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The Impact of Shareholders' Types on Corporate Social Responsibility: Evidence from Japanese firms

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Abstract

Purpose

The purpose of this study is to use an empirical model to investigate the effects of eight types of shareholders on CSR investments in terms of the monetary amount and ratio of each investment.

Design/Methodology/approach

We used cross-sectional data obtained from Japanese companies in 2010 and estimated three equations which reflect the effects of various shareholders on three types of CSR using OLS.

Findings

The effects of shareholders on CSR investment are different depending on shareholder types. Investment funds and top management shareholders decrease each CSR investment, while the government, foreign companies and individuals, financial institutions, brokerages, and domestic companies and individuals increase CSR investments. Moreover, different shareholder types are interested in different CSR. Most shareholders are concerned with environmental policies, while foreign shareholders are also concerned with work-life balance policies. Investment funds shareholders pay attention to all kinds of CSR. In addition, most outside shareholders are only concerned about individual CSR investments rather than a company's entire CSR resource allocation strategy.

Originality/Value

This study empirically analyzes various types of shareholders, determining which hypothesis is valid and what type of shareholder increases or decreases CSR investment. This study considers shareholders' effects not only on each CSR action, but also in terms of an overall CSR strategy. Our study provides guidance for managers that they should take into account in order to respond to each type of shareholder when they make decisions on CSR.

Keywords: Corporate Social Responsibility; Corporate Governance; Investment Strategy; Shareholders; Japanese Firms

JEL Codes: M14; M21; D22

1. Introduction

Corporate social responsibilities (CSR) are defined as "policies or actions which identify a company as being concerned with society-related issues" (Roberts, 1992). CSR activities include investments in environmental protection, the community, and the health and development of employees. Many companies believe that shareholders now have concerns about CSR when they choose companies in which to invest; however, it is rarely examined empirically whether shareholders' decisions truly influence CSR. The aim of shareholders is to maximize personal financial benefits according to economic theory rather than to maximize social welfare. Given this perspective, it is doubtful that shareholders' concerns about CSR activities are salient enough to influence CSR management decisions.

The purpose of this paper is to investigate the effects of various types of shareholders on companies' investments in CSR in terms of the amount and ratio of each CSR investment. First, we examine whether each type of shareholder simply increases or decreases the amount of each CSR investment. This calculation will show whether shareholders are truly concerned about CSR. Second, we examine the ratio of each CSR investment to understand the effects of shareholders on the allocation of resources for CSR activities. Together, these two analyses reveal which CSR actions each type of shareholder is interested or disinterested in, and moreover, whether they are concerned with particular CSR investments or general resource allocations that represent larger CSR investment strategies.

This paper makes three contributions to the field. First, we use an empirical approach to examine the effects of shareholders on CSR investment. The role of shareholders in CSR activities is now thought to be more salient; yet, the relationship between shareholders and CSR has not yet been empirically tested. Previous studies, such as Jamali et al. (2008) and O'Riordan and Fairbrass (2008), provide only theoretical analyses of the link between CSR and shareholders. This paper fills this gap in the literature by drawing on a dataset of Japanese companies and using an empirical model to determine the role of shareholders in CSR.

Second, our analysis investigates various types of shareholders as determinants of CSR. Previous studies have focused on the link between CSR investment and financial performance, considering CSR investment as one of the determinants of financial performance (e.g., Balabanis et al, 1998; Al-Tuwaijri et al, 2004; Brammer et al, 2006). However, studies have not yet examined the determinants of CSR investment, particularly the effects of shareholders on CSR. This gap means that shareholders are unsure of their effects on CSR management and what they should do in order to enhance CSR activities. Thus, studies examining determinants of CSR are needed. In this study, we interrogate eight types of shareholders: the government, foreign companies and individuals, financial institutions, investment funds, brokerages, domestic companies, domestic individuals, and top management. This categorization breaks from previous studies which have perceived shareholders more broadly. For example, Reverte (2009) investigates shareholders' pressure by ownership concentration, while Coffey and Fryxell (1991), Johnson and Greening (1999), and Aguilera et al. (2006) focus on institutional investors. Jia and Zang (2012) examine managerial ownership. Thus, this paper contributes to our understanding of the role of shareholders in CSR by examining more closely a range of different types of shareholders.

Third, we examine the effects of shareholders in terms of both the monetary amount and ratio of each CSR investment. Previous studies have investigated CSR either by CSR rating, which is the summed index of a whole CSR activity, or the performance of a single CSR activity. For example, Barnea and Rubin (2010) define CSR as a binary variable of the CSR rating of each firm. These studies do not consider the relationship among CSR actions. However, because each CSR action is integrated into an overall CSR strategy, it is important to capture each action as part of the big picture. Examining not only the monetary amount but also the ratio of each CSR investment enables us to understand the effects of shareholders on the bigger CSR picture. In this paper, we show that shareholders are only concerned with the monetary amount of their interested activity, and that they do not pay attention to a whole CSR strategy.

This paper is organized as follows. The following section provides the theoretical background by reviewing previous studies on CSR (Section 2). Next, we describe and create the empirical model used for the analysis (Section 3). Section 4 explains the data and defines the variables while Section 5 presents and discusses the estimation results. Finally, we provide a summary of the main findings and discuss the practical implications (Section 6).

