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How Japanese firms address the issues of the environment, society, and governance: A corporate governance perspective

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Abstract

Interest in environment, society, and governance (ESG) and ESG-related investment issues has increased worldwide recently. However, interest in Japan has remained low until recently. This is unexpected because Japanese firms are considered stakeholder-oriented corporate governance and assumed to be interested in ESG issues. Thus, this study firstly examines the nature of ESG investments in Japan, and then investigates how Japanese firms address ESG issues, focusing on the nature of corporate governance structure which comprises internally promoted managers, foreign shareholders, and independent directors. Using corporate-level raw data from 1,522 listed firms from 2009 to 2016, this study shows that both internal managers and foreign shareholders promote ESG engagement by considering corporate performance, whereas independent directors promote ESG engagement by considering stakeholder interests. Our empirical research shows that independent directors in Japanese firms have a dual function of representing shareholder and stakeholder interests.

Keywords: ESG/CSR, corporate governance, independent directors, foreign shareholdings

JEL classification: M14 (social responsibility), G34 (corporate governance)

1. Introduction

Interest in environment, society, and governance (ESG) and ESG-related investment issues has increased recently. The 2006 Principles for Responsible Investment (PRI) of the United Nations initiated this trend, which was amplified by the 2008 global financial crisis and the subsequent rise of distrust in (and hostility to) shareholder capitalism. Thus, Mayer (2009) warned that the corporate system would be unsustainable if pursuing short-term shareholder interests neglects the responsibility of commitment to stakeholder interests. Therefore, the author concludes that long-term shareholders are necessary to enable long-term stakeholder-oriented management. While Mayer (2013) is skeptical of institutional investors' behavior, those who get involved in ESG announce that they are responsible for the gradual shift in focus "from the stockholder to the stakeholder" (Arabesque Partners 2015). Recently, the US Business Roundtable, comprising CEOs of major US companies, declared a shared commitment to "all" stakeholders, as if in response to Mayer's warning.

Given these circumstances, Japanese firms may be considered front-runners in ESG and ESG-related investment engagement because they have been characterized by stakeholder-oriented corporate governance. Until recently, however, Japanese firms have rarely addressed ESG issues. Although they paid attention to corporate social responsibility (CSR) in the early 2000s in response to the global trend (Tanimoto, 2006), actual activities, including socially responsible investment (SRI), were sluggish; thus, interest ended with a temporary boom. Since then, interest shifted from CSR to ESG along with an increase in institutional investors' ESG investments. However, the amount of their investments was small, as will be seen later. While this situation has changed rapidly with the Government Pension Investment Fund (GPIF)—the largest public pension fund in the world—becoming a signatory of the UN's PRI global compact, actual activities addressing environmental, societal, and governance (ESG) issues are delayed.

Why Japanese firms are considered to have weak involvement in CSR and ESG. One reason may be that CSR envisioned by Japanese firms does not necessarily lead to activities required by CSR standards. This does not mean Japanese firms are without interest in CSR. Rather, they have often discussed the importance of CSR from the view of corporate citizen. The CSR reports of Japanese firms always note the contribution to society through their business activities. However, this result in focusing on providing socially useful products, including products to resolve environmental problems, rather than its specific actions toward

environmental and societal issues, such as carbon reduction and gender diversity. Therefore, Japanese firms tend to be low ranked in terms of CSR standards.

Another more decisive reason may be due to the nature of Japanese corporate governance. As conceptualized by Aoki (2014), Japanese firms shaped corporate structure based on the shared cognition between managers and employees, in contrast to the shared cognition between managers and shareholders in US firms. Thus, the essential issue of Japanese firms was to secure stable employment for "employees as a stakeholder," which has long been a matter of CSR for Japanese firms before the term CSR prevailed. However, this situation strengthened insider advantage. Such a nature of Japanese firms was often conceptualized as a "community firm" (Dore, 2000; Inagami and Whittaker, 2005), where only insiders are considered a stakeholder. Thus, outsiders, including shareholders, were treated as non-stakeholders, as they seemed not to be directly involved in the firm's activities. Consequently, outside issues related to the environment and society are rarely recognized as CSR matters.

It should be noted that ESG explicitly integrates governance issues with environmental and societal CSR issues. Governance issues require the transparency of management for outsiders by increasing independent board members and diversity. This is exactly the issue of corporate governance in Japan. While Japanese firms have been engaged in corporate governance reform over the past two decades, the transparency of management and outsider orientation remains insufficient. Therefore, if the reform of Japanese firms shifts from an insider to an outsider focus according to addressing the governance issue of ESG, involvement in outside issues on environment and society may increase. However, if the reform advances in the direction of US-style shareholder-dominated corporate governance, it may clash with the existing stakeholder orientation that provides stable employment as CSR. This situation, thus, creates a challenge for Japanese firms on how to engage and cope with both inside and outside stakeholders. ESG is, in this sense, not a temporary boom but a fundamental issue for Japanese firms.

Given these perspectives, this study firstly examines how ESG investments progress in Japan, and then investigates how Japanese firms promote ESG engagement from a corporate governance perspective. While previous studies often utilized CSR or ESG indicators via other databases that were already processed, our study is based on raw data from 1,522 listed firms during the 2009–2016 period from Bloomberg.

The remainder of this study is structured as follows: Section 2 presents an overview of the varieties of ESG investments and presents a framework for the following analysis; Section 3 explains the panel data used in this study; Section 4 examines the determinants of ESG involvement by Japanese firms from a corporate governance perspective; Section 5 analyzes how ESG activities treat environmental and societal issues, and Section 6 presents the discussion and conclusion of the study.

2. ESG investments and issues

While interest in ESG issues has progressed in line with an increase in institutional investors' ESG investments, ESG investment in Japan is not only small in amount, but also different in character from other countries. Therefore, it is assumed that involvement in ESG issues will also differ from other countries. Then, this section examines the varieties of ESG investment among regions and countries, and then investigate the nature of CSR and ESG in Japan. Table 1 summarizes worldwide ESG investments by the amount, policy, and composition ratio, based on the Global Sustainable Investment Alliance (GSIA) reports in 2016 and 2018 (Global Sustainable Investment Alliance, 2016; 2018)¹.

