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ABSTRACT

This study investigates the moderating role of a country's culture as an external contingency factor in the relationship between a firm's environmental, social, and governance (ESG) performance and financial performance. Using ESG performance data of 4978 firms from 48 countries for 17 years, we argue that the financial return from engaging in ESG varies depending on the countries' cultural aspects because stakeholder evaluations and appreciations for a firm's ESG performance differ across nations. We find that a country that espouses a culture of high individualism or masculinity tends to appreciate and reflect on this more explicitly, strengthening the relationship between a firm's ESG performance and financial performance. Contrastingly, in a country with a culture of high power distance or uncertainty avoidance, firms' ESG efforts are less likely to be associated with financial performance. Our findings have important implications for multinational enterprises facing various cultural environments when dealing with heterogeneous stakeholder demands across countries.

1. Introduction

For several decades, the relationship between a multinational enterprise's (MNE) environmental, social, and governance (ESG)[1] performance and financial performance has received much scholarly attention to answer a question about whether it pays to be good. However, research findings remain inconclusive, suggesting a positive, negative, or non-linear relationship between ESG performance and financial performance (Aupperle et al., 1985; Awaysheh et al., 2020; Barnett & Salomon, 2006; Graves & Waddock, 1994; Margolis & Walsh, 2003). McWilliams and Siegel (2000) and Barnett (2007) posit that scholars have often underestimated the contingencies that affect financial returns from ESG practices. In response, previous studies focus on firm-level characteristics such as firm size, innovation (Hull & Rothenberg, 2008), and industry context (Gras & Krause, 2020; Klassen & McLaughlin, 1996; Russo & Fouts, 1997) as moderators of the

ESG-financial performance relationship, shifting the research question to when it pays to be good.

This inconclusive relationship between the two is more remarkable in the international business (IB) context (Husted & Allen, 2006; McWilliams & Siegel, 2000; Shi & Veenstra, 2021; Wang & Qian, 2011). This is because not much effort have been made to reveal the impact of country environments on the relationship between the two (Cuervo-Cazurra et al., 2021). Aguinis and Glavas (2012) find two studies examining national and institutional factors as moderators of the relationship between ESG performance and financial outcomes in their literature review, but these are conceptual papers. Only a few studies have empirically tested these challenges. For example, El Ghoul et al. (2017) uncover that undertaking ESG activities in less-developed institutional environments enhance performance more than in more-developed ones. Rivera-Santos et al. (2012) provide evidence that ESG activities can reduce the transaction costs of underdeveloped

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[1] ESG as an integrated concept refers to "how corporations and investors integrate environmental, social, and governance concerns into their business models" (Gillan et al., 2021, p.2). Environmental performance reflects how firms address environmental issues, such as reducing emissions and environmental innovation in firms' policies and practices. Social performance considers firms' practices and policies toward various stakeholders such as employees, suppliers, customers, and communities, dealing with relevant social issues. Governance performance includes internal controls and ownership issues, including top management team diversity, executive pay, and how firms protect shareholders' rights. According to Gillan et al. (2021), *governance issues are the only difference between CSR and ESG, which allow us to use the two terms interchangeably.*

institutions for MNEs, improving firm performance. Each of these studies has provided evidence of the broad role of institutions only ignoring the cultural impact in leading ESG performance and affecting corporate performance through ESG performance. One recently published study pays limited attention to the effect of country culture, individualism, and flexibility as contingency factors at country-level in the relationship between ESG and financial outcomes (Shi & Veenstra, 2021). In summary, studies on why MNEs engage in ESG activities differently are abundant; however, research on why ESG performance affects firms' financial performance differently in different cultures and the contingency factors of countries that contribute to this relationship are still scarce. Therefore, more focus should be on revealing the role of country-level contingency factors (Li et al., 2021; Shi & Veenstra, 2021).

In IB, unveiling the moderating role of country-level contingency factors is essential because even if MNEs use a similar level of resources for ESG, their performance implication will differ across countries (Grewatsch & Kleindienst, 2017). That implies MNEs can manage their limited resources more effectively, depending on how their efforts are likely to be rewarded financially in each country. If stakeholders in different countries vary in appreciation levels for ESG issues (e.g., do not value the fair-trade products in a specific country, etc.), such differences may influence the relationship between MNEs' ESG and financial performance across countries.

To fill this research gap, we attempt to shift research attention to *where* it pays to be good by extending the discussion on the relationship between ESG and financial performance in the IB context by addressing the following questions: where does it pay to be good for MNEs? What is the role of external environments in the relationship between ESG and financial performance across different countries?

Using Hofstede's six cultural dimensions, we focus on a country's cultural aspect as an external environment that affects the relationship between ESG and financial performance. According to Hofstede et al. (2010), culture refers to "the collective programming of the mind that distinguishes the members of one group or category of people from another" (p.6). As such, national culture shapes social norms and standards, affecting social members' way of thinking and behaviours. IB scholars use several frameworks of culture, e.g., Hofstede (1980, 2001), Schwartz (1999), and the GLOBE project (House et al., 2004). We select Hofstede's cultural dimension framework because it has been widely used in the IB field (Beugelsdijk et al., 2017; Beugelsdijk et al., 2015; Venaik & Brewer, 2010), considering it as "the *de-facto* standard," so the study can be easily compared with other studies (Graafland & Noorderhaven, 2018). Moreover, Guiso et al. (2006) argue that national culture affects different beliefs, values, expectations, and economic outcomes. That is primarily attributed to the fact that culture also affects economic-related values; for example, attitudes toward social capital, unethical behaviour, and redistribution preferences differ across cultures (Guiso et al., 2006). In the same vein, we can assume that the level of appreciation for doing good and the penalty for doing bad may diverge across cultures (Jiang et al., 2020).

To understand the role of national culture in the relationship between ESG performance and financial performance, we empirically examine how these cultural differences affect this relationship. By analysing 4978 firms in 48 countries from 2002 to 2018, multilevel regression results show that countries with strong individualism and masculinity significantly and positively moderate the relationship between ESG performance and financial performance. These results are robust in terms of alternative measurements. Additionally, we test how each ESG dimension yields different results in the research model as *ad hoc* tests. Our findings indicate that cultural differences across countries are critical and important contingency factors in determining the performance effects of ESG activities.

This study contributes to the current literature on the implications of ESG performance on firm performance and the IB field. First, this study contributes to shifting research attention from 'whether' and 'when' it pays to be good to 'where' it pays to be good. Comparing different cultural aspects across countries, we shed light on why some firms are paid more in a specific location, whereas others are paid less. Second, we extend the literature in this field by revealing important moderating factors. Scholars have not paid enough attention to country- or institutional-level factors that moderate the relationship between MNEs' ESG performance and financial performance (Aguinis & Glavas, 2012; Grewatsch & Kleindienst, 2017). We examine country-level cultural aspects as important moderating variables. Moreover, to test our research model, we utilise a large sample comprising 17 years (2002 −2018) of panel data from 48 countries, providing sophisticated statistical evidence. Finally, this study uses multilevel analysis to test the research model. Previous literature highlights the importance of multilevel analysis, including a multilevel approach combining macro-level with micro-level factors (Aguinis et al., 2011; Aguinis & Glavas, 2012). Some studies provide multilevel research design with literature review studies but have not been operationalised with multilevel analysis. Overcoming these limitations from previous studies, we utilise multilevel analysis, the most suitable approach, in our research design.

2. Literature review and hypotheses development

2.1. Literature review

For decades, scholars and practitioners have intensely debated the relationship between ESG performance and financial performance; however, previous empirical findings are inconclusive (Awaysheh et al., 2020; Margolis & Walsh, 2003; Zhao & Murrell, 2016). Although evidence generally supports a positive relationship between firms' ESG performance and financial performance, it has not been unanimous.

Several studies have suggested that conducting ESG activities beyond regulations is costly and reduces the profits of firms and shareholders. Neoclassic economists and Friedman (1970) argue that a firm's commitment to ESG increases unavoidable costs. Thus, firms with ESG engagement are at a disadvantage financially compared to their competitors without ESG engagement (Aupperle et al., 1985; Friedman, 1970; McWilliams & Siegel, 2000). Additionally, agency theorists explain the adverse effect of corporate social responsibility (CSR) on firm financial outcomes, arguing that managers are likely to use ESG practices to maximise their personal gains as they engage in self-serving behaviour (Brammer & Millington, 2008; Jensen & Meckling, 1976). However, some studies investigating these relationships have not found a significant relationship between ESG performance and financial performance (Aupperle et al., 1985). Finally, a nonlinear relationship between ESG performance and financial performance has emerged based on the work of several researchers. For instance, Barnett and Salomon (2006) suggest a new perspective on the positive (or negative) relationship between firms' social and financial performance. By analysing socially responsible investing (SRI), they provide a nonlinear relationship between social and financial performance.

Contrastingly, stakeholder theory has predominated in the field to explain how a firm's financial achievements hinge upon relationships beyond its shareholders to encompass a broader set of stakeholders and the environment in which it operates. Instrumental stakeholder theory highlights how the effective management of relationships with stakeholders can improve a firm's performance. In other words, firms that maintain good relationships with stakeholders supposedly perform well (Donaldson & Preston, 1995; Freeman et al., 2010; Freeman & Liedtka, 1991; Porter & Kramer, 2006). This approach can be used as an underlying theoretical mechanism to illustrate the positive link between firms' ESG performance and financial performance (Wang & Qian, 2011), supported by a large body of previous literature.

A high ESG performance with a proactive ESG engagement that fulfils stakeholders' expectations can help firms build and maintain their reputations, increasing stakeholders' willingness to cooperate and providing resources essential to success (Backhaus et al., 2002). As such, the performance implications of a firm's ESG engagement depend on

how stakeholders respond to it (Hillman & Keim, 2001; Kang, 2013). Compliance with stakeholder expectations can lead to greater legitimacy, support, and appreciation for firms, thus improving their performance. However, non-compliance can cause firms to lose legitimacy and be punished through various means, including boycotts by stakeholders, lowering their performance. Thus, we formulate our baseline hypothesis: firms' ESG performance positively influences firms' financial outcomes.