2. Theoretical background

2.1 Definition of CSR

As previously mentioned, Roberts (1992) defines CSR as "policies or actions which identify a company as being concerned with society-related issues". In previous empirical studies, researchers have defined CSR in various ways. Many studies consider CSR as a single activity, such as environmental protection efforts or policies for employee's rights. For example, Hart and Ahuja (1996), Henriques and Sadorsky (1999), and King and Lenox (2001) all understand CSR in terms of environmental protection investments. MacInnes (2005) considers CSR activities in terms of work-life balance policies. In contrast, other studies define CSR in terms of multiple activities. For example, Balabanis et al. (1998) interrogate CSR in terms of policies having to do with women's advancement, ethnic minorities, philanthropy, and environmental action. Similarly, Brammer et al. (2006) define CSR as having to do with community responsiveness, environmental responsibility, and employee responsibility.

Drawing on this literature, we define CSR in this paper as actions that contribute to society, policies for work-life balance, and activities designed to protect the environment. Actions that contribute to society correspond to the concepts of philanthropy in Balabanis et al. (1998) and community responsiveness in Brammer et al. (2006). The notion of work-life balance policies corresponds to policies for women's advancement in Balabanis et al. (1998) and employee responsibility in Brammer et al. (2006). Finally, activities designed to protect the environment correspond to environmental action in Balabanis et al. (1998) and environmental responsibility in Brammer et al. (2006).

2.2 Previous studies

Few studies have investigated the relationship between shareholders and CSR, and most of this literature focuses on the question of whether CSR leads to better financial performance (e.g., Ullmann 1985; Balabanis et al, 1998; Al-Tuwaijri et al, 2004; Brammer et al, 2006; Mahoney and Roberts 2007). These studies consider CSR as one of the explanatory factors for corporate performance, and they explore this relationship not only through theoretical analyses but also empirical investigations. Overall, results show that policies for women's advancement, donations to charity group, and regional contributions tend to improve financial performance, while environmental protection activities tend to worsen financial performance (e.g., Al-Tuwaijri et al, 2004; Brammer et al, 2006).

On the other hand, even fewer studies have investigated the determinants of CSR investment, and thus the relationship between shareholders and CSR remains unexamined (e.g., Chih et al. 2010). One study, Aguilera et al. (2006), draws on a theoretical perspective to analyze the effect of institutional investors on CSR. The authors argue that CSR initiatives are motivated by three factors: instrumental, relational, and moral factors. Instrumental factors have to do with self-interest, which is represented by corporate financial performance. Relational factors have to do with status in a group and moral factors have to do with ethics and large groups, for example, the society as a whole. These factors play important roles when corporate stakeholders force companies to invest in CSR activities. In particular, Aguilera et al. (2006) show that institutional investors are mainly motivated by instrumental factors because these investors are forced to maximize their customers' investment returns. However, this important finding from Aguilera et al. (2006) is the result of theoretical analysis and not an empirical approach.

Another significant study examining CSR determinants is found in Jamali et al. (2008). These authors show that corporate governance plays an important role in CSR by highlighting the interdependent relationship between these two entities. In their study, various stakeholders such as employees, customers, and the community are included in the corporate governance system. Their study is valuable because they investigate the link between corporate governance and CSR by conducting interviews with top managers. According to their findings, for many companies, corporate governance is a key determinant of CSR, and moreover, CSR does not exist either as a continuum or a dimension of corporate governance. Rather, their study suggests that the shareholders, which occupy an important part of corporate governance, are key determinants of CSR. While they do understand the role of shareholders as part of corporate governance, they do not make detailed classifications of the different types of shareholders. Therefore, their study leaves open the question about the role of each type of shareholder in CSR.

O'Riordan and Fairbrass (2008) also investigate CSR determinants in the context of stakeholder dialogue, which crucially influences a manager's decision to put into practice certain CSR policies. According to these authors, four factors affect stakeholder dialogue about CSR: context, event, stakeholders' characteristics, and management response. Context is the ground on which managers and stakeholders operate. Event captures the particular episodes, such as innovations and media announcements, which influence managers' and stakeholders' decisions. Management response emerges

from the interaction between these two factors. Finally, stakeholders' characteristics, which we examine in this paper, include various factors such as stakeholders' identification and prioritization, company's success levels, industry types, and governance. The authors argue that managers first identify and prioritize their shareholders when they choose which CSR policies to implement. Second, managers recognize shareholders' expectations, including the factors influencing shareholders' expectations, such as success levels, industry types, and governance. Their study suggests a clear relationship between CSR and shareholders, i.e., managers undertake CSR activities in response to the shareholders' requirements.

Some studies suggest that CSR investments are determined by the interaction between shareholders. For example, Barnea and Rubin (2010) argue that the difference in goals between insiders, who have relatively high interests in companies, and institutions and individuals, who have relatively low interests in companies, leads to conflicts in CSR decision-making. Since insiders' reputations often emerge from CSR investments, they tend to overinvest in CSR. In contrast, institutions and individuals tend to limit CSR investments to a certain portfolio value. Thus, according to Barnea and Rubin (2010), the differences between ownership structures influence CSR investments. Roberts (1992), Reverte (2009), and Dam and Scholtens (2012) agree with Barnea and Rubin (2010) in that different types of ownership affect CSR investments.

In summary, although the importance of the roles of shareholders in CSR practices is recognized by many researchers and examined through theoretical analyses, the literature provides little empirical evidence to support these findings. This paper addresses this gap and empirically investigates the roles of eight types of shareholders in CSR, namely, the government, foreign companies and individuals, financial institutions, investment funds, brokerages, domestic companies, domestic individuals, and top management.