[Insert Table 1 here]

As already mentioned, the amount of ESG investments in Japan was small, accounted for only 2% of worldwide investments in 2016. While it has increased due to the entry of GPIF into ESG investments, it still accounts for only 7% in 2018. Additionally, investment policies are significantly different. Exclusion or divestment policy, such as "negative or exclusionary" screening—exclusion based on specific ESG criteria—and "norms-based" screening—exclusion based on standards set by international organizations, such as the International Labor Organization, is widespread in Europe; the sum of the two accounts for about 60% of their ESG investments. Contrastingly, inclusion or investment policies, such as "ESG integration"—investment based on both ESG and financial information—accounts for about half, followed by "negative screening" in the US; the sum of the two accounts for about 70 to

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¹ In the original data of GSIA, the amount of each policy is duplicated, so the sum of them exceeds the total amount displayed in Table1. The composition ratio of each policy is calculated based on the sum of all policies.

80%. Japan's pattern is also different; "corporate engagement"—investment with shareholder activism to management—accounts for about half, followed by "ESG integration;" the sum of the two accounts for about 80%. Although "positive screening," "sustainability-themed," and "impact/community" investing are likely preferable in terms of socially significant investment, neither are substantial in any region, while those increase in the US.

These varieties of ESG investment can be understood from the perspective of "Varieties of Capitalism" (VoC), which defines coordinated market economies (CMEs), such as those in Germany and Nordic countries, and liberal market economies (LMEs), such as those in the US and the UK (Hall and Soskice, 2001). Europe, categorized as CMEs except the UK, is characterized by a relatively strong social policies, which set social regulations and standards regarding environmental and societal issues. Companies are required to follow these regulations as part of their CSR, and as part of their stakeholder-oriented corporate governance (Jackson, *et.al.*, 2018). CSR and stakeholder-oriented corporate governance are this institutionalized at the social level. ESG investment is, therefore, focused on negative and norms-based screening types that exclude companies not complying with social regulations and standards. Conversely, ESG integration-type investing is less weighted. VoC theorists emphasize that CSR in CMEs is an institutional mirror or complementarity of social policy, with implicit activities (Matten and Moon, 2008; Jackson and Apostolakou, 2010; Brammer *et al.*, 2012; Kang and Moon, 2012). The implicit nature of CSR corresponds to the screening-type ESG investments.

Contrastingly, LME countries lack or weaken social regulations and standards. Thus, the ratio of screening-type is low compared to CMEs; especially, norms-based screening is reported as absent in the US, while negative-based screening raises the ratio. Instead, ESG investment is focused on ESG integration, based on two criteria: financial performance and good ESG behavior. It is also followed by corporate engagement-type investing with shareholder activism. This situation coincides with shareholder-oriented corporate governance in LMEs, where CSR is conducted separately from corporate governance, as highlighted by Tirole (2001). Therefore, CSR is voluntary, with explicit activities, including philanthropy by millionaires (Matten and Moon, 2008). One example from UK firms is particularly interesting; firms freely lay off employees for shareholder interests but provide financial support to training organizations for unemployed persons as CSR (Kinderman, 2012). Here,

CSR functions as a substitute for social policy². Hence, left-wing scholars hold a skeptical view of CSR (Reich, 2007). Furthermore, regarding voluntary CSR, Porter and Kramer (2006) emphasize that CSR should be considered as "strategic" instead of a burden, a strategy that improves the corporate brand, thereby increasing sales and profits. They further argue that CSR develops businesses to resolve environmental and societal issues and creates "shared value" (Porter and Kramer, 2011); that is, social value via CSR and economic value via private business. This also corresponds to ESG integration-type investments, accounting for about half of the US.

Compared to the above two types, Japan's ESG investment pattern is unique. While ESG investment increased 4.6 times from 2016 to 2018, led by GPIF, the growing investment concentrates on both corporate engagement and ESG integration types. This situation may be a result of the 2014 Stewardship Code and the 2015 Corporate Governance Code. Both modelled UK Codes, that required the institutional investors' engagement in corporate governance, and required corporate governance reform to improve management transparency and corporate performance (Lütz *et. al.*, 2011). Japanese institutional investors followed the two Codes, thereby focusing their ESG investment on corporate engagement-type on one hand and ESG integration-type on the other. Conversely, other socially responsible investments, the screening-types, received less focus in Japan. It is less than the US. The Japanese pattern of ESG investment is thus considered an institutional mirror of corporate governance reform led by the two Codes.

Scarcity of the screening-type investment may reflect the weakness of regulations and standards regarding social issues, such as work-life balance, gender equality, and diversity, while it is relatively strong on environmental issues due to past environmental pollution problems. Thus, as Jackson and Bartosch (2017) noted, Japanese firms are relatively highly ranked on environmental CSR but low on social CSR. Hence, CSR in Japan depends on firms' voluntary activities like the US. As already mentioned, CSR reports of Japanese firms always note the contribution to society through their business activities, especially the development of products and technologies to resolve environmental problems, which seems to be like the "shared value creation" advocated by Porter and Kramer (2006, 2011). This

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² As described by Jacoby (1997), it is the US tradition that limits government's social policy in exchange for providing employees with welfare by private companies.

corresponds to the striking increase in ESG integration-type of investment.

Japanese firms, however, are not likely to adopt a "strategic CSR" perspective. They instead seem to behave in accordance with the traditional norm of "company as a social institution", by which Japanese firms are strongly aware of social reputation and a norm to contribute to society, as in the case of German companies (Witt and Redding, 2012). Although Japanese firms strengthen insider advantage on their basis of stakeholder-oriented corporate governance and weaken interest in outside issues, traditional norm is likely to awake the consciousness of CSR. However, it is not certain whether CSR activities required by environmental and social issues are implemented. Instead, CSR issues may be strategically selected with the prospect of raising the corporate brand (Kotchen and Moon, 2011; Jones and Nisbet, 2011). Therefore, it is suggested that social regulations and standards are necessary to connect the awareness of social contribution with CSR activities, as seen in CME countries. Although German-style CSR may be considered to only achieve the baseline at which social regulations are legally enforced (Fifka, 2013), the Japanese case explains the necessity of a comprehensive and enforceable baseline.

In this way, despite that Japan is classified as a CME country based on stakeholder-oriented corporate governance, ESG investments and CSR activities do not seem to reflect a CME pattern. It rather follows an LME pattern, or a hybrid between LME and CME, as suggested by Schneider and Paunescu (2012). If the reason for a weak CSR in Japan is due to weak social regulations and insider advantage in corporate governance, there may be two ways to advance CSR involvement: strengthening social regulations as in the case of Germany, and reforming corporate governance toward outsider orientation as in the case of the US. In this study, we examine the latter perspective because it accords with the ESG flamework that integrates governance issues with CSR issues on environment and society. The main theme in this study is whether involvement in governance issues lead to the advancement of CSR involvement regarding environmental and social issues.

