** (0.622)</td>
</tr>
<tr>
<td>Sales per employee(\log_{10})</td>
<td>0.825 *** (0.037)</td>
</tr>
<tr>
<td>CSR(\log_{10}) (_{-1})</td>
<td>0.780 *** (0.033)</td>
</tr>
<tr>
<td>CSR(\log_{10}) (_{t})</td>
<td>0.124 ** (0.048)</td>
</tr>
<tr>
<td>Clan culture</td>
<td>0.196 ** (0.063)</td>
</tr>
<tr>
<td>Adhocracy culture</td>
<td>–0.244 *** (0.065)</td>
</tr>
<tr>
<td>Market culture</td>
<td>0.245 *** (0.068)</td>
</tr>
<tr>
<td>Hierarchy culture</td>
<td>–0.109 * (0.053)</td>
</tr>
<tr>
<td>CSR * Clan</td>
<td>0.141 * (0.059)</td>
</tr>
<tr>
<td>CSR * Adhocracy</td>
<td>–0.202 ** (0.066)</td>
</tr>
<tr>
<td>CSR * Market</td>
<td>0.245 ** (0.072)</td>
</tr>
<tr>
<td>CSR * Hierarchy</td>
<td>–0.114 * (0.051)</td>
</tr>
</tbody>
</table>

\(* p < 0.05, ** p < 0.01, *** p < 0.001. Model fit: \(\chi^2 = 8.812, df = 6, AIC = 3406.537, CFI/NNFI = 0.992/0.952, RMSEA = 0.053 (90\% confidence interval (CI), 0.000–0.123), SRMR = 0.041. Dummy variables of industry, firm type, unionization, scale were included as a control variable.\)

Hypothesis 1 predicted that clan culture would positively moderate the relationship between CSR and firm performance. As expected, CSR was positively related to firm performance (path coefficient \(\gamma = 0.124, p < 0.01\)) and the interaction effect of CSR and clan culture on performance was significant (\(\gamma = 0.196, p < 0.05\)); thus, Hypothesis 1 was supported. This result demonstrates that high levels of clan culture will enhance the positive relationship between CSR and firm performance.

Hypothesis 2 proposed that adhocracy culture would positively moderate the relationship between CSR and firm performance. Although adhocracy culture was significantly linked to firm performance and the interaction term of CSR and adhocracy culture was statistically significant,
it seemed to have the opposite effect \((\gamma = -0.202, p < 0.01)\). Thus, high levels of adhocracy culture diminished the positive relationship between CSR and firm performance. This opposite result indicates that the positive effects of CSR on firm performance will be significant in certain cases where the organization has a low adhocracy culture. Hypothesis 2 was not supported.

In accordance with Hypothesis 3, we assumed that the interaction term of market culture would be statistically significant \((\gamma = 0.245, p < 0.01)\). Our findings supported Hypothesis 3. High levels of market culture strengthened the positive relationship between CSR and firm performance.

Hypothesis 4 proposed that there would be negatively significant moderating effects on the influence of hierarchy culture and CSR on firm performance. As expected, hierarchy culture diminished the positive effect between CSR and firm performance; thus, Hypothesis 4 was also supported \((\gamma = -0.114, p < 0.05)\).

We drew a graph to demonstrate the pattern of the interaction slope (see Figure 1). In addition, to further verify this interaction, we conducted a test of simple slopes [79]. This is a regression equation of an interaction effect (see Equations (1) and (2), [79]). The simple slope test is used to confirm whether the relationship between X and Y is statistically significant or not at a particular value of Z [80]. To conduct this test, we first set the conditional value of the moderator variable Z; Cohen, Cohen [81] recommend choosing conditional values at the mean of Z and at one standard deviation above and below the mean of Z. Next, we tested the significance of a simple slope by comparing the ratio of the slope to its standard error with a t-distribution with \(n - k - 1\) degrees of freedom (see Equation (3)). If the slope is significant at a high level of Z, it can be interpreted that the regression effect of Y on X is significant at a high level of Z.