2.3 Link between shareholders and CSR

According to stakeholder theory, corporate managers make decisions in order to meet stakeholders' demands and therefore the level of stakeholder power is a crucial factor in corporate decisions (Roberts 1992). Ullmann (1985) suggests that stakeholder theory can also apply to the decision-making process of CSR activities by showing that companies' social disclosures are determined by the level of stakeholder power. Thus, our hypothesis that shareholders influence CSR investments is consistent with stakeholder theory.

Shareholders can affect CSR in two ways. First, shareholders can decrease the amount of money spent on CSR investment. As principal-agent theory shows, the aim of shareholders is to maximize personal financial benefits rather than maximize social welfare (Jensen and Meckling 1976). Although CSR can indirectly contribute to financial benefits if the company's reputation improves, shareholders are more attracted to direct investments in economic activities than indirect investments through CSR. Thus, we expect shareholders to pressure companies to invest in economic activities rather than in CSR activities. The hypothesis reflecting this expectation can be expressed as follows.

[H1] Shareholders decrease the amount of money spent on CSR investment.

Second, shareholders can also increase the amount of money spent on CSR investment. Recent managerial theories show that shareholders have motivations to pressure companies to invest in CSR. According to Aguilera et al. (2006), shareholders have relational, moral, and instrumental motivations for CSR activities. Recently, shareholders are typically more interested in the companies' moral responsibilities, reflecting increased social concern about the environment, labor issues, and other societal problems. Thus, we expect shareholders who are interested in these issues to pressure companies to invest in CSR. The hypothesis reflecting this expectation can be expressed as follows.

[H2] Shareholders increase the amount of money spent on CSR investment.

Both hypotheses can be considered true from a theoretical perspective. From an empirical perspective, the effects of shareholders on CSR can change depending on the types of shareholders and CSR actions. For example, Coffey and Fryxell (1991) show that institutional ownership increases representation of women policies but it has no effect on charitable giving. Dam and Scholtens (2012) indicate that employees and individuals decrease CSR investment while institutional ownership does not have significant effects. In this paper, we empirically test for each type of shareholder whether *[H1]* or *[H2]* is valid by drawing on data from Japanese companies.

3. Model

3.1 Model structure

As previously mentioned, this study examines the effect of eight types of shareholders on CSR investment: the government, foreign companies and individuals, financial institutions, investment funds, brokerages, domestic companies, domestic individuals, and top management. We specifically focused on three types of CSR investments: activities for social contribution, work-life balance, and environmental protection. The model structure is shown in equation (1).

$$CSR_i = f\,(SHAR_{GOV}, SHAR_{FOREIGN}, SHAR_{FINANC}, SHAR_{INVFUN}, SHAR_{BROKE}, SHAR_{COMP}, SHAR_{INDIV}, SHAR_{MANAG}, D_i),$$

where i= *SOCIAL, WORK, ENV.* (1)

In this model, CSR_i is investment in CSR activities (i=*SOCIAL, WORK, ENV*), $SHAR_{GOV}$ is governmental ownership, $SHAR_{FOREIGN}$ is foreign ownership, $SHAR_{FINANC}$ is ownership by financial institutions, $SHAR_{INVFUN}$ is ownership by investment funds, $SHAR_{BROKE}$ is ownership by brokerages, $SHAR_{COMP}$ is ownership by other companies, $SHAR_{INDIV}$ is ownership by individuals, and $SHAR_{MANAG}$ is ownership by

top management. We include industry dummies (D_i) as control variables for the difference among industries.

3.2 Empirical model

Based on equation (1), we specify the empirical model as follows:

$$CSR_{SOCIAL} = \beta_1 + \beta_2 SHAR_{GOV} + \beta_3 SHAR_{FOREIGN} + \beta_4 SHAR_{FINANC} + \beta_5 SHAR_{INVFUN} + \beta_6 SHAR_{BROKE} + \beta_7 SHAR_{COMP} + \beta_8 SHAR_{INDIV} + \beta_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i \quad (2)$$

$$CSR_{WORK} = \chi_1 + \chi_2 SHAR_{GOV} + \chi_3 SHAR_{FOREIGN} + \chi_4 SHAR_{FINANC} + \chi_5 SHAR_{INVFUN} + \chi_6 SHAR_{BROKE} + \chi_7 SHAR_{COMP} + \chi_8 SHAR_{INDIV} + \chi_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i \quad (3)$$

$$CSR_{ENV} = \delta_1 + \delta_2 SHAR_{GOV} + \delta_3 SHAR_{FOREIGN} + \delta_4 SHAR_{FINANC} + \delta_5 SHAR_{INVFUN} + \delta_6 SHAR_{BROKE} + \delta_7 SHAR_{COMP} + \delta_8 SHAR_{INDIV} + \delta_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i. \quad (4)$$

In this model, CSR_{SOCIAL} is investment in social contributions, CSR_{WORK} is investment in work-life balance, CSR_{ENV} is investment in environmental protection. The sample sizes used in each equation are different, thus we estimate each equation using the OLS method to avoid loss of information as a result of dropping data by simultaneous estimation.