Here we present the two theoretical perspectives of CSR. One is presented by Bénabou and Tirole (2009), which argue that CSR activities are justified from the shareholder-primacy perspective if they are based on shareholder agreement and enhancement of corporate performance; otherwise, CSR reflects the firm manager's private interest. Shareholder agreement requires the transparent managerial decision-making—a matter of "corporate

engagement" type of ESG investment—and enhancement of corporate performance corresponds to the "strategic" and "shared value creating" CSR—a matter of "ESG integration" type of ESG investment.

In contrast, Harjoto and Jo (2011) and Harjoto *et al.* (2015) present another CSR perspective, focusing on the governance issue, which intends to improve management transparency and efficiency, and therefore increase shareholder interests. However, this may clash with stakeholder interests regarding environmental and societal issues, including the employment issues. Therefore, these authors note that CSR is required to resolve conflicts of interest between shareholders and stakeholders.

Which of the two types, performance-improving CSR and conflict-resolving CSR, will Japanese firms pursue? ESG investments, corporate engagement and ESG integration, fit with the former performance-improving type, and the CSR reports, shared value creation, also fit with the former type. Then, agency-type of CSR seems to be applied in Japan. Although this situation supports the view that ESG coincides with shareholder interests, a conflict between shareholder and stakeholder interests may be resulted.

In so far as ESG aims to maintain the sustainability of both management and society, conflicts need to be resolved by considering stakeholder interests. Particularly, Japanese firms seem to support conflict-resolving CSR, such as employment security and generalized awareness of social contribution. However, these are unlikely derived from ESG investments. From the agency theory perspective, it is regarded as firm manager's private interest and the entrenchment of shareholder interests. Therefore, the question of how stakeholder interests are considered in CSR and how conflict-resolving CSR is presented should be investigated.

From these perspectives, we focus on the corporate governance structure—comprising institutional investors, internally promoted managers, and outside independent directors. Institutional investors, especially foreign investors, represent shareholder interests; internal managers represent the existing Japanese corporate governance with insider advantage; and independent directors represent outsider orientation. In the following, we examine how the Japanese corporate governance structure advances its involvement in CSR/ESG, using corporate-level raw data.

3. ESG data

This section presents the ESG data from Bloomberg—comprising 1,522 Japanese firms listed on the Tokyo Stock Exchange (TSE) from 2009 to 2016. There are 20 items for each of the following categories: environment (E), society (S), governance (G), and financial data. Ten items comprise numerical data, another 10 items comprise categorical data such that Yes = 1, No = 0. Numerical data reveals the firms' activities on each ESG issue, while categorical data indicates the firms' policies on each ESG issue. Since the display of total data is too large, Table 2 shows the two items for each numerical and categorical data respectively, and the other data relevant to the following analysis.

[Insert Table 2 here]

Notably, the amount of data differs from item to item. While complete financial data were obtained, and 90% of governance data were obtained, there are large gaps in the data for the environment and society. While categorical data were in the 50% range for most items, numerical data remained in the 30% range. This seems to occur because Bloomberg's data were gathered from each company's formal announcements, such as securities, corporate governance, and CSR reports. Since governance data are disclosed in securities reports, 90% can be obtained. However, concerning environmental and societal data, descriptions differ, and items are imperfect; thus, missing data increases.

While the lack of data at the early stage is due to low concern for ESG, a large amount of missing data indicates Japanese firms' passiveness of information disclosure, especially of numerical data that displays the firm's activities³. For instance, the number of female directors is disclosed in securities reports, and such data are almost available in full. Contrarily, only 3% and 2% of data were obtained for female employee and female manager ratios, respectively, because they are not mandated, even though these variables are important from a societal perspective. A low level of ESG and CSR activities in Japan may be reflected by the reluctance to disclose data that displays firms' impact on environmental and societal issues. It has been reported that mandatory regulation of disclosure promotes CSR activities

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³ Comparing four South African and five Japanese companies considered to be advanced in the ESG Integrated Report, Miyanaga (2018) fund that disclosure on numerical data is significantly lower in Japanese companies than South African counterparts.

more, based on an international comparison (Jackson et al., 2020).

Regarding the categorical data on environmental items, we set "Yes" as 1, and "No" as 0; the score obtained by adding each "Yes" is interpreted as the degree of involvement in environmental issues (the E index). Similarly, regarding societal items, each "Yes" data point is added, and the score is interpreted as the degree of involvement in societal issues (the S index). Further, we indicate ESG involvement by extracting three governance items: "having a director in charge of CSR," "having a CSR and/or Sustainability Committee," and "adopting Global Reporting Initiative (GRI) standards." Each "Yes" data is then added, and the score is taken as the degree of involvement in ESG (the ESG index). As the GRI standards provide a format for preparing sustainability reports on ESG, it can be regarded as equivalent to having a CSR report. As described below, previous research uses "having CSR officers," "having a CSR-related department," and "having a CSR report" as indicators of CSR involvement.

Table 3 illustrates the average score for the ESG, E, and S indexes for each industry. Based on the average score of all industries, the ESG index is relatively high in the energy-intensive industries (oil/gas/electricity, materials/chemicals/steel) and consumer-related industries (food); the E index is relatively high in the food, pharmaceutical/medicine, and oil/gas/electricity industries, and the S index is relatively high in the information/communication industry including the above industries. Industries with a high score for the E and S indexes exhibited a high GPI score. Given that the GRI standard is a format for standardized sustainability reports, their ESG activities seem to be standardized, whereas the materials/chemicals/steel industries are low despite a relatively high ESG index⁴. While the construction/manufacturing industries occupy the largest proportion, their scores remain at an average level. The distribution/service and financial industries exhibit the lowest ESG, E, and S indexes.

[Insert Table 3 here]

⁴ Regarding the social items, the GRI standard corresponds to the issues of "work-style reform" challenged by contemporary Japanese firms. Therefore, if Japanese firms challenge the issues according to the GRI standard, work-life balance, gender equity, and diversity are expected to improve. However, information disclosure is insufficient.