Some scholars have extended this discussion by considering other factors that affect the relationship between firms' ESG performance and financial performance. For example, McWilliams and Siegel (2000) illustrate that inconsistent results from empirical studies can be caused by the absence of important variables such as firm innovation. Thus, it is not surprising that Barnett (2007) argues that scholars have often underestimated the contingencies affecting financial returns from ESG practices. Additionally, depending on contingency factors, the relationship between ESG and financial performance could vary across firms and time (Barnett, 2007). Considering the contingency perspective, Grewatsch and Kleindienst (2017, p. 384) state, "research attention has recently begun to shift from *whether* it pays to be good to *when* it pays to be good (Orlitzky et al., 2011; Orsato, 2006)." Their study reveals the factors used for either moderating or mediating variables. Following this, Gras and Krause (2020) and Muller (2020) address the question of when ESG pays directly. Gras and Krause (2020) examine the moderating role of industry factors such as munificence, dynamism, complexity, and social orientation. Muller (2020) looks into the moderating effect of the degree of internationalization in the relationship between MNEs' ESG performance and financial performance.

An important tenet of previous arguments on the positive relationship between ESG performance and financial performance is that all ESG activities are assumed to enhance a firm's reputation in society, creating financial outcomes, regardless of a country's norms and culture. In other words, firms can gain legitimacy, establish a good reputation, and increase financial performance as long as they engage in various ESG activities. However, some questioned this assumption, suggesting that other factors can affect this relationship (Barnett, 2007; Gras & Krause, 2020). For example, not all countries globally have an SRI index and other social responsibility standards in place, suggesting that countries with an SRI index may be more attentive to firms' ESG activities (Demirbag et al., 2017). Among other factors, country regulations and economic systems affect stakeholders' attention toward firms' ESG practices (Ioannou & Serafeim, 2012). Fundamentally, the key to uncovering the mechanism of where it pays to be good is to examine why ESG performance affects firms' financial performance differently in different countries and how much economic value and incentives stakeholders are willing to assign to ESG performance behaviour based on society's cultural characteristics (Yang & Rivers, 2009).

2.2. Theoretical background and hypotheses development

To answer "where does ESG pay?", we need to pay attention to the characteristics of each cultural dimension separately and its impact on stakeholders in the society because stakeholders' responses (e.g., appreciation, indifference, and/or suspicion) affect the financial implication of ESG practices. To reveal this mechanism, we use the legitimacy theory by Suchman (1995) and the national business system framework proposed by Matten and Moon (2008).

Legitimacy theory is a useful theoretical framework to explain why firms engage in ESG practices. Suchman (1995) defines legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (p, 574). As Shi and Veenstra (2021) point out, stakeholders' dominant social values and beliefs influence the legitimacy level, and firms can obtain legitimacy by meeting society's expectations. Obtaining legitimacy in a society where a firm operates is a predominant condition affecting firms' reputations

and survival in the market. However, legitimacy theory does not fully explain the ESG impact on financial outcomes across countries because ESG practices do not guarantee financial rewards in every country. Therefore, a missing piece in the puzzle of understanding where it pays for firms to invest in ESG practices is the national business system: This can explain different incentives and opportunities that firms will receive through ESG practices and obtaining legitimacy across countries. For instance, while social licenses and approvals of doing business are the main incentives and opportunities to obtain legitimacy in some countries, some can, additionally, deliver financial outcomes (Matten & Moon, 2020). Combining legitimacy theory with the national business system, thus, can explain to what extent obtaining and maintaining legitimacy financially pays off across different countries.

Matten and Moon (2008) use the national business system to explain the differences among firms across countries for CSR, suggesting explicit and implicit CSR. Their key argument is that due to differences in incentives and opportunities based on the national business system, firms also differ in CSR. They specifically state that "U.S. style CSR has been embedded in a system that leaves more incentive and opportunity for corporations to take comparatively explicit responsibility. European CSR has been implied in systems of wider organizational responsibility that have yielded comparatively narrow incentives and opportunities for corporations to take explicit responsibility." (p, 409). For example, in coordinated market economies or European systems, ESG is treated as a social standard that is a mandatory and customary requirement for firms. In this society, the financial incentives for obtaining legitimacy through ESG practice may not be significant. Contrary to this, the U.S. system gives more incentives when firms engage in CSR, as it emphasizes liberalism but does not disincentivise firms for harming or not practicing ESG. As such, incentives and opportunities that firms get through ESG practices vary, as different cultural systems have different assumptions about the legitimacy of CSR (Matten & Moon, 2008).

Similarly, we can postulate that incentives and opportunities for doing good may differ depending on national culture. On the one hand, following Matten and Moon's argument, firms will get fewer incentives for practicing ESG in a society that considers it a social standard, given that ESG is already a mandatory requirement. In such a society, practicing ESG is a minimum requirement for gaining legitimacy; thus, doing ESG is needed for social license and approval to operate but does not entitle a firm to any extra or/and additional financial benefits. However, not practicing ESG directly influences an MNE's survival and loss. On the other hand, in a society that does not consider ESG as socially mandatory, firms can obtain more incentives, given that stakeholders award extra miles to firms rendering voluntary activities for the benefit of society (Godfrey et al., 2009; Mackey et al., 2007). Thus, in a society that considers ESG as socially mandatory, firms that practice ESG will gain legitimacy, but the financial implication of ESG is insignificant due to small incentives being given; in contrast, in a society that does not consider ESG as a social mandate, firms that practice ESG will gain legitimacy and receive much financial reward.

National culture creates social norms and values that shape how individuals and organisations behave in society, affecting the legitimacy of a firm's gains from stakeholders (Ahmadjian & Robinson, 2001; Meyer, 2008; Selznick, 1996). Based on Hofstede's cultural dimension, this study examines how different national cultures affect incentives and opportunities differently as outcomes of legitimacy in society, which provide various economic values and appreciation levels of a firm's ESG performance.

The following sections consider the moderating role of each country's cultural dimension defined in the literature (Hofstede, 1980, 1984, 2001): power distance, uncertainty avoidance, femininity vs masculinity, collectivism vs individualism, short-term vs long-term orientation, and indulgence vs restraint.

2.2.1. Power distance
Social members in a country with high power distance are more

inclined to tolerate the imbalance of power among them, defined as "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 1980, p. 45). Stakeholders in a society with low power distance are less likely to accept power imbalances among social members. A low power distance society tends to be less corrupted, its income is more evenly distributed, and its use of power is related to legitimacy (Hofstede, 2011). Therefore, stakeholders in a society with low power distance may consider firms' ESG practices as social norms that could generate only small incentives and opportunities.

Contrarily, stakeholders in a country with high power distance are more inclined to endure power imbalances and inequality among members (Ringov & Zollo, 2007; Thanetsunthorn, 2015). Those societies are more engaged in corruption and are biased in income distribution, not considering that using power is irrelevant to legitimacy (Hofstede, 2011). Moreover, stakeholders in a high power distance society pay less attention to a firm's decisions and practices (Ho et al., 2012). Thus, engaging in ESG may not be mandated as a firm's obligation to society in a country with high power distance, as it is not a critical factor affecting a firm's survival. In such a circumstance, firms actively engaging in ESG get more incentives, creating a positive image of noblesse oblige; stakeholders appreciate firms' efforts to reduce social tension and inequality even if it is not the firms' obligation in that society.

However, in a country with low power distance, stakeholders pay less attention to firms' efforts to display socially responsible behaviour, considering it their social obligation. Instead, stakeholders may be more sensitive to firms' socially irresponsible behaviours, indicating how they neglect their obligation as a member of society. In sum, firms are likely to get fewer incentives by doing good in a country with low power distance but may get more incentives when they do something that is not within their social obligation. Thus, we hypothesise the following:

Hypothesis 1. The relationship between ESG performance and financial performance is stronger in countries with a culture of high power distance.

2.2.2. Masculinity vs femininity

Masculinity reflects a condition wherein the dominant values of a society are material goods and success; in contrast, femininity reflects caring for and harmonizing with others and well-being (Hofstede, 2001). A masculine society emphasises material achievement and success, whereas a feminine society emphasises social harmony and other intangible values (Vitolla et al., 2021). Accordingly, firms in a masculine society are more likely to consider maximising profit as a social norm, whereas those in a feminine society emphasize harmonization with society as one of the social members (Hofstede et al., 2010). Moreover, empirical research has shown that women exhibit stronger pro-social behaviour than men (Beutel & Marini, 1995; Glynn & Sen, 2015; Washington, 2008). For example, Adams and Funk (2012) show that female executives are inclined to adopt pro-social policies more than male executives. Having a daughter can induce a CEO to engage in more ESG activities (Cronqvist & Yu, 2017).

A more feminine society may consider ESG as a firm's obligation (duty) as a social member and thus less incentivizing toward ESG practice of firms. However, a masculine society may give extra points for doing ESG practices considering it may be a valuable resource, i.e., a competitive advantage for firms. That is because, in such a society, other competitors may not or pay less attention to ESG practice as long as it contributes to financial gains significantly. Litz (1996) argues that ESG performance can be interpreted as a firm's capacity to perceive, assess, and react to legitimacy pressure, being a competitive advantage. Additionally, ESG activities provide internal and external benefits as firms' intangible assets (Branco & Rodrigues, 2006).