Moreover, in order to examine the ratio of each CSR investment, we estimate the following equations with *RCSR* as the dependent variable and the same independent variables as equations (2)-(4).

$$RCSR_{SOCIAL} = \beta_1 + \beta_2 SHAR_{GOV} + \beta_3 SHAR_{FOREIGN} + \beta_4 SHAR_{FINANC} + \beta_5 SHAR_{INVFUN} + \beta_6 SHAR_{BROKE} + \beta_7 SHAR_{COMP} + \beta_8 SHAR_{INDIV} + \beta_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i \quad (5)$$

$$RCSR_{WORK} = \chi_1 + \chi_2 SHAR_{GOV} + \chi_3 SHAR_{FOREIGN} + \chi_4 SHAR_{FINANC} + \chi_5 SHAR_{INVFUN} + \chi_6 SHAR_{BROKE} + \chi_7 SHAR_{COMP} + \chi_8 SHAR_{INDIV} + \chi_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i \quad (6)$$

$$RCSR_{ENV} = \delta_1 + \delta_2 SHAR_{GOV} + \delta_3 SHAR_{FOREIGN} + \delta_4 SHAR_{FINANC} + \delta_5 SHAR_{INVFUN} + \delta_6 SHAR_{BROKE} + \delta_7 SHAR_{COMP} + \delta_8 SHAR_{INDIV} + \delta_9 SHAR_{MANAG} + \Sigma_t \delta_t D_i. \quad (7)$$

Here, *RCSR* is the investment ratio of each CSR activities. $RCSR_{SOCIAL}$ is the ratio of investment in social contributions, $RCSR_{WORK}$ is the ratio of investment in work-life balance, and $RCSR_{ENV}$ is the ratio of investment in environmental protection. We predict that companies allocate resources for CSR policies

for social contributions, work-life balance, and environmental protection, including all of these or only some of these. While the dependent variables of equations (2)-(4) are the monetary amounts of each investment, the equations (5)-(7) represent the ratio of investment.

4. Data and method

4.1 Sample and data

We use cross-sectional data from Japanese companies in 2010 across all industries which are traded at Tokyo Stock Exchange. These data are obtained from NEEDS Financial QUEST by Nikkei Digital Media, and CSR data are obtained from *CSR Kigyo Souran*, which is provided by Toyokeizai. We collected data on Japanese companies because there is a large amount of available information on their CSR activities and governance structures. For example, CSR data by Toyokeizai includes information about environmental accounting, firms' efforts towards solving employment problems, and social action programs, all of which are important for calculating the variables in our study.

The size of the data is different for each equation. We used data from 384 companies for the CSR_{SOCIAL} equation, 268 companies for the CSR_{WORK} equation, 561 companies for the CSR_{ENV} equation, and 188 companies for the *RCSR* equations. As stated before, we estimate each equation separately using the OLS method to avoid loss of information as a result of dropping data by simultaneous estimation.

4.2 Definition of the variables

The definitions and summary statistics of the variables used in the analysis are shown in Table 1. Among the three CSR activities, companies invest in environmental protection most since the mean of CSR_{ENV} is larger than CSR_{SOCIAL} or CSR_{WORK}. Moreover, the mean of $RCSR_{ENV}$ is 0.762, which indicates that resources for CSR activities are mostly allocated into environmental policies. These facts show that CSR activity means environmental investment for many Japanese companies.

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Table 1 Here

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We define CSR_{SOCIAL} as the monetary amount of investment in social contributions, CSR_{WORK} as the monetary amount of investment in work-life balance, and CSR_{ENV} as the monetary amount of investment in environmental protection. While CSR_{SOCIAL} and CSR_{ENV} are raw data, CSR_{WORK} is computed by multiplying the number of employees taking parental leave by the average annual earnings of employees. The result represents the proxy variable, calculated using the available data, for the costs put in work-life balance programs.

RCSR is the ratio of each investment. $RCSR_{SOCIAL}$ is defined as $(CSR_{SOCIAL})/(CSR_{SOCIAL}+ CSR_{WORK}+ CSR_{ENV})$, $RCSR_{WORK}$ as $(CSR_{WORK})/(CSR_{SOCIAL}+ CSR_{WORK}+ CSR_{ENV})$, and $RCSR_{ENV}$ as

(CSR_{ENV})/(CSR_{SOCIAL}+ CSR_{WORK}+ CSR_{ENV}).

Each *SHAR* is defined as follows. $SHAR_{GOV}$ is calculated as the ratio of stock held by the government and public organizations to total stock, $SHAR_{FOREIGN}$ as the ratio of stock held by foreign companies and individuals to total stock, $SHAR_{FINANC}$ as the ratio of stock held by financial institutions to total stock, $SHAR_{INVFUN}$ as the ratio of stock held by investment funds to total stock, $SHAR_{BROKE}$ as the ratio of stock held by brokerages to total stock, $SHAR_{COMP}$ as the ratio of stock held by the other domestic companies to total stock, $SHAR_{INDIV}$ as the ratio of stock held by domestic individuals to total stock, and finally, $SHAR_{MANAG}$ represents the ratio of stock held by top management to total stock. Industry dummies are determined by using the two-digit level of *Japan Standardized Industrial Classification*.

5. Estimation results and discussion

The estimation results are shown in Table 2. We consider these results reasonable because the estimated coefficients are stable among the models with different subsamples and different combinations of variables. Thus, we focus our discussion on the results shown in Table 2 for the rest of this section.

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Table 2 Here

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5.1 Results for the monetary amount of each CSR investment

The most important result from this analysis is that the effects of shareholders on CSR investment are different depending on shareholders' types. That is, not all shareholders are concerned with CSR actions. Some shareholders prefer direct financial benefit obtained from business activities to indirect social benefit obtained from CSR activities. This means that which hypothesis *[H1]* or *[H2]* is valid depends on the types of shareholders. Moreover, which CSR action shareholders are interested in is also different depending on shareholders' types. Most of them are concerned with environmental policies, while foreign shareholders are also concerned with work-life balance policies. Investment funds shareholders tend to discourage companies to invest in all kinds of the actions.