Notably, the ESG index score is lower than that reported in previous studies, which consisted of (1) having CSR officers, (2) having a CSR-related department, and (3) having a CSR report. Suzuki *et al.* (2010) note proportions of (1) 35%, (2) 26%, and (3) 24% from an analysis of 725 companies in 2005, while Kato and Kodama (2016) note these proportions to (1) 61%, (2) 67%, and (3) 44% for 8,594 companies from 2006 to 2014. Contrastingly, Bloomberg data from 2009 to 2016 indicate values of 15% for "CSR-related directors," 3% for "CSR/Sustainability Committee," and 34% for "adopting GRI standards." The ratios of (1) and (2) are extremely low, whereas the ratio of (3) corresponding to the CSR report is almost equivalent. For this reason, Suzuki *et al.* (2005) used CSR survey data compiled by Toyo Keizai, Inc., while Kato and Kodama (2016) used data compiled by the Research Institute of Economy, Trade, and Industry (RIETI). These are gathered through questionnaires for individual firms. Contrarily, Bloomberg data are based on formally published corporate information.

The data used by Suzuki *et al.* (2005) and Kato and Kodama (2016), however, indicate that the ratio of CSR reports is substantially lower than the existence of the CSR officer and CSR department. That is, the effectiveness of leading CSR activities by the CSR officer and department without a CSR report is in doubt. With the Bloomberg data, the "CSR/Sustainability Committee" is set as directly linked and responsible to the board of directors. Therefore, even if the ratio is low, the effectiveness of leading ESG activities seems to be high. Next, we examined the determinants of ESG involvement.

4. Analysis of ESG behavior

This section examines how Japanese firms engage in ESG issues from a corporate governance perspective. The aforementioned arguments used the term CSR when engaged in environmental and social issues; here, we use the term ESG to investigate governance issues as well as environmental and social issues. Initially, we assumed that ESG will be promoted by corporate governance reform, which shifts from insider to outsider orientation. Next, we assumed that if Japanese firms engage in ESG in accordance with ESG investments, performance-improving CSR would follow. Hence, our question is how another conflict-resolving type of CSR would follow. If it is based on considering stakeholder interests, how does it arise in Japanese firms?

Suzuki *et al.* (2010) indicated that increasing foreign investment promotes CSR in Japanese firms. They note that CSR is perceived as a management innovation in Japan that foreign

investments facilitate. Their finding corresponds to the view that corporate governance reform which shifts to outsider orientation promotes ESG involvement. Conversely, Kato and Kodama (2016) found that CSR is promoted even in the existing management that holds long-term employment practices. Focusing on the promotion of female managers, they noted that female employees are at a disadvantage because promotion is based on long-term service in Japanese firms. They argue that CSR practices, such as gender diversity and work-life balance, encourage women to continue working. Consequently, female promotion will be facilitated, which results in the improvement of corporate performance through the effective use of female human resources. Their findings suggest that CSR is promoted even in insider-advantaged management to improve corporate performance.

Given these perspectives, we characterized the Japanese corporate governance via the Bloomberg data: "internal promotion of management" and "adoption of executive officer system." The former represents the existing nature of Japanese firms with insider advantage, while the latter represents the managerial reform aimed at strengthening managerial decision-making to improve corporate performance. Japanese firms began corporate governance reform around 2000 with the introduction of the executive officer system while maintaining the existing structure of internal promotion of management (Buchanan and Deakin, 2009).

We then distinguish four management structures according to whether managers are internally promoted, and the executive officer system is introduced. Table 4 displays the number of firms during the entire period, the composition ratio, total assets on average, average return on assets (ROA), independent directors' ratio among the board members, and foreign shareholdings ratio of all shareholdings for four types, J1, J2, J3, and J4.

[Insert Table 4 here]

J1 represents the traditional structure based on internally promoted managers without the adoption of an executive officer system, decreasing recently to about one-fourth of the listed companies. J2 represents a new style of management that introduces the executive officer system to improve corporate performance while maintaining managers' internal promotion, becoming the majority of Japanese firms. J3 represents an opposite structure to the traditional J1, based on externally appointed managers with the introduction of the executive officer system. J4 represents a variant of J2 and J3 based on external managers without an executive

officer system. The J3 and J4 firms are relatively small in scale; J3 is relatively high in the information and communication fields, and J4 is relatively high in the distribution and service fields.

Additionally, we used two variables regarding corporate governance reform: an increase in independent directors and foreign shareholdings. Foreign shareholdings have rapidly increased since the late nineties through the acquisition of stocks relinquished by banks. Foreign shareholders blamed the lack of or very few independent directors in Japanese firms for evidence of insider dominance and the entrenchment of shareholder interests. Therefore, shareholder activism always demanded an increase in independent directors. The New Corporate Law was enacted in 2014 requiring the appointment of at least one independent director, and the Corporate Governance Code was followed in 2015 requiring the appointment of at least two independent directors. Independent directors immediately increased, while 68% of firms in the TSE First section had no independent directors in 2010, and 88% had more than two independent directors in 2017 (Tokyo Stock Exchange, 2017).

Based on the above framework, we examined how governance structure affects the promotion of ESG involvement. The explained variable is the ESG index—indicating the degree of ESG involvement. The explanatory variables are the above four governance structures and two governance variables (independent directors and foreign shareholdings). As the explanatory variable, independent director is set as *Indepen*—a variable of the appointment of at least one independent director, and foreign shareholding is set as *Fs*—a variable of foreign shareholdings ratio of more than 10%, a medium percentage of all sample firms. We added cross variables between the four management structures and *Indepen* and *Fs* to examine the effects of independent directors and foreign shareholdings in each management structure. Each variable is set as a dummy variable, set to 1 when observed, and 0 otherwise. Furthermore, we used total assets (logarithmic transformation) as the control variables, and ROA is added to gauge whether well-performing firms evolve ESG practices. As the explained variable, the ESG index is a discrete value ranging from 0 to 3, we applied an ordered logit estimation with year and industry dummies. We set the J1 structure as a base category and examined the effects of other structures on ESG involvement.

From our initial assumption that Japanese firms were not actively involved in ESG because of insider-oriented corporate governance, the J1 structure, comprising internally promoted

managers is assumed to promote ESG the least. Contrastingly, according to Kato and Komada's (2016) findings that ESG is promoted even by the existing insider-advantaged management to improve corporate performance, the J2 structure is assumed to promote ESG. Regarding the J3 and J4 structures, the effect of externally appointed managers is examined, as compared to internally promoted managers. Similarly, independent directors (*Indepen*) and foreign shareholdings (*Fs*) are assumed to promote ESG involvement through the effect of corporate governance reform to increase management transparency and outsider orientation. Both acts, simultaneously, to put pressure on managers to increase corporate performance. The effects of these two aspects are then examined by the cross term between management structures and *Indepen* and *Fs*. Table 5 presents the results of the estimation.