As such, stakeholders in a masculine society are likely to provide incentives for firms' efforts, cultivating competitive advantage to facilitate performance through ESG activities, whereas those in a feminine society gain smaller financial incentives for firms' ESG practices. If this difference holds, the positive relationship between ESG performance and financial performance will be more prominent in a masculine culture. Therefore, we suggest that masculinity positively moderates the relationship between ESG performance and financial performance. Thus, we formulate the following hypothesis:

Hypothesis 2. The relationship between ESG performance and financial performance is stronger in countries with a culture of masculinity.

2.2.3. Individualism vs collectivism

Individualism refers to "people's tendency to look after themselves and their immediate family only" (Hofstede, 1985, p. 348). In contrast, collectivism emphasises the importance of the community and prioritises the community's interests over individuals. It also demands that individual members pledge allegiance to and even sacrifice for the community (Hofstede, 2001). Individualistic stakeholders believe that individual freedom and independence are more valuable than group interests and benefits (Ho et al., 2012; Peng et al., 2012). Individualism, hence, is an important feature of countries with liberal market economies (Matten & Moon, 2008), showing that stakeholders in individualistic societies are driven mainly by economic gain. It is obvious, therefore, that in a country with a higher degree of individualism, doing ESG is hard to be embedded in a society, so doing ESG brings more incentives. Contrarily, collectivist societies are centred on social factors (Handley & Angst, 2015). Regarding this, in a country with higher collectivism, doing ESG practices is likely to be a firm obligation of the society where they operate, which is a minimum condition of legitimacy. Thus, ESG practices may not provide additional incentives in a collectivist society.

Moreover, once stakeholders in an individualistic society recognise that ESG contributes to the firm's performance, firms in an individualistic culture are likely to give additional incentives for doing good because they are under higher pressure to promote economic goals (i.e., profit). The positive performance effect of ESG activities would also be stimulated more significantly in an individualistic culture, considering ESG performance as a tool for achieving individualistic aims by maximising economic performance. Therefore, we expect individualism to strengthen the positive relationship between ESG and financial performance. Thus, we suggest the following hypothesis:

Hypothesis 3. The relationship between ESG performance and financial performance is stronger in countries with a culture of individualism.

2.2.4. Uncertainty avoidance

According to Hofstede (1980), *uncertainty avoidance* refers to "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (p. 46). Following this definition, stakeholders in a country with a high degree of uncertainty avoidance maintain a lower tolerance for uncertainty, whereas those with a low uncertainty avoidance will be more willing to live with uncertainty.

A possible scenario of uncertainty avoidance in the relationship between ESG performance and financial outcomes can be inferred from the uncertainty-reducing effect of ESG activities (Godfrey, 2005; Godfrey et al., 2009). For instance, firms with weak governance and those lacking transparency expose their shareholders and other stakeholders (e.g., employees and suppliers) to greater uncertainty and risks owing to the sizeable likelihood of financial and accounting problems and a heightened risk of bankruptcy. Contrastingly, socially responsible and ethical firms are prone to lower uncertainty and risk as they are involved in fewer controversies. Similarly, firms that adopt comprehensive, proactive, and preventive environmental protection initiatives are less likely to suffer from environmental controversies (Barton et al., 2002). Hence, doing ESG is likely subject to social norms in countries with a

strong tendency to avoid uncertainty, where stakeholders tend to give firms the benefit of the doubt (Godfrey et al., 2009). Doing ESG practices are likely to be accepted as a social norm that must be observed by firms in order to reduce uncertainty level, resulting in small incentives. However, in a country with low uncertainty avoidance, reducing future risk through ESG is less bound to obtaining legitimacy. In a country with low uncertainty avoidance, firms that practice ESG will get more incentives because ESG practices are uncommon among firms. Therefore, the positive relationship between ESG performance and financial performance is stronger in countries with low uncertainty avoidance. Thus, we propose the following hypothesis:

Hypothesis 4. The relationship between ESG performance and financial performance is stronger in countries with a culture of low uncertainty avoidance.

2.2.5. Long-term vs short-term orientation

Long-term orientation vs short-term orientation refers to the tendency to focus on the future than the present (Bearden et al., 2006; Chun et al., 2021). A society characterized by a high degree of long-term orientation is inclined to display higher persistence and frugality in the future, emphasizing the importance of savings. Conversely, the one with a high short-term score tends to respect traditions and social obligations (Beugelsdijk et al., 2015).

Studies find that time orientation affects an individual's ethical value by emphasizing it in countries with a high degree of long-term orientation (Bearden et al., 2006; Graafland & Noorderhaven, 2018; Nevins et al., 2007). According to Bearden et al. (2006), long-term orientation influences individuals' frugality, compulsive buying behaviour and ethical values, and those people put their value on future outcomes rather than the present consumption for a long-term goal. We can base our premise that the long-term orientation country recognises the crucial role of ESG practice in securing future value and retaining ESG among firms. In contrast, doing ESG is not a social norm in short-term orientation societies because a strong short-term orientation emphasises short-term returns. Thus, incentives for doing good are less in countries with a long-term orientation than in those with a short-term. Hence, we propose the following hypothesis:

Hypothesis 5. The relationship between ESG performance and financial performance is stronger in countries with a culture of short-term orientation.

2.2.6. Indulgence vs Restraint

Based on World Value Survey, Indulgence vs restraint dimension was newly added in 2010 (Hofstede et al., 2010). Indulgence refers to "a society that allows relatively free gratification of basic and natural human desires related to enjoying life and having fun," and restraint refers to "a society that controls gratification of needs and regulates it by means of strict social norms" (Hofstede et al., 2010, p. 15).

Restrained societies are generally stricter about social rules and are less lenient toward controversies and unethical behaviours. Hence, it is likely that restrained societies consider firms' ESG as a tool that prevents firms' unethical scandals/events and thus ultimately contributes to society's stability. The incentives received from engaging in ESG are less in such a society than in an indulgent society. The indulgent society values democracy and freedom of speech, emphasizing individuals' freedom and happiness (Hofstede, 2001). Consequently, it is highly likely that the indulgent society respects firms' decisions and behaviour toward ESG practices, indicating that ESG practices do not affect gaining legitimacy. In this society, stakeholders may appreciate the practice of ESG, given that it contributes to society's welfare and happiness, protecting democratic values. Thus, the incentives given based on the practice of ESG are higher in an indulgent society.

Hypothesis 6. The relationship between ESG performance and financial performance is stronger in countries with a culture of indulgence.

3. Methods

3.1. Data and sample composition

We begin with the ASSET4 database, which provides ESG scores to construct our sample for a cross-country sample from 2002 to 2018. Thomson Reuters ASSET4 database offers comprehensive ESG, including economic information yearly on about 5000 corporations from more than 50 countries. We merge ASSET4 data with firm financial information obtained from DataStream through Eikon of Thomson Reuters. Then, we combine cultural dimension scores from Hofstede (2001) and country-level information from the World Bank database. We drop firms with missing observations on ESG scores, cultural dimension scores, financial information, and control variables. Eventually, we are left with an unbalanced panel of 37,481 observations, which include 4978 firms in 48 countries over 17 year period between 2002 and 2018.

Table 1 presents a summary of our sample by industry, year, and country. Of the 37,481 observations, approximately 30% and 13% are firms from the U.S. and Japan, respectively. The remaining are widely distributed across countries and regions, and each country represents less than 10% of the sample. The manufacturing industry is the dominant industry in our sample, accounting for approximately 43% of the observations, and agriculture, forestry, and finishing industries account for smaller proportions. Each of the seven remaining industries constitutes 2–16% of the sample. In our analysis, we add industry fixed effect (FE) to control for idiosyncratic industry effect. We also include year FE to handle the effect of the business cycle.

3.2. Variables

3.2.1. Dependent variable

We use return on assets (ROA) as a dependent variable of our main analysis to measure corporate financial outcomes. It is measured as net income divided by total assets and captures the accounting-based performance (Wang & Qian, 2011). ROA has been used frequently for measuring firms financial outcomes in ESG research (Kang et al., 2016; Wang & Qian, 2011).

3.2.2. Independent variable

The independent variable is the firm's ESG score provided by the ASSET4 database.

The ASSET4 database is compiled from publicly available information from approximately 900 sources yearly, including CSR and/or sustainability reports, firm's official websites, proxy filings, and reports from major news organisations globally. The database is compiled with 250 key performance indicators based on these sources. These indicators are categorised into 18 subcategories within the three main pillars mentioned above. The database provides an index score for each pillar: an environmental performance (E), a social performance (S), and a corporate governance performance (G) for each firm every year in the sample.

We use the ASSET4 database for several reasons. First, the ASSET4 database offers multidimensional measurements of ESG performance. Brammer and Millington (2008) indicate that the cause of the vague relationship between ESG performance and financial performance reported in the literature is related to the ESG performance measurements used. ESG researchers have also identified the limitations of ESG performance measurements and the need for multidimensional measurements (Capelle-Blanchard & Petit, 2017; Lindgreen et al., 2009; Waddock & Graves, 1997). The ASSET4 database offers 250 ESG evaluation items, providing comprehensive information about ESG performance measurement. Second, the ASSET4 database offers ESG information of more than 5000 global firms from 56 countries, thus allowing us to conduct

Table 1
Sample composition by country, year, and industry.