For investment funds and top management shareholders, *[H1]* is valid. Our result shows that these two types of shareholders decrease each CSR investment. This result is clear given that the coefficients for these two types of shareholders are negative in equations of *CSR*. Moreover, the coefficient for investment funds is significant in all equations and the coefficient for top management is significant in the environmental protection equation. This result is reasonable because top management is interested in business activities which lead to financial benefits rather than social activities which do not directly lead to financial benefits. Investment funds also assign greater value to the benefit of a company than the value of society, since these funds are required to produce high returns on their customers' investments, which is consistent with Aguilera et al. (2006).

On the other hand, for the shareholders such as the government, foreign companies and individuals, financial institutions, brokerages, and domestic companies and individuals, *[H2]* is valid. Our result shows that these shareholders tend to increase the monetary amount of CSR investments. This finding is clear given that the coefficients for these shareholders are mostly positive. These shareholders might have relational, moral, and instrumental motivations for CSR activities as shown in Aguilera et al. (2006). In particular, the fact that the government and financial institutions increase CSR investment is consistent with Prado-Lorenzo et al. (2009), who indicate that companies respond to the interests of the shareholders possessing large power.

Moreover, the shareholders that increase CSR investment are concerned about social contributions for most of the CSR activities, given the strong significance found in the CSR_{SOCIAL} equation. In contrast, they are not as interested in environmental protection and work-life balance issues since the coefficients for these shareholders are not significant in the CSR_{ENV} and CSR_{WORK} equations. This result might be the case because many companies invest in environmental protection activities, and shareholders consider these types of activities as standard among all companies. As a result, shareholders might not pay close attention to these activities. They also do not appear to recognize work-life balance as a type of CSR investment. Except for foreign shareholders, these shareholders consider work-life balance an issue to be handled by managers as part of labor management, not shareholders as part of CSR activities.

5.2 Relationship between the monetary amount and the ratio of CSR investment

Results suggest that most outside shareholders are concerned about the monetary amount of particular CSR investments that align with their own passions but ignore overall patterns of resource allocation for CSR investments. This finding is clear given that most of the coefficients are not significant in the models that have *RCSR* as a dependent variable. Only the coefficients for the investment funds in the $RCSR_{SOCIAL}$ equation and top management in the $RCSR_{WORK}$ equation are significant.

However, shareholders should consider the overall pattern of resource allocation for CSR investments rather than focus on the particular CSR investments that align with their interests. Diversified, rather than concentrated, investments boost a company's financial performance, as shown in the Appendix. Overall, investment funds play an important role in CSR strategy, since the coefficients for $SHAR_{INVFUN}$ in all *CSR* equations and $RCSR_{SOCIAL}$ equation are strongly significant. This finding is consistent with Aguilera et al. (2006), who suggest that institutional investors are motivated by instrumental factors, which are represented by financial performance. Because investment funds are required to maximize their customers' investment returns, these funds cause companies to decrease CSR investment and increase investments in economic activities. Thus, our results show that the interests of each type of shareholder are different. This means that not necessarily all shareholders share the same concerns about CSR, especially given that some of them are oriented more towards economic concerns.

5.3 Policy implications

Our results suggest the importance of aligning with investment funds when a company makes a decision about CSR management. Compared with the other shareholders, the attitude of investment funds is more severe toward CSR actions. This means that a company might be forced to embrace more costs in order to persuade investment funds shareholders. Governmental and foreign shareholders can be reliable fellows, since they have strong interests in CSR activities.

Moreover, managers should make more efforts to make shareholders consider overall patterns of resource allocation for CSR investments. Since most shareholders do not pay attention to the overall CSR strategy, the goals of managers and shareholders are not consistent. In order for efficient decision-making, managers and shareholders should share the same perspective. In addition, managers should work on the different goals among shareholders. For example, governmental shareholders are most interested in environmental policies while foreign shareholders are interested in not only environmental policies but also work-life balance. By making all shareholders consider overall patterns of resource allocation for CSR investment, managers can reduce the costs to respond to each shareholder's interest.

6. Conclusion

The purpose of this paper is to investigate the effects of various types of shareholders on companies' investments in CSR. We calculated these effects in terms of the monetary amount and ratio of each CSR investment. Analyses revealed the following results.

First, the effects of shareholders on CSR investment are different depending on shareholders' types. That is, not all shareholders are concerned with CSR actions. Some shareholders prefer direct financial benefit obtained from business activities to indirect social benefit obtained from CSR activities. Investment funds and top management shareholders are shown to decrease each CSR investment. Top management is interested in business activities that lead to financial benefits rather than social activities which do not directly lead to financial benefits. Investment funds also assign greater value to the company's benefit rather than that of society, since they are required to produce high returns on their customers' investments. In contrast, shareholders such as the government, foreign companies and individuals, financial institutions, brokerages, and domestic companies and individuals tend to increase the monetary amount of CSR investments. Moreover, these shareholders are most concerned about social contribution activities, and they are not as interested in environmental protection and work-life balance issues.

Second, different shareholder types are interested in different CSR actions. Most shareholders are concerned with environmental policies, while foreign shareholders are also concerned with work-life balance policies. Investment funds shareholders tend to discourage companies from investing in all kinds of CSRactions.

Third, most outside shareholders are concerned about the monetary amounts of particular CSR investments that are aligned with their own passions while ignoring larger patterns of resource allocation in CSR investment. However, shareholders should consider a company's entire CSR strategy rather than

focus on particular CSR investments because companies with diversified CSR investments perform better those with more concentrated investments.