[Insert Table 5 here]

First, column (1) indicates that the J2, J3, and J4 structures are more likely to promote ESG involvement compared to the J1 structure. The J2 structure's effect is as expected, showing that internal managers promote ESG when the executive officer system is introduced to improve corporate performance. Even though the J3 and J4 firms are small numbers, the fact that external managers are more actively involved in ESG than internal managers are important, while the J2 structure exhibit a more significant effect.

Second, column (2) indicates independent directors' appointment (*Indepen*) and a foreign shareholding ratio of over 10% (*Fs*) promote ESG involvement. Both represent a corporate governance reform that strengthens the influence of outsiders. Thus, the assumption that increasing outsider orientation promotes ESG seems to be verified. Third, column (3) shows that the effect of *Indepen* is not significant in any cross term between management structures, while the effect of *Fs* is significant only in the cross term with the J2 structure. Foreign shareholdings promote ESG involvement in management that intends to improve corporate performance, whereas independent directors promote ESG involvement independently of the specific management structure. Last, regarding the effect of ROA, it cannot be confirmed that ESG involvement is promoted in well-performing firms, whereas the notion that ESG is advanced in large-scale firms is supported.

We can confirm three factors that advance ESG in Japanese firms: the executive officer system, independent directors, and foreign shareholdings. Although the effect of external

managers is important, a more effective structure is the J2 structure, comprising internal managers with an executive officer system. While the J1 structure is least involved in ESG, it becomes the most effective structure along with the introduction of executive officer system to improve corporate performance. This situation coincides with the findings of Kato and Kodama (2016), in which CSR is promoted even in the existing management to improve corporate performance. It also coincides with a view of performance-improving CSR despite the absence of shareholder agreement.

If the consideration of corporate performance promotes ESG involvement, however, a question arises as to why the J2 structure is more effective than the J3 structure because the latter's external managers are assumed to be more performance-oriented than the former's internal managers, given that both are under the executive officer system. Conversely, the estimation results suggest that internal managers are more likely to intend to achieve performance than external managers. A reason may be that the J3 firms are relatively small-scale and have a lower ROA. Thus, external managers are likely to come from the parent company, although there are no data to confirm this notion. Another plausible reason is that internal managers are more conscious of outside pressure to achieve better performance than external managers to maintain their internally promoted positions. Such consciousness seems to be more strengthened in the J2 structure along with the introduction of executive officer system.

The effect of foreign shareholders again coincides with the findings of Suzuki *et al.* (2010) that CSR is promoted as per management innovation—led by increasing foreign shareholdings. However, it acts only in the cross term with the J2 structure. If foreign shareholders facilitate outsider orientation, their interest in ESG should act in the cross term with the J3 structure, comprising external managers. In reality, however, it does not. A negative effect is observed in the cross term with the J4 structure, comprising external managers alone. Although our data are indistinguishable between foreign investors and ESG investors, foreign shareholders' "corporate engagement" seems to be based on the consideration of corporate performance rather than management innovation, such as management transparency. As has always been the case, voice-form shareholder activism is directed toward achieving higher corporate performance. Thus, foreign shareholders act to further enhance the effect of the J2 structure that promotes

performance-improving CSR.

Meanwhile the effects of independent directors are separated from any management structure. Independent directors certainly have the role of monitoring and advising management to improve corporate performance. If they promote ESG by considering corporate performance, they should act on the cross terms with the J2 structure, as in the case of foreign shareholders. However, this is not the case in reality; their effect is independent of any management structure. Independent directors' concern for ESG, therefore, seems to be based not on the consideration of corporate performance but on the consideration of stakeholder interests. As will be discussed below, this supposition supports another view of ESG that resolves conflicts between shareholder and stakeholder interests.

5. ESG behavior toward the environment and society

The previous section illustrated the corporate governance structure of Japanese firms that promoted engagement in ESG. Therefore, it is necessary to examine whether ESG engagement promotes involvement in environmental issues (the E index) and societal issues (the S index). Moreover, we examine the actual impact of the E and S indexes on environmental issues (e.g., carbon emissions) and social issues (e.g., a female director appointment). Finally, we examined the impact of ESG activities on corporate performance in terms of ROA.

First, we examined the effect of ESG engagement (ESG index) on both E and S indexes. As the explained variables, E and S indexes, are discrete values ranging from 0 to 10, we applied ordered logit estimations with year and industry dummies by considering the differences between industries. The explanatory variable is the ESG index, and independent directors' appointment (*Indepen*) and foreign shareholdings ratio of over 10% (*Fs*) are added separately from the ESG index. The total assets (logarithmic transformation) were used as control variables. Table 6 presents the estimation results.

[Insert Table 6 here]

Table 6 demonstrates that engagement in ESG raises involvement in environmental and societal issues, with a greater effect noted for the S index. However, this result may be caused by the GRI standard, comprising the ESG index, and the E and S indexes are constructed

following the GRI standard; therefore, the coefficient value is extremely high on the S index. Thus, we conducted an estimation after excluding the GRI from the ESG index. This also indicates positive effects on both E and S indexes, as demonstrated on column (2). Notably, having an independent director raises both the E and S indexes directly, while having foreign shareholdings of over 10% ratio has no significant effect on the S index. Instead, a negative effect was observed for the E index. The effect of independent directors is important; it supports the view that independent directors promote ESG engagement directly by considering stakeholder interests, whereas foreign shareholders have no such effect.

Next, we examined whether the increasing involvement in environmental issues (E index) really reduces carbon emissions, total waste, energy consumption, water consumption, and electric power consumption, contained in Bloomberg data. We conducted a panel regression analysis of the effects of the E index on each reported value. A strong correlation exists among the environmental variables, especially between carbon emissions and energy consumption. Each variable is set as per sales, considering the dependency on production activities, and total assets are added as a control variable. Table 7 displays the random effects of the panel regression with year and industry dummies—demonstrating that an increase in the E index significantly reduces energy consumption per sales. Even with the limitation of a small number of observations, an important environmental issue, energy consumption, confirms the effectiveness of involvement in ESG.

[Insert Table 7 here]

Further, we examined societal issues with a focus on female human resources use. Although the activation of female human resources is an important issue for contemporary Japanese firms, missing data on female employee and female manager ratios is extremely large as mentioned before. Thus, we focused on female directors with nearly complete data and examined whether the increasing involvement in societal issues (S index) promotes the appointment of female directors. As the maximum number of female directors is four, we used a logit regression analysis, setting as 1 if a female director was appointed, and 0 otherwise. Female directors are appointed as independent directors, 87% of female directors are independent directors. We thus distinguished female directors between externally appointed independent directors and internally promoted directors and estimated each determinant. The explanatory variable was the S index. Moreover, we added Fs of over 10%.