Country	N	%	Year	N	%
Argentina	60	0.16	2002	499	1.33
Australia	2263	6.04	2003	504	1.34
Austria	166	0.44	2004	1001	2.67
Belgium	236	0.63	2005	1272	3.39
Brazil	558	1.49	2006	1301	3.47
Canada	2149	5.73	2007	1475	3.94
Chile	189	0.50	2008	1775	4.74
China	1327	3.54	2009	2039	5.44
Colombia	56	0.15	2010	2432	6.49
Czech Republic	30	0.08	2011	2576	6.87
Denmark	304	0.81	2012	2648	7.06
Finland	334	0.89	2013	2815	7.51
France	1046	2.79	2014	2943	7.85
Germany	1014	2.71	2015	3491	9.31
Greece	167	0.45	2016	4182	11.16
Hong Kong	908	2.42	2017	4554	12.15
Hungary	27	0.07	2018	1974	5.27
India	646	1.72	Total	37,481	100.00
Indonesia	208	0.55			
Ireland	81	0.22	Industry	N	%
Italy	247	0.66	Agriculture, Forestry, Fishing	167	0.45
Japan	4845	12.93	Mining	3624	9.67
Luxembourg	79	0.21	Construction	1616	4.31
Malaysia	365	0.97	Manufacturing	15,980	42.63
Malta	2	0.01	Transportation & Public Utilities	6038	16.11
Mexico	249	0.66	Wholesale Trade	1123	3.00
Morocco	15	0.04	Retail Trade	2907	7.76
Netherlands	413	1.10	Finance, Insurance, Real estate	902	2.41
New Zealand	250	0.67	Service	5124	13.67
Norway	231	0.62	Total	37,481	100.00
Pakistan	4	0.01			
Peru	59	0.16			
Philippines	130	0.35			
Poland	142	0.38			
Portugal	97	0.26			
Russia	309	0.82			
Singapore	385	1.03			
South Africa	678	1.81			
South Korea	750	2.00			
Spain	447	1.19			
Sweden	608	1.62			
Switzerland	738	1.97			
Thailand	192	0.51			
Turkey	168	0.45			
UAE	31	0.08			
UK	3060	8.16			
Uruguay	1	0.00			
US	11,217	29.93			
Total	37,481	100.00			

ESG-related research in a multiple-country setting. Third, the ASSET4 database can be easily combined with other databases. We combine the ASSET4 database with the DataStream database to obtain detailed company information.

We compute an alternative ES score for a robustness check by averaging the environmental and social performance scores (Ioannou & Serafeim, 2012). We also use E, S, and G scores individually for additional analysis.

3.2.3. Moderating variables

As moderating variables, we use Hofstede's cultural dimensions of power distance, masculinity vs femininity, individualism vs collectivism, uncertainty avoidance, long-term vs short-term orientation, and indulgence vs restraint. We obtain six cultural dimension scores from the Hofstede website.[2]

3.2.4. Control variables

We control for firm-level factors such as size, leverage, fixed asset intensity, current ratio, corporate social irresponsibility, and industry. We measure *firm size* using the logarithm of total assets. *Leverage* is measured as total debt divided by total assets and captures the degree of financial risk. We measure *fixed asset intensity* as fixed assets divided by total assets, capturing the firm's dependence on capital expenditure, and *the current ratio* as the current assets divided by current liabilities, capturing financial slack. We include a control variable for MNEs, *multinationals*: Since most MNEs are present in multiple foreign countries, it may be unclear which country's institutions affect the relationship between ESG performance and financial performance. In order to address this issue, it is coded 1 for MNEs and 0 for domestic firms. A firm's *controversy* score is added to control the firm's social irresponsibility behaviours. Finally, the firm's *industry* is controlled using the 1-digit SIC. We gather all firm-level financial information from the DataStream.

We control the macroeconomic factors at the country level. To control for national economies' developmental status and size, we control the *population density*, *GDP growth*, *FDI inflow,* and *patent applications*. All information is gathered from the World Development Indicators (WDI), World Bank. In addition, the country's *regulative environment* is controlled. We use the World Bank's Worldwide Governance Indicators (WGI). The WGI indicators consist of six dimensions: political stability and absence of violence, voice and accountability, government effectiveness, the rule of law, regulatory quality, and control of corruption. A *regulative environment* is calculated as the average of these six dimensions. We lag all explanatory and control variables by one year.

3.2.5. Variables overview

Table 2 presents the summary statistics and correlations among all the variables used in our main analysis. The average ESG score of the sample firms is approximately 40, which is a percentile score (range: 1–100). Each cultural dimension also provides scores from 1–100 at the country level. We find that the five cultural dimensions, except for power distance, are negatively related to our dependent variable, ROA. Regarding ESG score: power distance, masculinity, and short-term orientation are negatively related to ESG score, whereas individualism, uncertainty avoidance, and indulgence show a positive relationship. Finally, we find a high correlation between indulgence, individualism, and short-term orientation. To limit these effects, several country-level control variables are included in our regression models. We also check the multicollinearity issue by computing the variance inflation factors (VIFs). Since the average VIF is 2.86, and all VIFs are below 10, we argue that multicollinearity is not a big concern.

4. Results

As our data have a multilevel structure, with firms nested within countries, a multilevel regression is appropriate for our data. We use a multilevel regression and present our results in Table 3. Model (1) in Table 3 presents the results with control variables only. Model (2) presents the relationship between ESG and financial performance as our baseline. Model (3) includes six cultural dimensions. Models (4) through (9) test the moderating effects of cultural dimensions one by one. Model (10) shows the results with all the variables.

All our models ([2] through [10]) show a strong and positive relationship between ESG performance and financial performance, consistent with the results of previous studies (Hillman & Keim, 2001; Waddock & Graves, 1997). Thus, the baseline hypothesis is supported. Power distance negatively and significantly moderates the relationship

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Table 2
Descriptive statistics and correlations.

	Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10
1	ROA (t + 1) (%)	4.561	12.295	1.000									
2	ESG performance	40.496	20.963	0.062	1.000								
3	Power distance	47.978	15.859	0.035	-0.032	1.000							
4	Masculinity	61.262	18.221	-0.037	-0.080	0.038	1.000						
5	Individualism	68.375	24.986	-0.045	0.004	-0.781	-0.067	1.000					
6	Uncertainty avoidance	55.922	21.579	-0.033	0.090	0.259	0.360	-0.369	1.000				
7	Short term orientation	51.090	25.050	-0.032	-0.066	-0.417	-0.338	0.685	-0.494	1.000			
8	Indulgence	57.022	16.628	-0.025	0.000	-0.686	-0.198	0.784	-0.352	0.736	1.000		
9	Firm size (log)	15.273	1.582	0.043	0.504	0.178	0.049	-0.185	0.173	-0.252	-0.236	1.000	
10	Leverage (%)	25.284	20.639	-0.055	0.056	0.036	-0.052	0.007	-0.004	0.048	0.008	0.203	1.000
11	Current ratio (%)	2.123	3.817	-0.093	-0.134	-0.041	0.015	0.056	-0.030	0.071	0.058	-0.226	-0.176
12	Fixed asset intensity	0.320	0.244	-0.061	0.008	0.039	-0.011	-0.048	0.045	0.017	-0.011	0.129	0.186
13	Controversy	91.301	22.075	-0.005	-0.285	0.071	0.028	-0.102	0.029	-0.049	-0.059	-0.323	-0.031
14	Multinationals	0.765	0.424	0.046	0.177	-0.052	-0.042	-0.023	0.042	-0.120	-0.027	0.138	-0.056
15	GDP growth (%)	2.250	2.364	0.039	-0.112	0.345	-0.136	-0.274	-0.319	-0.028	-0.231	-0.017	-0.015
16	Population density	0.375	1.256	0.019	-0.061	0.288	-0.032	-0.390	-0.243	-0.205	-0.412	0.042	-0.006
17	FDI inflow	3.622	7.303	0.009	-0.039	0.126	-0.204	-0.184	-0.269	-0.049	-0.190	0.016	0.012
18	Patents	11.180	2.040	-0.048	-0.137	-0.028	0.512	0.195	-0.008	0.020	-0.028	0.080	0.021
19	Regulative environment	1.146	0.586	-0.053	0.013	-0.755	0.011	0.568	-0.096	0.177	0.476	-0.115	-0.052
	Variables	Mean	SD	11	12	13	14	15	16	17	18		
11	Current ratio (%)	2.123	3.817	1.000									
12	Fixed asset intensity	0.320	0.244	-0.105	1.000								
13	Controversy	91.301	22.075	0.056	-0.023	1.000							
14	Multinationals	0.765	0.424	-0.020	-0.168	-0.074	1.000						
15	GDP growth (%)	2.250	2.364	0.001	0.014	0.039	-0.053	1.000					
16	Population density	0.375	1.256	0.002	-0.038	0.051	0.047	0.137	1.000				
17	FDI inflow	3.622	7.303	0.003	-0.031	0.036	0.047	0.133	0.713	1.000			
18	Patents	11.180	2.040	0.035	-0.045	-0.029	-0.123	-0.005	-0.167	-0.306	1.000		
19	Regulative environment	1.146	0.586	0.050	-0.038	-0.033	0.117	-0.372	0.096	0.139	-0.070		

Note: N = 37,481

between ESG performance and financial performance in Model (4) ($\beta = -0.0012$, $p < 0.001$), but it is not significant in Model (10). Therefore, Hypothesis 1 is not supported. Regarding H2, masculinity positively and significantly moderates the relationship between ESG performance and financial performance in both Models (5) ($\beta = 0.0005$, $p < 0.05$) and Model (10) ($\beta = 0.0007$, $p < 0.01$ in Table 3). Thus, Hypothesis 2 is supported, showing that stakeholders in masculine cultures are more likely to pay for firms' ESG behaviour leading to increased financial performance. Individualism also positively and significantly moderates the relationship between ESG performance and financial performance in both Models (6) ($\beta = 0.0010$, $p < 0.001$) and Model (10) ($\beta = 0.0008$, $p < 0.05$). These results show that stakeholders in an individualistic society are inclined to provide more incentives to firms' ESG practices with economic tools, strengthening the relationship between ESG performance and financial performance. However, although uncertainty avoidance is negatively significant in Model (7) ($\beta = -0.0005$, $p < 0.01$), it is insignificant in Model (10) ($\beta = -0.0003$, $p = n.s.$). Thus, the moderating effects of uncertainty avoidance, Hypothesis 4, is not statistically supported. Both short-term orientation and indulgence are positively significant in Model (8) ($\beta = 0.0006$, $p < 0.001$) and Model (9) ($\beta = 0.0011$, $p < 0.001$) but in Model (10), both show insignificant results. Therefore, the moderating effects of short-term orientation (H5) and indulgence (H6) are not statistically supported.