In summary, this paper has some important implications for firm managers. First, aligning with the investment funds leads to more successful decisions about CSR management. Compared with the other shareholders, the attitude of investment funds is more severe toward CSR actions. This means that managers should pay more attention to the investment funds in order to obtain their support for CSR investments. Second, managers should make more efforts to make shareholders consider overall patterns of resource allocation for CSR investments. Since the goals of managers and shareholders are not consistent, it is necessary that managers and shareholders should work towards the same perspective for efficient decision-making. Managers should also work on the different goals among shareholders by making all shareholders consider overall patterns of resource allocation for CSR investment.

Our study has some limitations. Although we defined CSR activities in terms of policies having to do with social contributions, work-life balance, and environmental protection, there can also be the other types of CSR actions. The data required to investigate other types of CSR investment were unavailable; however, future studies should focus on additional types of CSR investment activities in order to provide a fuller understanding of the link between shareholders and CSR. In addition, the relationship between shareholders and CSR strategy can dynamically change. Although our study uses one cross-sectional data set, studies using panel data are also needed.

Appendix A. Concentration level of CSR investments on financial performance

The effects of concentration of CSR investments on financial performance are shown in Table 3.

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Table 3 Here

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CSRSD in Table 3 represents the standard deviation of the CSR investment ratio in a company. When the value of this variable is high, the investment is concentrated in a particular CSR activity. As the value decreases, the investment is diversified into various CSR activities. *ROA* represents a company's financial performance, which is expressed as return on assets. *FIRM*, *IND*, and *D* are control variables. $FIRM_{SIZE}$ is firm size calculated as total assets, $FIRM_{AGE}$ is firm age, and $FIRM_{CONCENT}$ is the level of concentration of shareholding. These variables express the firm's characteristics. In contrast, *IND* and *D* are the industry characteristics. IND_{GROWTH} is the industry growth calculated as the earnings growth in an industry, IND_{MONOP} is the monopoly level of an industry, which is calculated as Herfindahl-Hirschman Index, and *D* is the manufacturing industry dummy, which takes a value of 1 when the firm belongs to manufacturing industries, otherwise the value is 0.

The results in Table 3 show that higher *CSRSD* leads to lower *ROA* significantly, which means that concentrated investment in CSR results in lower performance. This might be the case because

stakeholders such as consumers and trading partners only pay attention to “how many actions the company implements” rather than “how deeply the company works on the actions.” In fact, it is easier for a company to explain their CSR actions to their stakeholders by addressing the number of CSR policies and giving brief profile of each action than by providing the detailed and particular explanation for each CSR action. Our result indicates the importance of working on many kinds of CSR actions. Thus, in order to maintain a company’s high performance, shareholders should consider the overall pattern of resource allocation for CSR rather than pressure a company to invest in particular CSRs in which they are interested.

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Table 1 Summary Statistics

Variable	Definition	N	Mean	Std. Dev.	Min	Max	Variable	Definition	N	Mean	Std. Dev.	Min	Max
CSR_{SOCIAL}	Monetary amount of investment in social contributions (million yen)	384	268.906	928.090	0.000	12100.000	$D_{MACHINE}$	Dummy variable for machine industry	593	0.067	0.251	0.000	1.000
CSR_{WORK}	Monetary amount of investment in work-life valance (million yen)	561	337.628	751.311	0.000	8312.812	$D_{ELECMACHINE}$	Dummy variable for electric machine industry	593	0.123	0.329	0.000	1.000
CSR_{ENV}	Monetary amount of investment in environmental protection (million yen)	268	9241.922	23361.650	5.000	207400.000	D_{CAR}	Dummy variable for car industry	593	0.046	0.209	0.000	1.000
$RCSR_{SOCIAL}$	Investment ratio of social contributions	188	0.076	0.124	0.000	0.675	D_{TRANS}	Dummy variable for transportation equipment industry	593	0.007	0.082	0.000	1.000
$RCSR_{WORK}$	Investment ratio of work-life valance	188	0.162	0.173	0.004	0.941	$D_{PRECISION}$	Dummy variable for precision machine industry	593	0.027	0.162	0.000	1.000
$RCSR_{ENV}$	Investment ratio of environmental protection	188	0.762	0.221	0.019	0.995	D_{OTHER}	Dummy variable for other manufacturing industry	593	0.032	0.176	0.000	1.000
$SHAR_{GOV}$	Ratio of stock held by government and public organizations to total stock	593	0.002	0.025	0.000	0.500	$D_{FISHERY}$	Dummy variable for fishery industry	593	0.002	0.041	0.000	1.000