Besides the total assets, ROA is used as a control variable to gauge whether female human resources will be more utilized by well-performing companies. Table 8 presents the estimation results with year and industry dummies.

[Insert Table 8 here]

Table 8 illustrates the S index positively affects the appointment of all female directors, as shown on the left side of Table 8. Foreign shareholders had a positive effect. However, contrasting results are displayed between independent and internal female directors, as shown on the right side of Table 8. The S index, foreign shareholdings, and relatively large-scale firms promote the appointment of independent female directors. Meanwhile, relatively well-performing and small-scale firms promote the internal promotion of female directors, yet the S index has a negative effect, and foreign shareholdings have no effect. Although the opportunity for internal promotion is important for utilizing female human resources, as suggested by Kato and Kodama (2016), ESG practices, such as diversity management, do not work for the female director's internal promotion, rather exhibit a negative effect. Female directors seem to be juggled between external appointments and internal promotions.

Finally, we examine the view that ESG coincides with corporate performance. We already observed that ESG involvement is not promoted in well-performing firms. Here we examine whether corporate performance is affected by ESG involvement. If involvement in environmental issues (E index) effectively works to reduce energy consumption, corporate profits are likely to increase because of energy-efficient production. Similarly, from a strategic CSR perspective, involvement in environmental and societal issues is assumed to increase sales because of corporate brand improvement, thereby increasing profits. We then examined the effect of ESG involvement on corporate performance in terms of ROA. The explanatory variable is the ESG index. The E and S indexes, independent directors (*Indepen*), and foreign shareholdings (Fs) were added separately. Furthermore, considering that ESG involvement is not related to corporate performance, we set the performance dummy based on the medium rate of ROA (2.6% or more = 1, otherwise = 0) and added the cross term between the ESG index and performance dummy to examine the different effects of ESG between well-performing firms and others. Table 9 displays the results of the panel regression analysis, including the year and industrial dummies.

[Insert Table 9 here]

Table 9 demonstrates that ESG involvement alone does not affect ROA. Meanwhile, as shown in column (4), it increases the ROA in well-performing firms, wherein the coefficient value of the ESG index is 1.05 (2.159-1.109 when performance dummy is 1). The view that ESG coincides with corporate performance is supported, at least for well-performing firms. Another important finding is that the E index exhibits a strong negative effect on ROA, while the S index has no significant effect. Even if environmental activities positively affect corporate profits through energy-saving production and improving corporate brands, corporate profits are likely to decrease due to increasing investment costs for environmental activities. A similar finding is reported wherein the increase in CSR ratings on environmental and societal issues negatively affects ROA (Giuli and Kostovetsky, 2014). From the agency perspective, however, this result is regarded as evidence that CSR is based on the manager's private interests, in line with the debate by Bénabou and Tirole (2009) in Section 2. Moreover, increasing foreign shareholdings increases ROA, whereas independent directors are ineffective. While the effect of foreign shareholders is as expected, there may be an endogeneity problem: foreign investors prefer companies that are involved in ESG activities and exhibit high corporate performance. However, this corresponds to an ESG integrationtype investment. Our estimation empirically verifies the effectiveness of ESG integrationtype investing.

6. Discussion and conclusion

This study began with the question of why Japanese firms are not so active in ESG and ESG-related investments, despite the nature of stakeholder-oriented corporate governance. We assumed that the reason for weak ESG is the insider advantage of Japanese corporate governance, where interest in outsiders and outside issues related to the environment and society was low. Therefore, we assume that if Japanese corporate governance is reformed in the direction of outsider orientation, ESG engagement will be promoted. This corresponds to the ESG's governance issue, requiring the transparency of management for outsiders. It also corresponds to the ESG investments in Japan, which focuses on corporate engagement investing. Based on the ESG flamework, we assumed that addressing governance issues leads to involvement in environmental and societal issues.

From these perspectives, we found three factors that advance ESG: introduction of an

executive officer system, appointment of independent directors, and an increase in foreign shareholdings. These factors exactly correspond to corporate governance reforms that Japanese firms have tackled since around 2000. We further found that externally appointed managers were more likely to promote ESG than internally promoted managers. Although this is an important finding, more effective management for ESG engagement was the internal promotion of managers, with an executive officer system to improve corporate performance. Furthermore, we confirmed that ESG engagement promotes the involvement in environmental and societal issues; energy consumption is effectively reduced; appointment of female directors is effectively promoted; and corporate performance in terms of the ROA is increased, at least, in well-performing firms, while negatively affected by the increase in investment costs for challenging environmental issues.

These results confirm that corporate governance reform promotes overall ESG involvement in Japanese firms. However, this may contravene the initial assumption that corporate governance reform that enhances outsider orientation with the transparency of management will promote ESG involvement. Instead, our findings reveal the effectiveness of the reform that intends to improve corporate performance via executive officer system, with maintaining managers' internal promotion. The effect of foreign shareholders is also confirmed in such a management structure, not in the practice that comprises external managers. Japanese firms' ESG is, thus, considered performance-improving type, which supports the view that ESG coincides with shareholder interest. However, this does not follow the agency perspective based on shareholder agreement. Instead, it accords with a managerial view of CSR of traditional Japanese firms, which emphasizes the contribution to society through a firm's business activities. It also accords with a view of "shared value crating" CSR, resulting corporate performance improving.

Conversely, we found that independent directors' interest in ESG is separated from a specific management structure, especially from the structure that intends to improve corporate performance. If their interest in ESG is not based on corporate performance consideration, unlike foreign shareholders, it hinges on stakeholder interests. This supposition can be seen by the independent director's direct effects on involvement in environmental and social issues, whereas foreign shareholders have no such effects. It does not disregard independent directors' functions that represent shareholder interests by monitoring and advising management to improve corporate performance. At the same time, they seem to have another

function that represents stakeholder interests and advances ESG. Our empirical research shows that independent directors in Japanese firms have a dual function to represent both shareholder and stakeholder interests, which leads to another view of ESG that resolves conflicts between shareholders and stakeholders.