Concerning the effect of each cultural dimension on MNEs financial outcomes, uncertainty avoidance and short-term orientation adversely impact the firm's financial performance in Models (3) and (10). Regarding the control variables, firms' controversy scores positively impact the firm's performance. That suggests firms can also benefit from harm, in line with previous studies (Kotchen & Moon, 2012; Krüger, 2015). We also note that a country's regulative environment negatively impacts the firm's performance.

4.1. Robustness check

We conduct several robustness tests to verify our findings. We use an alternative measure of ESG performance—the average of environmental

and social performance (ES) following Ioannou and Serafeim (2012). Using this alternative measurement, we conduct a multilevel model analysis. Table 4 presents the results of this analysis. The results are consistent with our main findings: individualism and masculinity positively moderate the relationship between ESG and financial performance, while other dimensions do not show a significant moderating effect.

4.2. Analysis by separate E, S, and G performance

Given that each dimension of ESG reflects different issues in firms' ESG activities, our results may differ for each dimension. Thus, we test the moderating effect of cultural dimensions in the relationship of each ESG dimension as an independent variable with financial performance. Tables 5–7 present the multilevel analysis results for environmental (Table 5), social (Table 6), and corporate governance (Table 7), respectively. Similar results are obtained when we use environmental performance as an independent variable: masculinity positively moderates the relationship between environmental performance and financial performance, but the statistical significance of the moderating effect of masculinity is weak. Moreover, the results for individualism are consistent with those for three separate performances. Thus, individualism moderates the relationship between each ESG score and financial performance.

Contrary to our expectation, uncertainty avoidance negatively moderates the relationship between environmental performance and financial performance, although the statistical significance is weak at 0.1. That is observed possibly because a society with high uncertainty avoidance is more sensitive to the firms' involvement in environmental-related accidents, such as oil spills. Thus, a country with high uncertainty avoidance emphasizes the benefit of the insurance-like effect of ESG practice (Godfrey et al., 2009; Shiu & Yang, 2017) more than its role in providing public goods (Kotchen, 2006).

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)
	Dependent variable: ROA									
Firm size (log)	-0.3087 * **	-0.4178 * **	-0.4566 * **	-0.4582 * **	-0.4170 * **	-0.4786 * **	-0.4177 * **	-0.4714 * **	-0.4535 * **	-0.4901 * **
	(0.0825)	(0.0883)	(0.0890)	(0.0889)	(0.0883)	(0.0887)	(0.0885)	(0.0888)	(0.0888)	(0.0891)
Leverage	0.0102 *	0.0103 * *	0.0107 * *	0.0106 * *	0.0102 *	0.0103 * *	0.0102 *	0.0102 *	0.0105 * *	0.0104 * *
	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)
Current ratio	-0.1925 * **	-0.1914 * **	-0.1909 * **	-0.1908 * **	-0.1915 * **	-0.1906 * **	-0.1910 * **	-0.1908 * **	-0.1907 * **	-0.1901 * **
	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)
Fixed asset intensity	-1.4971 * *	-1.4849 * *	-1.4393 * *	-1.5005 * *	-1.5009 * *	-1.5540 * *	-1.4978 * *	-1.4770 * *	-1.5084 * *	-1.5159 * *
	(0.5270)	(0.5263)	(0.5250)	(0.5264)	(0.5264)	(0.5251)	(0.5259)	(0.5236)	(0.5254)	(0.5242)
Controversy	0.0074 * *	0.0081 * *	0.0079 * *	0.0082 * *	0.0081 * *	0.0082 * *	0.0082 * *	0.0080 * *	0.0081 * *	0.0083 * *
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Multinationals	0.3445	0.3135	0.3056	0.3062	0.3078	0.3114	0.3101	0.3025	0.3160	0.2906
	(0.2145)	(0.2145)	(0.2145)	(0.2145)	(0.2145)	(0.2143)	(0.2144)	(0.2143)	(0.2144)	(0.2143)
GDP growth	0.2017 * **	0.2063 * **	0.1658 * **	0.1801 * **	0.2007 * **	0.1744 * **	0.2033 * **	0.2040 * **	0.1911 * **	0.1456 * **
	(0.0416)	(0.0416)	(0.0430)	(0.0421)	(0.0417)	(0.0417)	(0.0423)	(0.0409)	(0.0416)	(0.0433)
Population density	0.1688	0.1931	-0.2740	0.0249	0.2051	-0.0962	0.1293	0.1106	0.0025	-0.2631
	(0.1713)	(0.1701)	(0.2197)	(0.1909)	(0.1702)	(0.1885)	(0.1784)	(0.1492)	(0.1839)	(0.2199)
FDI inflow	-0.0312 *	-0.0304 *	-0.0305 *	-0.0285 *	-0.0321 *	-0.0273 *	-0.0311 *	-0.0312 *	-0.0280 *	-0.0315 *
	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0132)	(0.0131)	(0.0131)	(0.0131)	(0.0131)	(0.0132)
Patents	-0.4783 * **	-0.4551 * **	-0.5767 * **	-0.4454 * **	-0.4088 * *	-0.4283 * **	-0.4719 * **	-0.5913 * **	-0.5098 * **	-0.5746 * **
	(0.1171)	(0.1162)	(0.1151)	(0.1180)	(0.1267)	(0.1097)	(0.1164)	(0.0949)	(0.1129)	(0.1151)
Regulative environment	-1.0414 * *	-1.0857 * **	-0.3851	-0.3131	-1.1222 * **	-0.2074	-1.1429 * **	-1.0684 * **	-0.7308 *	-0.3435
	(0.3216)	(0.3193)	(0.5117)	(0.4932)	(0.3198)	(0.4224)	(0.3211)	(0.2730)	(0.3475)	(0.5144)
ESG performance		0.0184 * **	0.0196 * **	0.0194 * **	0.0187 * **	0.0202 * **	0.0192 * **	0.0193 * **	0.0191 * **	0.0213 * **
		(0.0052)	(0.0052)	(0.0052)	(0.0052)	(0.0052)	(0.0052)	(0.0052)	(0.0052)	(0.0052)
Power distance			0.0151	0.0382 +						0.0183
			(0.0210)	(0.0206)						(0.0209)
Masculinity vs. femininity			-0.0020		-0.0160					-0.0041
			(0.0130)		(0.0147)					(0.0129)
Individualism vs. collectivism			-0.0266			-0.0386 * *				-0.0224
			(0.0162)			(0.0138)				(0.0162)
Uncertainty avoidance			-0.0323 * *				-0.0143			-0.0306 * *
			(0.0116)				(0.0119)			(0.0116)
Short term vs. long term orientation			-0.0307 *					-0.0322 * **		-0.0296 *
			(0.0136)					(0.0089)		(0.0136)
Indulgence vs. restraint			-0.0002						-0.0308 +	-0.0001
			(0.0198)						(0.0163)	(0.0197)
ESG * Power distance				-0.0012 * **						-0.0000
				(0.0003)						(0.0004)
ESG * Masculinity					0.0005 *					0.0007 * *
					(0.0002)					(0.0002)
ESG * Individualism						0.0010 * **				0.0008 *
						(0.0002)				(0.0003)
ESG * Uncertainty avoidance							-0.0005 * *			-0.0003
							(0.0002)			(0.0002)
ESG * Short term orientation								0.0006 * **		0.0001
								(0.0002)		(0.0003)
ESG * Indulgence									0.0011 * **	-0.0000
									(0.0002)	(0.0004)
Constant	12.7278 * **	13.8790 * **	19.3340 * **	11.7020 * **	14.3202 * **	16.1335 * **	15.0251 * **	17.7398 * **	16.4819 * **	19.5390 * **
	(2.5414)	(2.5549)	(3.2765)	(2.8616)	(2.5762)	(2.5801)	(2.6712)	(2.6101)	(2.7961)	(3.2732)
Log of random effects parameter										
Country (Level 1)	-0.0440	-0.0627	-0.6331	-0.0369	-0.0613	-0.2105	-0.0748	-0.6978	-0.1978	-0.6425
	(0.2634)	(0.2678)	(0.5243)	(0.2854)	(0.2527)	(0.3317)	(0.2611)	(0.5661)	(0.3184)	(0.5390)
Firm (Level 2)	2.2066 * **	2.2040 * **	2.2051 * **	2.2040 * **	2.2040 * **	2.2014 * **	2.2015 * **	2.2031 * **	2.2026 * **	2.2009 * **
	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0141)	(0.0141)	(0.0141)	(0.0141)	(0.0141)
Number of observations	37481	37481	37481	37481	37481	37481	37481	37481	37481	37481
Log-likelihood	-141695.939	-141689.651	-141679.458	-141677.749	-141686.155	-141667.600	-141684.902	-141678.510	-141679.002	-141657.729
AIC	283469.877	283459.301	283450.917	283439.498	283456.311	283419.199	283453.804	283441.021	283442.003	283419.458

Notes: Standard errors are in parentheses; $+$, *, * *, and * ** indicate statistical significance at the 10 per cent, 5 per cent, 1 per cent, and 0.1 per cent levels, respectively. Year and industry fixed effects are included but are not reported here. Multilevel regression with random intercept modelling is used to estimate the results. The total number of observations is 37,481, with 4978 firms in 48 countries. Aside from cultural dimensions, all explanatory and control variables are lagged by one year to minimise the endogeneity concern. AIC = Akaike information criterion.

Table 4
Multilevel regression results with ES score as independent variable.