$SHAR_{FOREIGN}$	Ratio of stock held by foreign companies to total stock	593	0.143	0.126	0.000	0.748	D_{MINING}	Dummy variable for mining industry	593	0.002	0.041	0.000	1.000
$SHAR_{FINANC}$	Ratio of stock held by financial institutions to total stock	593	0.258	0.131	0.002	0.619	$D_{CONSTRUCT}$	Dummy variable for construction industry	593	0.056	0.229	0.000	1.000
$SHAR_{INVFUN}$	Ratio of stock held by investment funds to total stock	593	0.042	0.032	0.001	0.259	D_{TRADE}	Dummy variable for trading industry	593	0.113	0.317	0.000	1.000
$SHAR_{BROKE}$	Ratio of stock held by brokerages to total stock	593	0.013	0.017	0.000	0.238	D_{RETAIL}	Dummy variable for retail industry	593	0.067	0.251	0.000	1.000
$SHAR_{COMP}$	Ratio of stock held by the other companies to total stock	593	0.238	0.178	0.002	0.767	D_{FINANC}	Dummy variable for finance industry	593	0.022	0.147	0.000	1.000
$SHAR_{INDIV}$	Ratio of stock held by individuals to total stock	593	0.342	0.198	0.030	0.966	$D_{REALEST}$	Dummy variable for real estate industry	593	0.025	0.157	0.000	1.000
$SHAR_{MANAG}$	Ratio of stock held by top management to total stock	593	0.045	0.107	0.000	0.866	D_{TRAIN}	Dummy variable for train and bus industry	593	0.007	0.082	0.000	1.000
D_{TEXT}	Dummy variable for textile industry	593	0.020	0.141	0.000	1.000	$D_{LANDTRANS}$	Dummy variable for land transportation industry	593	0.005	0.071	0.000	1.000
D_{PULP}	Dummy variable for pulp and paper industry	593	0.007	0.082	0.000	1.000	D_{SHIP}	Dummy variable for shipping industry	593	0.008	0.092	0.000	1.000
D_{CEM}	Dummy variable for chemical industry	593	0.084	0.278	0.000	1.000	$D_{AIRCARGO}$	Dummy variable for air-cargo industry	593	0.002	0.041	0.000	1.000

D_{DRUG}	Dummy variable for drug industry	593	0.027	0.162	0.000	1.000	D_{WARE}	Dummy variable for warehouse industry	593	0.007	0.082	0.000	1.000
D_{GUM}	Dummy variable for gum industry	593	0.013	0.115	0.000	1.000	D_{INFO}	Dummy variable for information and telecommunity industry	593	0.007	0.082	0.000	1.000
$D_{CERAMIC}$	Dummy variable for ceramic industry	593	0.019	0.135	0.000	1.000	D_{ELEC}	Dummy variable for electricity industry	593	0.013	0.115	0.000	1.000
D_{STEEL}	Dummy variable for steel industry	593	0.017	0.129	0.000	1.000	D_{GAS}	Dummy variable for gas industry	593	0.005	0.071	0.000	1.000
$D_{NONFERROUS}$	Dummy variable for nonferrous metal industry	593	0.027	0.162	0.000	1.000	$D_{SERVICE}$	Dummy variable for service industry	593	0.105	0.306	0.000	1.000

Table 2 Estimation Results

Dependent variable	*Monetary amount*						*Investment ratio*					
	CSR_{SOCIAL}		CSR_{WORK}		CSR_{ENV}		$RCSR_{SOCIAL}$		$RCSR_{WORK}$		$RCSR_{ENV}$	
Independent variable	Coef.	(Std. Err.)	Coef.	(Std. Err.)	Coef.	(Std. Err.)	Coef.	(Std. Err.)	Coef.	(Std. Err.)	Coef.	(Std. Err.)
$SHAR_{GOV}$	15120.060***	(5002.756)	-423.730	(1224.926)	-179035.900	(247486.300)	0.464	(2.872)	-1.124	(3.164)	0.660	(4.022)
$SHAR_{FOREIGN}$	11019.510**	(5276.336)	1844.000*	(947.032)	-108576.500	(251823.400)	0.325	(2.853)	-1.051	(3.179)	0.725	(4.021)
$SHAR_{FINANC}$	9709.442*	(5329.055)	109.719	(1202.312)	-143570.200	(256279.300)	0.040	(2.924)	-1.126	(3.218)	1.086	(4.098)
$SHAR_{INVFUN}$	-4036.490***	(1463.883)	-2490.838***	(732.573)	-90550.090**	(39997.390)	-0.405*	(0.217)	0.375	(0.667)	0.031	(0.682)
$SHAR_{BROKE}$	10730.760*	(5615.025)	-45.849	(1645.957)	-168943.500	(262359.200)	0.511	(3.079)	-1.865	(3.193)	1.354	(4.283)
$SHAR_{COMP}$	8847.969*	(5131.406)	-335.600	(1116.986)	-166177.000	(251363.200)	-0.032	(2.889)	-1.026	(3.196)	1.057	(4.048)
$SHAR_{INDIV}$	9264.455*	(5227.394)	-327.256	(1029.536)	-144439.900	(255112.200)	0.186	(2.882)	-0.899	(3.233)	0.713	(4.080)
$SHAR_{MANAG}$	-252.125	(220.023)	-68.177	(198.882)	-32688.610	(24785.720)	-0.420	(0.296)	1.642*	(0.862)	-1.222	(0.990)
D_{TEXT}	-49.494	(198.183)	56.827	(101.506)	-5145.863*	(2962.587)	-0.079***	(0.027)	0.030	(0.076)	0.049	(0.066)
D_{PULP}	-156.228	(144.222)	-191.469**	(86.475)	3965.434	(3059.815)	-0.103***	(0.025)	-0.103***	(0.037)	0.206***	(0.042)
D_{CEM}	-145.084	(163.648)	-148.246	(110.563)	314.568	(2455.873)	-0.080***	(0.030)	-0.064	(0.041)	0.144***	(0.051)
D_{DRUG}	646.766	(602.774)	108.804	(143.398)	-8496.506***	(3208.982)	0.086	(0.091)	0.115	(0.072)	-0.201***	(0.076)
D_{GUM}	-133.184	(156.259)	-194.424**	(95.832)	1598.821	(2940.310)	-0.036	(0.023)	-0.058	(0.046)	0.094**	(0.043)
$D_{CERAMIC}$	-216.967	(186.619)	-170.029	(116.213)	-708.726	(3397.848)	-0.055	(0.061)	0.004	(0.059)	0.051	(0.108)
D_{STEEL}	-165.561	(156.482)	-149.485*	(83.423)	37480.800***	(12953.040)	-0.052*	(0.029)	-0.092**	(0.042)	0.144***	(0.047)
$D_{NONFERROUS}$	-343.839**	(157.900)	-131.862	(97.093)	-2216.528	(2038.024)	-0.109***	(0.025)	0.019	(0.073)	0.090	(0.079)
$D_{MACHINE}$	-229.752	(159.824)	-81.740	(102.143)	-1752.028	(2447.237)	-0.095***	(0.026)	0.020	(0.051)	0.075	(0.052)
$D_{ELECMACHINE}$	15.706	(190.600)	306.702*	(169.768)	3235.440	(3251.153)	-0.087***	(0.024)	0.018	(0.043)	0.069	(0.043)
D_{CAR}	542.049	(687.506)	185.168	(224.468)	25811.040*	(14674.940)	-0.096***	(0.029)	0.012	(0.053)	0.084	(0.059)
D_{TRANS}	64.279	(162.111)	-72.514	(95.349)	444.521	(2536.426)	(omitted)		(omitted)		(omitted)	
$D_{PRECISION}$	-305.727*	(156.794)	-109.842	(88.524)	-3170.649	(2723.719)	-0.098***	(0.029)	0.070	(0.062)	0.028	(0.063)
D_{OTHER}	-287.517*	(162.985)	-127.025	(90.543)	-1199.485	(2318.307)	-0.015	(0.091)	0.100	(0.095)	-0.085	(0.114)