As for such conflicts, it is reported that long-term employment is still being maintained, despite the corporate performance deterioration and increasing shareholder emphasis (Kambayashi and Kato, 2017). A related study based on a questionnaire survey of corporate behavior shows that a management that introduces the executive officer system weakens long-term employment and strengthens performance-related pay to improve corporate performance, while a management that stresses CSR involvement maintains long-term employment (Miyamoto, 2016, 2018). This study notes that managerial behavior is subject to a shareholder-oriented policy on one hand but is also subject to an employee-oriented policy. As a result of the two contrasting effects, about 70 to 80% of sample firms report the maintenance of long-term employment, explaining that CSR acts to resolve conflict by the pursuit of shareholder interests. A similar study on interviews with managers shows that Japanese managers are conscious of the dual role of the representatives of shareholders and stakeholders (Hirota, 2014). While these studies focus on the dual nature of Japanese managers, the same will be applied to independent directors. If Japanese managers behave in such a dual way, they need support from independent directors with the same dual nature.

From the agency theory perspective, the dual nature of independent directors is blamed for weakening the monitoring function of shareholder interests. This view corresponds to the existence of many non-managed experts among independent directors in Japanese firms, accounting for about 40% of all independent directors in the listed companies in 2019 (Tokyo Stock Exchange, 2019). Meanwhile, Sako and Kubo (2018) found that non-managed directors, lawyers and accountants, contribute to the improvement of corporate performance through their advice based on professional expertise. Even if their empirical findings are admitted, non-managed directors seem to be expected to provide a wider insight into managerial issues, from intellectual, political, and social perspectives, rather than a specific expertise. For instance, Adams *et. al.* (2011) discovered two types of directors; those endorsing entrepreneurial values, such as higher achievement, power, and self-direction, are more shareholder-oriented, whereas those endorsing universalism values, such as broadmindedness, wisdom, and social justice as well as employee representation, are more

stakeholder-oriented. Then, if the former is a director assumed by the agency theory, the non-managed directors can be regarded as the latter type. They also seem to resemble the German employee-representative directors on their advisory board, which supports the notion of "company as a social institution." It should be emphasized that independent directors in Japanese firms have a role of conflict-resolution in corporate governance.

We considered the dual nature of independent directors in this study. However, there is no institutional basis for them to behave as dual representatives of shareholders and stakeholders. If agency theory becomes dominant along with the increase in foreign shareholdings, internal managers are more likely to pursue shareholder interests, and independent directors are expected to change in the direction of the representative of shareholders. Then, another system that represents stakeholder interests is needed. Although the German-style employee representation is difficult to introduce immediately, it is necessary to consider the appointment of a director who represents employees, as considered in the UK. It is also not yet unrealistic to propose the appointment of two employee representatives in response to the Corporate Governance Code, which requires the appointment of at least two independent directors. If Japanese firms advocate stakeholder management, establishing a "stakeholder meeting" comprised of representatives from local communities, customers, employees, suppliers, and shareholders is recommended. However, Japan may lag, as in the case of ESG investment.

Finally, it is necessary to note the limitations of this study. Besides the endogeneity problem of foreign shareholders, as mentioned above, there may be another problem with independent directors. While we argued that independent directors promote ESG independently of the management structure, this may be because they were introduced by external pressure regardless of management structure. It is, therefore, necessary to examine their nature and effect of independent directors who have proliferated in recent years. Constraints on environmental and social data are also noted. Japanese firms are passive about information disclosure, which is likely the most serious ESG issue they face.

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Table 1. ESG investment by policies and regional compositions

	Europe		U.S.		Japan		Worldwide	
	2016	2018	2016	2018	2016	2018	2016	2018
Total amounts (billion of US dollars)	12,040	14,075	8,723	11,995	474	2,180	22,892	30,683
Investment policies	Composition ratio of each policy (%)							
Negative or exclusory screening	44.3	42.0	28.9	37.1	3.6	5.4	36.4	35.9
Norm-based screening	22.2	14.0	_	_	10.6	9.9	15.0	8.5
ESG integration	11.6	18.8	46.9	44.5	22.8	38.0	25.0	31.8
Corporate engagement	18.7	21.5	20.7	8.3	55.1	44.0	20.3	17.8
Positive screening	2.2	2.6	2.0	5.2	4.8	2.0	2.0	3.3
Sustainability themed investing	0.6	0.7	0.6	3.7	1.6	0.4	0.7	1.8
Impact/community investing	0.4	0.5	1.0	1.4	1.5	0.3	0.6	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: GSIA (2016, 2018), Global Sustainable Investment Review

Note1: Canada, Australia/New Zealand, and Asia except Japan are not displayed

Note2: In the original data of GSIA, each policy is duplicated; thus, their sum exceeds the total amounts displayed in the Table. The composition ratio of each policy is calculated based on the sum of all polies.

Table 2. Basic data

		Obs.	Mean	St.Dev.	Min	Max
	Total assets (billions/yen)	12,176	1,027	8,819	1.27	298,000
Finance	Sales (billions/yen)	12,176	338	1,055	0.74	28,400
	ROA	12,176	0.027	0.045	-0.652	0.728
	Carbon emissions (1,000 tons)	3,534	1,934	9,550	0.41	141,400
Environment	Water consumption (1,000 cubic meters)	3,219	27	72	0.00	1,520
Livironinent	Climate change policy	6,553	0.692	0.462	0	1
	Water reduction policy	6,554	0.867	0.339	0	1
	Female employee ratio	333	0.267	0.151	0.062	0.964
Society	Female manager ratio	185	0.100	0.093	0.006	0.455
	Eequal opportunity policy	6,555	0.468	0.499	0	1
	Training policy	6,555	0.687	0.464	0	1
	Number of independent directors	10,487	1.1	1.220	0	13
Governance	Number of female directors	11,298	0.1	0.394	0	4
Governance	Internal promotion of management	11,292	0.921	0.269	0	1
	Adoption of executive officer system	11,059	0.743	0.437	0	1
Having a CSF	R director (Yes=1, No=0)	11,289	0.153	0.360	0	1
Having a CSF	R Committee (Yes=1, No=0)	11,282	0.030	0.171	0	1
Adhering to GRI standards (Yes=1, No=0)		6,622	0.341	0.474	0	1
Independent director ratio		10,532	0.117	0.133	0	0.889
Foreign shareholding ratio		12,176	0.137	0.124	0	0.872
ESG index		11,323	0.382	0.665	0	3
E index		6,555	5.783	2.371	0	10
S index		6,555	3.869	2.682	0	10