\[
y_i = \gamma_0 + \gamma_1 x_i + \gamma_2 z_i + \gamma_3 x_i z_i + \epsilon_i
\]

\[
\text{performance} = \gamma_0 + \gamma_1 \text{CSR}_i + \gamma_2 \text{Culture}_i + \gamma_3 \text{CSR}_i \times \text{Culture}_i + \gamma_4 \text{Control variables}_i + \epsilon_i,
\]

\[
E[y_i|x_i, z_i] = (\hat{\gamma}_0 + \hat{\gamma}_2 z_i) + (\hat{\gamma}_1 + \hat{\gamma}_3 z_i) x_i
\]

\[
\hat{\omega}_0 = \hat{\gamma}_0 + \hat{\gamma}_2 z_i
\]

\[
\hat{\omega}_1 = \hat{\gamma}_1 + \hat{\gamma}_3 z_i
\]

\[
\text{var}(\hat{\omega}_1|z_i) = \text{var}(\hat{\gamma}_1) + 2z \text{cov}(\hat{\gamma}_1, \hat{\gamma}_3) + z^2 \text{var}(\hat{\gamma}_3)
\]

\[
\text{the significance of a simple slope} = \frac{\hat{\gamma}_1 + \hat{\gamma}_3 z}{\sqrt{\text{var}(\hat{\gamma}_1) + 2z \text{cov}(\hat{\gamma}_1, \hat{\gamma}_3) + z^2 \text{var}(\hat{\gamma}_3)}}
\]

First, the slopes of clan culture (a) and market culture (c) were reversed in comparison with the slope of hierarchy culture (d). The slopes of the high levels of clan culture and market culture were statistically significant \((t = 4.932, p < 0.05; t = 4.990, p < 0.05, \text{respectively})\), whereas the lower bound of clan culture was not meaningful \((t = -0.390, p > 0.05)\). Different from the earlier result, the lower bound of market culture was statistically significant \((t = -1.995, p < 0.05)\). These results can be interpreted as the positive effects of CSR on firm performance in companies with dominant clan culture or as market culture being significant. On the contrary, the effect of CSR on firm performance is not significant in firms where clan culture is not dominant. Even the results of this study show that CSR negatively affects firm performance in firms with weak market cultures.

Second, the slope of the low level of hierarchy culture was significant \((t = 4.872, p < 0.05)\), whereas the slope of the high level of hierarchy culture was not significant \((t = 0.161, p > 0.05)\). The slope of adhocracy culture (b) was similar in shape. The lower bound was significant \((t = 4.844, p < 0.05)\), but the higher bound was not significant \((t = -1.417, p > 0.05)\). These results indicated that the positive effects of CSR on firm performance are significant only for firms that do not have a dominant adhocracy or hierarchy culture. Specifically, Figure 1 clearly shows the relationship between CSR and the dimensions of organizational culture on firm performance.
The results indicate that the effects of CSR on firm performance can differ depending on the
Sustainability team work, and participation, CSR activities in such organizations correspond with the direction of
such interested parties instead of competitive relationships. Since organizations with a strong clan
communities. In addition, companies should have cooperative and communal relationships with

5. Discussion

Despite all the squared terms and in view of the fact that there was a significant effect of interaction,
we inserted the squared terms of CSR and the cultural variables in the model equation. The simple slope test is used to
confirm whether the relationship between

equation of an interaction effect (see Equations (1) and (2), [79]).

To test the robustness of the interaction effect, we conducted a post hoc analysis using a squared
term [82,83]. We inserted the squared terms of CSR and the cultural variables in the model equation. Despite all the squared terms and in view of the fact that there was a significant effect of interaction, the interaction effect of organizational culture was confirmed, and it was not a spurious effect arising from the nonlinear effect of independent variables.

5. Discussion

This study focused on the effects of CSR and organizational culture on firm performance. The results indicate that the effects of CSR on firm performance can differ depending on the organizational culture. Based on Quinn and Rohrbaugh’s CVF [31], organizational culture was classified into four types: clan culture, adhocracy culture, market culture, and hierarchy culture.