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)
	Dependent variable: ROA									
Firm size (log)	-0.3087 * **	-0.3920 * **	-0.4300 * **	-0.4280 * **	-0.3930 * **	-0.4463 * **	-0.3901 * **	-0.4396 * **	-0.4244 * **	-0.4581 * **
	(0.0825)	(0.0878)	(0.0885)	(0.0884)	(0.0878)	(0.0883)	(0.0881)	(0.0883)	(0.0883)	(0.0887)
Leverage	0.0102 *	0.0103 *	0.0106 * *	0.0105 * *	0.0101 *	0.0103 * *	0.0101 *	0.0103 *	0.0104 * *	0.0105 * *
	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)
Current ratio	-0.1925 * **	-0.1917 * **	-0.1912 * **	-0.1914 * **	-0.1919 * **	-0.1914 * **	-0.1914 * **	-0.1915 * **	-0.1913 * **	-0.1909 * **
	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)
Fixed asset intensity	-1.4971 * *	-1.5023 * *	-1.4563 * *	-1.5127 * *	-1.5207 * *	-1.5630 * *	-1.5039 * *	-1.4844 * *	-1.5227 * *	-1.5196 * *
	(0.5270)	(0.5266)	(0.5253)	(0.5267)	(0.5267)	(0.5256)	(0.5262)	(0.5241)	(0.5257)	(0.5248)
Controversy	0.0074 * *	0.0079 * *	0.0078 * *	0.0081 * *	0.0079 * *	0.0081 * *	0.0081 * *	0.0079 * *	0.0080 * *	0.0082 * *
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Multinationals	0.3445	0.3171	0.3091	0.3071	0.3111	0.3140	0.3141	0.3069	0.3206	0.2949
	(0.2145)	(0.2146)	(0.2146)	(0.2146)	(0.2147)	(0.2145)	(0.2146)	(0.2145)	(0.2145)	(0.2145)
GDP growth	0.2017 * **	0.2061 * **	0.1656 * **	0.1808 * **	0.2012 * **	0.1760 * **	0.2024 * **	0.2040 * **	0.1916 * **	0.1460 * **
	(0.0416)	(0.0416)	(0.0430)	(0.0421)	(0.0417)	(0.0417)	(0.0423)	(0.0410)	(0.0416)	(0.0433)
Population density	0.1688	0.1885	-0.2751	0.0254	0.1989	-0.0938	0.1217	0.1080	0.0030	-0.2620
	(0.1713)	(0.1698)	(0.2197)	(0.1901)	(0.1700)	(0.1878)	(0.1782)	(0.1493)	(0.1835)	(0.2196)
FDI inflow	-0.0312 *	-0.0304 *	-0.0306 *	-0.0285 *	-0.0319 *	-0.0272 *	-0.0311 *	-0.0310 *	-0.0280 *	-0.0302 *
	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0132)	(0.0131)	(0.0131)	(0.0131)	(0.0131)	(0.0132)
Patents	-0.4783 * **	-0.4559 * **	-0.5790 * **	-0.4463 * **	-0.4094 * *	-0.4296 * **	-0.4724 * **	-0.5885 * **	-0.5094 * **	-0.5639 * **
	(0.1171)	(0.1160)	(0.1151)	(0.1174)	(0.1266)	(0.1092)	(0.1162)	(0.0948)	(0.1125)	(0.1145)
Regulative environment	-1.0414 * *	-1.0821 * **	-0.3928	-0.3323	-1.1123 * **	-0.2261	-1.1416 * **	-1.0793 * **	-0.7310 *	-0.3795
	(0.3216)	(0.3188)	(0.5118)	(0.4917)	(0.3194)	(0.4210)	(0.3207)	(0.2735)	(0.3471)	(0.5143)
ES performance		0.0129 * *	0.0139 * *	0.0143 * *	0.0132 * *	0.0152 * **	0.0137 * *	0.0137 * *	0.0140 * *	0.0162 * **
		(0.0046)	(0.0046)	(0.0046)	(0.0046)	(0.0046)	(0.0046)	(0.0046)	(0.0046)	(0.0046)
Power distance			0.0149	0.0384 +						0.0166
			(0.0210)	(0.0206)						(0.0210)
Masculinity vs. femininity			-0.0018		-0.0163					-0.0047
			(0.0130)		(0.0147)					(0.0129)
Individualism vs. collectivism			-0.0263			-0.0387 * *				-0.0236
			(0.0163)			(0.0137)				(0.0162)
Uncertainty avoidance			-0.0325 * *				-0.0142			-0.0298 *
			(0.0116)				(0.0119)			(0.0116)
Short term vs long term orientation			-0.0304 *					-0.0323 * **		-0.0287 *
			(0.0136)					(0.0089)		(0.0136)
Indulgence vs. restraint			-0.0000						-0.0313 +	0.0004
			(0.0198)						(0.0163)	(0.0197)
ES * Power distance				-0.0010 * **						0.0000
				(0.0002)						(0.0004)
ES * Masculinity					0.0003 *					0.0004 *
					(0.0002)					(0.0002)
ES * Individualism						0.0008 * **				0.0007 *
						(0.0001)				(0.0003)
ES * Uncertainty avoidance							-0.0004 *			-0.0003
							(0.0002)			(0.0002)
ES * Short term orientation								0.0004 * *		-0.0001
								(0.0001)		(0.0002)
ES * Indulgence									0.0008 * **	0.0001
									(0.0002)	(0.0004)
Constant	12.7278 * **	13.7079 * **	19.1595 * **	11.4824 * **	14.1902 * **	15.8816 * **	14.7982 * **	17.4473 * **	16.2620 * **	19.2644 * **
	(2.5414)	(2.5576)	(3.2787)	(2.8608)	(2.5799)	(2.5820)	(2.6747)	(2.6112)	(2.7965)	(3.2747)
Log of random effects parameter										
Country (Level 1)	-0.0440	-0.0691	-0.6385	-0.0518	-0.0662	-0.2274	-0.0806	-0.7090	-0.2095	-0.6693
	(0.2634)	(0.2699)	(0.5349)	(0.2894)	(0.2543)	(0.3374)	(0.2624)	(0.5822)	(0.3227)	(0.5684)
Firm (Level 2)	2.2066 * **	2.2054 * **	2.2066 * **	2.2058 * **	2.2055 * **	2.2040 * **	2.2033 * **	2.2058 * **	2.2046 * **	2.2040 * **
	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0141)
Number of observations	37481	37481	37481	37481	37481	37481	37481	37481	37481	37481
Log-likelihood	-141695.939	-141691.975	-141681.958	-141681.578	-141689.501	-141673.925	-141688.572	-141683.898	-141682.870	-141665.441
AIC	283469.877	283463.950	283455.915	283447.155	283463.002	283431.849	283461.144	283451.796	283449.741	283434.882

Notes: The same notes as those belonging to Table 3 apply here.

Table 5

Multilevel regression results with E score as independent variable.