Table 3. ESG indicators by industries

Industries	Obs.	ESG index	E index	S index	GRI score
Food	2,224	0.48	6.61	4.38	0.43
Distribution-Service	1,712	0.21	4.72	3.07	0.24
Finance	1,064	0.20	4.18	2.66	0.24
Pharmaceuticals-Medicine	504	0.33	6.24	4.40	0.44
Construction-Manufacturing	4,016	0.39	5.78	3.78	0.31
Materials-Chemicals-Steel	1,296	0.53	5.73	3.87	0.28
Oil-Gas-Electricity	256	0.65	6.65	4.51	0.57
Information-Communications	1,104	0.34	5.91	4.42	0.42
Average score of all industries	12,176	0.38	5.78	3.87	0.34

Table 4. Four types of management structure

	Manegers' internal promotion	Executive oficer system	Num. of Obs.	Composition rate (%)	(average;		Ratio of independent directors (%)	lcharpholdinge
J1	Yes	No	2,593	23.5	825,356	2.96	7.34	12.43
J2	Yes	Yes	7,634	69.0	1,272,305	2.76	12.68	15.62
J3	No	Yes	585	5.3	582,740	2.29	9.94	12.57
J4	No	No	247	2.2	312,206	2.78	4.74	7.87

Table 5. Determinants of the ESG involvement: Ordered logit regressions with year and industry dummies (J1 is the base category)

	(1)	(2)	(3)
J2	0.584***	0.563***	0.489***
J3	0.287**	0.222*	0.145
J4	0.347*	0.343	0.444
Indepen		0.268***	0.429***
Fs		0.31***	0.08
J2* <i>Indepen</i>			-0.222
J3* <i>Indepen</i>			-0.066
J4* <i>Indepen</i>			0.443
J2*Fs			0.324**
J3*Fs			0.173
J4*Fs			-0.76*
ROA	-0.024***	-0.028***	-0.029***
Total asset	0.855***	0.784***	0.783***
Observations	11,058	10,202	10,202
Pseudo R ²	0.204	0.206	0.207

^{*} p<0.1; ** p<0.05; *** p<0.01, Standard deviations are indicated in brackets

Note: J1 is the management that comprises internal managers without executive offer system; J2 is that comprises internal managers with executive offer system; J3 is that comprises external managers with executive offer system; J4 is that comprises external managers without executive offer system. *Indepen* is the appointment of at least one independent director; *Fs* is foreign shareholdings ratio of more than 10%.

Table 6. Determinants of the E and S indexes: Ordered logit regressions with year and industry dummies

		E index				S in	dex	
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
ESG Index	0.683 [0.033]***			_	1.137 [0.035]***	:		
ESG index excluding GRI		0.387 [0.046]***		0.401 [0.047]***		0.635 [0.046]***		0.637 [0.047]***
Indepen			0.45 [0.058]**	0.454 **[0.058]***			0.544 [0.058]***	0.551 * [0.058]***
Fs			-0.164 [0.057]**	-0.171 **[0.057]***			0.006 [0.057]	-0.008 [0.057]
Total assets	0.524 [0.019]***	0.637 [0.018]***	0.674 [0.021]**	0.646 **[0.021]***	0.597 [0.019]***	0.746 [0.018]***	0.753 [0.021]***	0.717 * [0.021]***
Pseudo R ²	0.0966	0.0835	0.085	0.0879	0.1326	0.1004	0.0988	0.1052
Observations * p<0.1; ** p<0.05; *** p<0	6,555	6,530	5,993	5,979	6,555	6,530	5,993	5,979

Table 7. Effects on the issues of the environment: Panel regression with year and industry dummies (fixed effects)

	Carbon Emissions	Total Waste	Energy	Water	Power
			Consumption	Consumption	Consumption
E index	2.413	-2.481	-7.451	0.055	-2.21
	[3.341]	[3.838]	[4.076]*	[4.150]	[4.088]
Total assets	-5.875	7.847	6.638	6.946	7.11
	[6.473]	[6.922]	[6.636]	[7.755]	[6.982]
Constant	468.244	278.209	343.113	296.398	333.681
	[81.561]***	[86.572]***	[82.764]***	[98.992]***	[86.930]***
Observations	3,534	3,372	3,339	3,137	2,941
R^2	0.0235	0.1028	0.0191	0.0207	0.0192

^{*} p<0.1; ** p<0.05; *** p<0.01, Standard deviations are indicated in brackets

Note: Explained variables are set as per sales.

Table 8. Determinants of the appointment of female directors; logit regression (appointment =1, otherwise = 0) with year and industry dummies

	Fen	nale director		Female	director
	(1)	(2)	(3)	Independent	Internal
S index	0.106		0.105	0.117	-0.188
	[0.019]***		[0.019]***	[0.020]***	[0.088]**
Fs		0.248	0.353	0.391	0.337
		[0.076]***	0.122]***	[0.137]***	[0.366]
ROA	0.04	0.029	0.034	0.017	0.104
	[0.012]***	[0.008]***	0.012]***	[0.013]	[0.034]***
Total assets	0.264	0.227	0.221	0.282	-0.604
	[0.033]***	[0.022]***	0.035]***	[0.038]***	[0.167]***
Constant	-6.518	-5.589	-6.22	-8.637	3.324
	[0.429]***	[0.291]***	0.440]***	[0.667]***	[1.884]*
Pseudo R ²	0.1576	0.1155	0.1595	0.1947	0.1753
Observations	6,535	11,224	6,498	5,979	5,283

^{*} p<0.1; ** p<0.05; *** p<0.01, Standard deviations are indicated in brackets

Note: "Independent" is externally appointed female director; "Internal" is internally promoted female director.

Table 9. Determinants of ROA: Panel regressions with year and industry dummies (random effects)

	(1)	(2)	(3)	(4)
ESG index	-0.082	0.019	0.033	-1.109
	[0.092]	[0.091]	[0.090]	[0.099]***
E index		-0.151	-0.15	-0.146
		[0.036]***	[0.035]***	[0.033]***
S index		-0.02	-0.025	-0.026
		[0.034]	[0.033]	[0.031]
Indepen			0.024	0.016
			[0.125]	[0.120]
Fs			0.957	0.927
			[0.133]***	[0.135]***
ESG index*performance dummy				2.159
				[0.093]***
Total assets	-0.077	0.071	-0.105	-0.058
	[0.053]	[0.068]	[0.068]	[0.064]
Constant	0	0	0	0
	[0.000]	[0.000]	[0.000]	[0.000]
R^2	0.0792	0.1008	0.1742	0.2993
Observations	10,099	5,801	6,029	5,993

^{*} p<0.1; ** p<0.05; *** p<0.01, Standard deviations are indicated in brackets

Note: Performance dummy is the ROA more than the medium rate (2.6% or more = 1, otherwise