First, Hypothesis 1 predicted that the positive effects of CSR on firm performance would increase
in organizations with a strong clan culture. In the results, when there was a strong clan culture and
the firm participated in various CSR activities, firm performance was higher. However, when the clan
culture was weak, CSR activities were not significantly related to firm performance. These results
can be explained from the perspective of CSR as defined according to Donaldson and Preston’s [22]
stakeholder theory that explains why companies should participate in CSR. Since the diverse interested
parties in companies exchange influences related to firm activities, the companies should participate
in CSR activities that represent the interests of those parties, such as employees, consumers, and
communities. In addition, companies should have cooperative and communal relationships with
such interested parties instead of competitive relationships. Since organizations with a strong clan
culture place emphasis on the pursuit of joint goals, community spirit, consideration for employees,
teamwork, and participation, CSR activities in such organizations correspond with the direction of
the organizational culture. As CSR activities and organizational culture consistently suggest the same
goals and direction, the effects of CSR on firm performance increase [12,84].

Second, Hypothesis 2 predicted that the effects of CSR on firm performance would increase
in organizations with a strong adhocracy culture. However, the actual result proved the opposite.
When adhocracy culture was weak, CSR activities were positively associated with performance.
However, when adhocracy culture was strong, there was no significant relationship between CSR and
firm performance. These results could be generated from the relationship between adhocracy culture,
slack resources, and performance. Organizations with a strong adhocracy culture adapt flexibly
to environmental changes and invest lots of resources to obtain novel information and knowledge
and use it in order to develop new products. It is important that such organizations maintain slack
resources to foster innovation [85]. Slack resources that firms use to implement their strategies that
improve their efficiency and effectiveness could have positive effects on firm performance [86–88].
However, CSR activities also lead to the consumption of slack resources. Organizations that are
strongly committed to CSR activities may not be able to allocate resources more efficiently; hence,
CSR activities are not likely to improve firm performance.

We conducted a post hoc analysis to empirically test our slack resource hypothesis as to why
Hypothesis 2 was not supported. Slack resources indicate potentially usable resources [88]. In previous
research, slack resources were measured as the debt to equity ratio or current ratio [89,90]. In our
research model, slack resources were added as control variables, and both adhocracy culture and CSR
were positively associated with firm performance. Slack resources were measured as the current ratio
and were positively associated with CSR. However, the interaction effect of an adhocracy culture and
CSR on firm performance was positive but not statistically significant. The reason for this result is that
the number of samples can be considered. In general, when examining the effect of slack resources
in a research model, it should be used with variables such as research and development (R&D)
intensity [11,91], calculated as a ratio of investment in R&D by total assets, and advertising
expenditure [92]. However, because of the large number of missing values in these variables, they were
not added in the post hoc analysis. For these reasons, the interaction effects appear to be insignificant.
Future research will need to consider slack resources as a control variable when verifying the effect of
CSR on firm performance. Similar to the results presented in this research, Hull and Rothenberg [92]
also showed that corporate innovation reduces the impact of CSR on firm performance.

Third, Hypothesis 3 predicted that the effects of CSR on firm performance would increase in
organizations with a strong market culture. In the empirical results, in cases of a weak market
culture, when there were few CSR activities, firm performance was higher. If organizations are
dominated by market culture, when CSR activities are increased, firm performance will be increased.
Organizations with a strong market culture respond sensitively to market consumers and work hard to
provide better services and products. They also offer diverse reward programs to motivate employees.
Thus, the findings suggest that a market culture is likely to enhance the positive effects of CSR on
firm performance.

Fourth, Hypothesis 4 predicted that the effects of CSR would decrease in organizations with
a strong hierarchical culture. Our results also supported this hypothesis. For organizations with
a strong hierarchical culture, the effects of CSR on firm performance decreased. Organizations
with a strong hierarchical culture emphasize cost efficiency, which enhances firm performance.
From the point of view of these organizations, CSR activities could have negative effects on cost
efficiency through the consumption of resources, thereby decreasing the positive effects of CSR on
firm performance.