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)
	Dependent variable: ROA									
Firm size (log)	-0.3087 * **	-0.4301 * **	-0.4653 * **	-0.4582 * **	-0.4298 * **	-0.4751 * **	-0.4291 * **	-0.4791 * **	-0.4599 * **	-0.4891 * **
	(0.0825)	(0.0872)	(0.0878)	(0.0876)	(0.0872)	(0.0874)	(0.0873)	(0.0875)	(0.0876)	(0.0878)
Leverage	0.0102 *	0.0102 *	0.0106 * *	0.0105 * *	0.0101 *	0.0103 * *	0.0101 *	0.0102 *	0.0105 * *	0.0103 * *
	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)
Current ratio	-0.1925 * **	-0.1915 * **	-0.1910 * **	-0.1913 * **	-0.1917 * **	-0.1915 * **	-0.1912 * **	-0.1913 * **	-0.1913 * **	-0.1911 * **
	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)
Fixed asset intensity	-1.4971 * *	-1.5427 * *	-1.4975 * *	-1.5618 * *	-1.5535 * *	-1.6250 * *	-1.5534 * *	-1.5444 * *	-1.5751 * *	-1.5880 * *
	(0.5270)	(0.5262)	(0.5250)	(0.5262)	(0.5263)	(0.5249)	(0.5257)	(0.5234)	(0.5251)	(0.5241)
Controversy	0.0074 * *	0.0080 * *	0.0079 * *	0.0082 * *	0.0080 * *	0.0082 * *	0.0082 * *	0.0081 * *	0.0082 * *	0.0083 * *
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Multinationals	0.3445	0.3087	0.3013	0.3071	0.3066	0.3117	0.3051	0.2932	0.3140	0.2955
	(0.2145)	(0.2145)	(0.2145)	(0.2145)	(0.2145)	(0.2143)	(0.2144)	(0.2143)	(0.2143)	(0.2143)
GDP growth	0.2017 * **	0.2096 * **	0.1682 * **	0.1859 * **	0.2057 * **	0.1784 * **	0.2067 * **	0.2073 * **	0.1935 * **	0.1526 * **
	(0.0416)	(0.0416)	(0.0430)	(0.0420)	(0.0417)	(0.0417)	(0.0423)	(0.0409)	(0.0416)	(0.0433)
Population density	0.1688	0.1903	-0.2812	0.0340	0.1998	-0.0820	0.1150	0.1072	0.0100	-0.2771
	(0.1713)	(0.1680)	(0.2194)	(0.1881)	(0.1678)	(0.1860)	(0.1765)	(0.1485)	(0.1817)	(0.2193)
FDI inflow	-0.0312 *	-0.0301 *	-0.0301 *	-0.0279 *	-0.0312 *	-0.0267 *	-0.0307 *	-0.0308 *	-0.0272 *	-0.0306 *
	(0.0131)	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0131)	(0.0131)	(0.0131)	(0.0131)	(0.0132)
Patents	-0.4783 * **	-0.4576 * **	-0.5739 * **	-0.4471 * **	-0.4107 * **	-0.4177 * **	-0.4718 * **	-0.5730 * **	-0.5005 * **	-0.5595 * **
	(0.1171)	(0.1144)	(0.1146)	(0.1157)	(0.1248)	(0.1077)	(0.1149)	(0.0938)	(0.1108)	(0.1143)
Regulative environment	-1.0414 * *	-1.1086 * **	-0.4008	-0.3872	-1.1330 * **	-0.2584	-1.1588 * **	-1.0577 * **	-0.7566 *	-0.3088
	(0.3216)	(0.3155)	(0.5108)	(0.4876)	(0.3154)	(0.4172)	(0.3180)	(0.2717)	(0.3437)	(0.5129)
Environmental performance		0.0166 * **	0.0171 * **	0.0170 * **	0.0165 * **	0.0172 * **	0.0173 * **	0.0171 * **	0.0171 * **	0.0179 * **
		(0.0038)	(0.0038)	(0.0038)	(0.0038)	(0.0038)	(0.0038)	(0.0038)	(0.0038)	(0.0038)
Power distance			0.0152	0.0376 +						0.0178
			(0.0209)	(0.0204)						(0.0209)
Masculinity vs. femininity			-0.0021		-0.0162					-0.0052
			(0.0129)		(0.0145)					(0.0129)
Individualism vs. collectivism			-0.0263			-0.0384 * *				-0.0240
			(0.0162)			(0.0135)				(0.0162)
Uncertainty avoidance			-0.0336 * *				-0.0142			-0.0303 * *
			(0.0116)				(0.0118)			(0.0116)
Short term vs. long term orientation			-0.0291 *					-0.0315 * **		-0.0277 *
			(0.0136)					(0.0088)		(0.0136)
Indulgence vs. restraint			-0.0005						-0.0314 +	-0.0016
			(0.0197)						(0.0161)	(0.0197)
E * Power distance				-0.0008 * **						0.0002
				(0.0002)						(0.0003)
E * Masculinity					0.0002					0.0004 *
					(0.0002)					(0.0002)
E * Individualism						0.0007 * **				0.0006 *
						(0.0001)				(0.0002)
E * Uncertainty avoidance							-0.0004 * *			-0.0003 +
							(0.0001)			(0.0002)
E * Short term orientation								0.0005 * **		0.0001
								(0.0001)		(0.0002)
E * Indulgence									0.0008 * **	0.0001
									(0.0002)	(0.0003)
Constant	12.7278 * **	14.3378 * **	19.6929 * **	12.0864 * **	14.7863 * **	16.2807 * **	15.4338 * **	17.8891 * **	16.7692 * **	19.7479 * **
	(2.5414)	(2.5516)	(3.2744)	(2.8511)	(2.5715)	(2.5703)	(2.6677)	(2.6000)	(2.7822)	(3.2692)
Log of random effects parameter										
Country (Level 1)	-0.0440	-0.0971	-0.6444	-0.0813	-0.1014	-0.2559	-0.1020	-0.7292	-0.2425	-0.6607
	(0.2634)	(0.2796)	(0.5328)	(0.2975)	(0.2652)	(0.3440)	(0.2691)	(0.5939)	(0.3339)	(0.5425)
Firm (Level 2)	2.2066 * **	2.2040 * **	2.2051 * **	2.2036 * **	2.2040 * **	2.2007 * **	2.2010 * **	2.2024 * **	2.2020 * **	2.1999 * **
	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0141)	(0.0141)	(0.0141)	(0.0141)	(0.0141)
Number of observations	37481	37481	37481	37481	37481	37481	37481	37481	37481	37481
Log-likelihood	-141695.939	-141686.282	-141676.210	-141677.130	-141684.591	-141666.563	-141680.852	-141673.699	-141675.117	-141657.329
AIC	283469.877	283452.564	283444.420	283438.260	283453.182	283417.126	283445.704	283431.399	283434.234	283418.659

Notes: The same notes as those belonging to Table 3 apply here.

Table 6

Multilevel regression results with S score as independent variable.

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)
	Dependent variable: ROA									
Firm size (log)	-0.3087 * **	-0.3149 * **	-0.3515 * **	-0.3442 * **	-0.3152 * **	-0.3553 * **	-0.3087 * **	-0.3540 * **	-0.3399 * **	-0.3610 * **
	(0.0825)	(0.0858)	(0.0866)	(0.0864)	(0.0859)	(0.0863)	(0.0861)	(0.0865)	(0.0864)	(0.0869)
Leverage	0.0102 *	0.0102 *	0.0106 * *	0.0104 * *	0.0101 *	0.0102 *	0.0101 *	0.0104 * *	0.0103 *	0.0106 * *
	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)
Current ratio	-0.1925 * **	-0.1924 * **	-0.1919 * **	-0.1921 * **	-0.1924 * **	-0.1920 * **	-0.1921 * **	-0.1923 * **	-0.1921 * **	-0.1914 * **
	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)
Fixed asset intensity	-1.4971 * *	-1.4949 * *	-1.4470 * *	-1.4907 * *	-1.5118 * *	-1.5240 * *	-1.4853 * *	-1.4641 * *	-1.5007 * *	-1.4671 * *
	(0.5270)	(0.5270)	(0.5259)	(0.5274)	(0.5272)	(0.5267)	(0.5269)	(0.5251)	(0.5266)	(0.5261)
Controversy	0.0074 * *	0.0074 * *	0.0073 * *	0.0076 * *	0.0075 * *	0.0075 * *	0.0075 * *	0.0073 * *	0.0074 * *	0.0076 * *
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Multinationals	0.3445	0.3422	0.3339	0.3300	0.3338	0.3397	0.3410	0.3338	0.3446	0.3155
	(0.2145)	(0.2147)	(0.2146)	(0.2147)	(0.2147)	(0.2146)	(0.2146)	(0.2146)	(0.2146)	(0.2147)
GDP growth	0.2017 * **	0.2019 * **	0.1632 * **	0.1815 * **	0.1982 * **	0.1802 * **	0.1953 * **	0.1987 * **	0.1917 * **	0.1469 * **
	(0.0416)	(0.0416)	(0.0430)	(0.0421)	(0.0417)	(0.0418)	(0.0423)	(0.0410)	(0.0417)	(0.0433)
Population density	0.1688	0.1708	-0.2713	0.0138	0.1787	-0.0999	0.1044	0.0956	0.0006	-0.2644
	(0.1713)	(0.1714)	(0.2222)	(0.1930)	(0.1722)	(0.1919)	(0.1806)	(0.1518)	(0.1866)	(0.2243)
FDI inflow	-0.0312 *	-0.0312 *	-0.0314 *	-0.0300 *	-0.0324 *	-0.0289 *	-0.0316 *	-0.0313 *	-0.0300 *	-0.0305 *
	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0132)	(0.0131)	(0.0132)	(0.0131)	(0.0131)	(0.0132)
Patents	-0.4783 * **	-0.4758 * **	-0.6048 * **	-0.4751 * **	-0.4251 * **	-0.4618 * **	-0.4938 * **	-0.6091 * **	-0.5348 * **	-0.5877 * **
	(0.1171)	(0.1174)	(0.1179)	(0.1197)	(0.1283)	(0.1125)	(0.1181)	(0.0984)	(0.1153)	(0.1197)
Regulative environment	-1.0414 * *	-1.0440 * *	-0.4197	-0.3320	-1.0655 * **	-0.2447	-1.1044 * **	-1.1154 * **	-0.7338 *	-0.4715
	(0.3216)	(0.3215)	(0.5169)	(0.4974)	(0.3232)	(0.4296)	(0.3247)	(0.2783)	(0.3523)	(0.5237)
Social performance		0.0011	0.0020	0.0021	0.0015	0.0029	0.0014	0.0017	0.0018	0.0031
		(0.0042)	(0.0042)	(0.0042)	(0.0042)	(0.0042)	(0.0042)	(0.0042)	(0.0042)	(0.0042)
Power distance			0.0144	0.0359 +						0.0141
			(0.0212)	(0.0208)						(0.0213)
Masculinity vs. femininity			-0.0030		-0.0163					-0.0047
			(0.0132)		(0.0148)					(0.0133)
Individualism vs. collectivism			-0.0241			-0.0371 * *				-0.0229
			(0.0165)			(0.0142)				(0.0166)
Uncertainty avoidance			-0.0314 * *				-0.0145			-0.0298 *
			(0.0118)				(0.0121)			(0.0120)
Short term vs. long term orientation			-0.0321 *					-0.0331 * **		-0.0309 *
			(0.0139)					(0.0093)		(0.0140)
Indulgence vs. restraint			0.0007						-0.0297 +	0.0022
			(0.0200)						(0.0166)	(0.0201)
S * Power distance				-0.0008 * **						-0.0001
				(0.0002)						(0.0003)
S * Masculinity					0.0003 +					0.0003
					(0.0002)					(0.0002)
S * Individualism						0.0005 * **				0.0005 *
						(0.0001)				(0.0003)
S * Uncertainty avoidance							-0.0002			-0.0002
							(0.0001)			(0.0002)
S * Short term orientation								0.0001		-0.0004
								(0.0001)		(0.0002)
S * Indulgence									0.0005 *	0.0002
									(0.0002)	(0.0004)
Constant	12.7278 * **	12.7887 * **	18.2873 * **	10.6417 * **	13.2169 * **	14.7267 * **	13.8167 * **	16.4770 * **	15.1943 * **	18.2278 * **
	(2.5414)	(2.5515)	(3.3026)	(2.8697)	(2.5765)	(2.5896)	(2.6761)	(2.6315)	(2.8066)	(3.3301)
Log of random effects parameter										
Country (Level 1)	-0.0440	-0.0450	-0.5633	-0.0092	-0.0325	-0.1598	-0.0480	-0.6096	-0.1530	-0.5298
	(0.2634)	(0.2635)	(0.4860)	(0.2779)	(0.2460)	(0.3141)	(0.2558)	(0.5073)	(0.3042)	(0.4801)
Firm (Level 2)	2.2066 * **	2.2065 * **	2.2077 * **	2.2080 * **	2.2066 * **	2.2076 * **	2.2055 * **	2.2085 * **	2.2073 * **	2.2079 * **
	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)	(0.0140)
Number of observations	37481	37481	37481	37481	37481	37481	37481	37481	37481	37481
Log-likelihood	-141695.939	-141695.903	-141686.405	-141688.060	-141693.562	-141685.382	-141694.677	-141691.171	-141691.231	-141676.101
AIC	283469.877	283471.806	283464.810	283460.120	283471.124	283454.764	283473.354	283466.342	283466.462	283456.203

Notes: The same notes as those belonging to Table 3 apply here.