$D_{FISHERY}$	(omitted)		169.753*	(93.750)	1649.865	(4856.380)	(omitted)		(omitted)		(omitted)	
D_{MINING}	-1765.734***	(112.551)	-238.150***	(80.162)	5489.459	(6585.233)	0.451***	(0.015)	0.148***	(0.026)	-0.599***	(0.028)
$D_{CONSTRUCT}$	-162.675	(150.953)	6.693	(91.772)	2193.909	(2472.804)	-0.105***	(0.023)	-0.009	(0.076)	0.114	(0.078)
D_{TRADE}	-212.092	(152.712)	-145.566*	(86.591)	-3355.126	(3458.718)	0.019	(0.060)	0.195**	(0.093)	-0.214**	(0.104)
D_{RETAIL}	-20.516	(180.224)	187.320	(138.972)	2444.091	(3206.635)	-0.022	(0.054)	0.100	(0.117)	-0.079	(0.145)
D_{FINANC}	-350.662*	(199.058)	-207.678*	(114.871)	3126.359	(3738.361)	0.015	(0.066)	0.187*	(0.103)	-0.202	(0.131)
$D_{REALEST}$	-148.812	(171.505)	-283.288**	(110.891)	-4121.717	(5278.265)	0.017	(0.065)	-0.078*	(0.046)	0.061	(0.080)
D_{TRAIN}	-301.494*	(164.548)	93.134	(265.986)	-5360.939	(3390.273)	-0.125***	(0.027)	-0.111**	(0.047)	0.236***	(0.049)
$D_{LANDTRANS}$	-245.673*	(146.904)	-138.378	(102.908)	(omitted)		(omitted)		(omitted)		(omitted)	
D_{SHIP}	-109.736	(188.461)	-480.958***	(144.158)	-12646.920***	(3250.982)	0.159**	(0.087)	-0.061	(0.039)	-0.098	(0.091)
$D_{AIRCARGO}$	29.787	(153.161)	-7.817	(94.838)	(omitted)		(omitted)		(omitted)		(omitted)	
D_{WARE}	-316.179**	(147.729)	-194.949**	(90.131)	(omitted)		(omitted)		(omitted)		(omitted)	
D_{INFO}	2642.092	(1992.437)	2509.670***	(768.550)	8886.788	(9289.534)	0.097	(0.067)	0.183	(0.132)	-0.280***	(0.076)
D_{ELEC}	284.991	(725.175)	787.443**	(361.211)	56598.850***	(19069.940)	-0.127***	(0.022)	-0.084*	(0.043)	0.211***	(0.043)
D_{GAS}	36.471	(163.688)	-100.051	(90.907)	-4336.646	(2841.626)	-0.098***	(0.024)	-0.068	(0.042)	0.166***	(0.043)
$D_{SERVICE}$	-166.785	(154.900)	17.159	(90.334)	4445.113	(4369.929)	-0.037	(0.041)	0.177	(0.177)	-0.140	(0.197)
constant	-9005.500*	(5127.826)	328.409	(1085.770)	152991.900	(251880.900)	0.037	(2.874)	1.144	(3.178)	-0.181	(4.034)
N	384		561		268		188		188		188	
R-sq	0.238		0.279		0.341		0.453		0.352		0.387	

Notes

(1) Numbers in parentheses are standard errors.

(2) Significant at 1% (***), 5% (**), and 10% (*).

Table 3 Result on the Relation with Performance

ROA	Coef.	(Std. Err.)
CSRSD	-0.038*	(0.023)
$FIRM_{SIZE}$	1.270E-06	(2.260E-06)
$FIRM_{AGE}$	1.351E-04	(1.324E-04)
$FIRM_{CONCENT}$	0.014	(0.016)
IND_{GROWTH}	0.001***	(3.980E-04)
IND_{MONOP}	-0.006	(0.014)
$D_{MANUFAC}$	0.001	(0.006)
constant	0.023	(0.018)
N	196	
R-sq	0.179	

Notes

(1) Numbers in parentheses are standard errors.

(2) Significant at 1% (***), 5% (**), and 10% (*).