Based on the results, this study makes the following contributions. First, the study empirically
showed the moderating role of organizational culture in the relationship between CSR and firm
performance. There has been little empirical research on the effects of organizational culture on CSR and
firm performance. Maignan and Ferrell [13] examined the effects of market-oriented, human-oriented,
and competition-oriented organizational cultures on CSR, but only market-oriented culture yielded
significant results. Thus, it would be necessary to conduct research on the relationship between organizational culture, CSR, and firm performance in different countries, especially in the non-Western context, in addition to developing a more comprehensive organizational culture model. In their research on the relationship between organizational culture and CSR, Linnenluecke and Griffiths [12] stressed the need for empirical research on the organizational culture CSR model. Aguinis and Glavas [1] argued that organizational values or contextual characteristics can have an effect on CSR, and they called for research on this matter. The present study contributed to the CSR literature by showing the moderating role of organizational culture in the relationship between CSR and performance.

Second, the results of the present study suggest that each organizational culture has different effects on the relationship between CSR and firm performance. In organizations with a strong clan culture and market culture, the positive relationship between CSR and firm performance was strengthened. In organizations with a strong adhocracy culture and hierarchy culture, the positive relationship between CSR and firm performance was weakened. In particular, a strong adhocracy culture and significant CSR in organizations can have a negative effect on firm performance. In organizations with a strong adhocracy culture and that were engaged in many CSR activities when slack resources were insufficient, the positive effects of CSR activities on firm performance decreased. In this sense, managers in an organization with a strong adhocracy culture should consider slack resources fully when initiating CSR activities.

Although our research contributes to the CSR literature in multiple ways, the study nevertheless faced limitations. First, as this study relied on panel data, CSR was measured by donation amounts. Although it seems suitable to measure CSR as charitable giving in the Korean context, this measure does not fully reflect the four dimensions of CSR defined by Carroll [16,93], which are commonly used. Despite the many disputes related to how well the measurement methods reflect the definition of CSR, as with the process model theoretically suggested by Basu and Palazzo [94], it is necessary to conduct empirical research through the development of methods of measuring CSR that can fully reflect the definition of CSR. Second, much of the data that we used in this study were from the manufacturing industry. As the purpose of this study was not to examine the effects of industry in the research model, we controlled the industry effect using dummy variables. Therefore, future research should use data pertaining to diverse industrial groups. Third, this study used SEM to correct measurement errors and estimate the moderating effects of the four cultural dimensions in a single model. In addition, data from 2013 for the independent variable and data from 2015 for the dependent variable were used to support the causal relationship. Though there was a time lag between the independent and dependent variables, this cannot explain the causal relationship clearly and still remained a causality problem. Therefore, future research is needed to clarify the causal relationship using a longitudinal approach (e.g., the latent growth model).

To expand the CSR literature, future research needs to focus on various topics related to organizational culture. Future research will need to investigate the differences in CSR effects between public and private sector organizations, and CSR effects across types of culture in terms of national, sub-organizational cultures, and professional cultures. It would be interesting to look at the effects of different types and sizes of organizations in future studies.

Author Contributions: Myeongju Lee and Hyunok Kim conceived and designed the idea of the paper; Myeongju Lee reviewed related previous literature and Hyunok Kim analyzed the data. All authors wrote and reviewed the manuscript. First author: Myeongju Lee. Second author: Hyunok Kim (corresponding author).

Conflicts of Interest: The authors declare no conflict of interest.

References

1. Aguinis, H.; Glavas, A. What We Know and Don’t Know About Corporate Social Responsibility: A Review and Research Agenda. J. Manag. 2012, 38, 932–968. [CrossRef]


88. George, G. Slack Resources and the Performance of Privately Held Firms. *Acad. Manag. J.* 2005, 48, 661–676. [CrossRef]

© 2017 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).