Table 7

Multilevel regression results with firm G score as independent variable.

Variables	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)	Model (9)	Model (10)
	Dependent variable: ROA									
Firm size (log)	-0.3087 * **	-0.3673 * **	-0.4017 * **	-0.3974 * **	-0.3643 * **	-0.4145 * **	-0.3667 * **	-0.4279 * **	-0.4005 * **	-0.4285 * **
	(0.0825)	(0.0846)	(0.0854)	(0.0851)	(0.0847)	(0.0849)	(0.0849)	(0.0851)	(0.0852)	(0.0854)
Leverage	0.0102 *	0.0103 *	0.0106 * *	0.0105 * *	0.0102 *	0.0102 *	0.0103 *	0.0102 *	0.0104 * *	0.0101 *
	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)	(0.0040)
Current ratio	-0.1925 * **	-0.1920 * **	-0.1916 * **	-0.1920 * **	-0.1919 * **	-0.1918 * **	-0.1918 * **	-0.1913 * **	-0.1915 * **	-0.1907 * **
	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0178)	(0.0177)
Fixed asset intensity	-1.4971 * *	-1.5192 * *	-1.4765 * *	-1.5501 * *	-1.5092 * *	-1.6216 * *	-1.5516 * *	-1.5700 * *	-1.5563 * *	-1.5831 * *
	(0.5270)	(0.5264)	(0.5253)	(0.5266)	(0.5264)	(0.5254)	(0.5263)	(0.5236)	(0.5257)	(0.5242)
Controversy	0.0074 * *	0.0076 * *	0.0074 * *	0.0076 * *	0.0076 * *	0.0075 * *	0.0076 * *	0.0075 * *	0.0075 * *	0.0074 * *
	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)	(0.0028)
Multinationals	0.3445	0.3347	0.3275	0.3406	0.3340	0.3392	0.3323	0.3211	0.3339	0.3259
	(0.2145)	(0.2144)	(0.2144)	(0.2144)	(0.2144)	(0.2142)	(0.2143)	(0.2141)	(0.2143)	(0.2141)
GDP growth	0.2017 * **	0.2024 * **	0.1638 * **	0.1900 * **	0.2013 * **	0.1849 * **	0.1956 * **	0.1982 * **	0.1930 * **	0.1571 * **
	(0.0416)	(0.0431)	(0.0420)	(0.0420)	(0.0416)	(0.0417)	(0.0423)	(0.0410)	(0.0417)	(0.0431)
Population density	0.1688	0.1761	-0.2718	0.0276	0.1832	-0.0846	0.1112	0.1020	0.0167	-0.2754
	(0.1713)	(0.1717)	(0.2225)	(0.1940)	(0.1716)	(0.1919)	(0.1817)	(0.1517)	(0.1868)	(0.2235)
FDI inflow	-0.0312 *	-0.0311 *	-0.0313 *	-0.0303 *	-0.0315 *	-0.0298 *	-0.0316 *	-0.0320 *	-0.0303 *	-0.0335 *
	(0.0131)	(0.0131)	(0.0131)	(0.0132)	(0.0132)	(0.0131)	(0.0132)	(0.0131)	(0.0131)	(0.0131)
Patents	-0.4783 * **	-0.4779 * **	-0.6053 * **	-0.4836 * **	-0.4265 * **	-0.4490 * **	-0.4960 * **	-0.6118 * **	-0.5308 * **	-0.6180 * **
	(0.1171)	(0.1174)	(0.1181)	(0.1203)	(0.1278)	(0.1123)	(0.1187)	(0.0986)	(0.1157)	(0.1196)
Regulative environment	-1.0414 * *	-1.0490 * *	-0.4107	-0.3792	-1.0631 * **	-0.2726	-1.0998 * **	-1.1118 * **	-0.7786 *	-0.3521
	(0.3216)	(0.3223)	(0.5170)	(0.4987)	(0.3221)	(0.4294)	(0.3267)	(0.2771)	(0.3524)	(0.5192)
Governance performance		0.0113 * *	0.0117 * **	0.0108 * *	0.0109 * *	0.0103 * *	0.0115 * **	0.0120 * **	0.0111 * *	0.0107 * *
		(0.0035)	(0.0035)	(0.0035)	(0.0035)	(0.0035)	(0.0035)	(0.0035)	(0.0035)	(0.0035)
Power distance			0.0149	0.0347 +						0.0183
			(0.0212)	(0.0209)						(0.0213)
Masculinity vs. femininity			-0.0039		-0.0148					-0.0016
			(0.0132)		(0.0148)					(0.0133)
Individualism vs. collectivism			-0.0242			-0.0377 * *				-0.0222
			(0.0165)			(0.0142)				(0.0165)
Uncertainty avoidance			-0.0309 * *				-0.0143			-0.0323 * *
			(0.0118)				(0.0122)			(0.0119)
Short term vs. long term orientation			-0.0327 *					-0.0330 * **		-0.0304 *
			(0.0139)					(0.0093)		(0.0140)
Indulgence vs. restrained			0.0001						-0.0298 +	-0.0027
			(0.0200)						(0.0167)	(0.0200)
G * Power distance				-0.0008 * **						-0.0001
				(0.0002)						(0.0004)
G * Masculinity					0.0003 +					0.0007 * *
					(0.0002)					(0.0002)
G * Individualism						0.0007 * **				0.0005 +
						(0.0001)				(0.0003)
G * Uncertainty avoidance							-0.0005 * *			-0.0002
							(0.0002)			(0.0002)
G * Short term orientation								0.0007 * **		0.0008 * *
								(0.0001)		(0.0002)
G * Indulgence									0.0008 * **	-0.0007 +
									(0.0002)	(0.0004)
Constant	12.7278 * **	13.1942 * **	18.6845 * **	11.2755 * **	13.4805 * **	15.2704 * **	14.3336 * **	17.2626 * **	15.7406 * **	19.0705 * **
	(2.5414)	(2.5447)	(3.3018)	(2.8696)	(2.5662)	(2.5748)	(2.6739)	(2.6236)	(2.8002)	(3.3121)
Log of random effects parameter										
Country (Level 1)	-0.0440	-0.0343	-0.5424	0.0117	-0.0358	-0.1479	-0.0256	-0.5770	-0.1321	-0.4955
	(0.2634)	(0.2611)	(0.4616)	(0.2688)	(0.2482)	(0.3013)	(0.2530)	(0.4730)	(0.2954)	(0.4351)
Firm (Level 2)	2.2066 * **	2.2036 * **	2.2047 * **	2.2032 * **	2.2033 * **	2.2002 * **	2.2012 * **	2.2003 * **	2.2019 * **	2.1976 * **
	(0.0140)	(0.0140)	(0.0141)	(0.0141)	(0.0140)	(0.0141)	(0.0141)	(0.0141)	(0.0141)	(0.0141)
Number of observations	37481	37481	37481	37481	37481	37481	37481	37481	37481	37481
Log-likelihood	-141695.939	-141690.770	-141680.992	-141683.416	-141688.786	-141672.325	-141685.543	-141672.486	-141682.247	-141656.902
AIC	283469.877	283461.541	283453.984	283450.832	283461.573	283428.650	283455.087	283428.972	283448.493	283417.803

Notes: The same notes as those belonging to Table 3 apply here.

5. Discussion and conclusion

Over the last two decades, scholars have paid attention to the questions, "Does ESG pay?" and "When does ESG pay?" These questions have been the centre of debate for a long time (Campbell, 2006; Cheng et al., 2014). However, considering MNEs' exposure to multi-country settings, the question, "Where does ESG pay?" is quite important in IB, yet has not been investigated thoroughly. Thus, this study theorises and empirically tests how national cultural aspects moderate the relationship between ESG performance and financial performance. Specifically, we measure country cultural characteristics with Hofstede's six cultural dimensions. Based on the theories of legitimacy (Suchman, 1995) and the national business system (Matten & Moon, 2008), we argue that the incentives and opportunities for firms to ESG practice depend on national culture: Societies that are embedded in ESG practice as a social standard offer fewer incentives as firms are required to practice ESG to gain legitimacy. In contrast, societies that do not consider ESG practice as a social standard offer more incentives because stakeholders appreciate firms' ESG efforts, which are not mandatory and are less considered when gaining legitimacy in society. Our empirical results show that individualistic and masculine societies exhibit a stronger relationship between ESG performance and financial performance, showing higher economic returns on MNEs' ESG activities. For instance, firms are likely to enjoy more benefits of ESG practice in the U.S. and U.K., where individualism scores are high (91 and 89. respectively). Nevertheless, some firms use their resources to practice ESG strategically or voluntarily. Regardless of their purpose, stakeholders are likely to appreciate their activities that increase overall social welfare. However, societies with a high tendency toward demonstrating power distance, uncertainty avoidance, short-term orientation, and indulgence do not exhibit a stronger relationship between ESG performance and financial performance.

This study contributes to the growing literature on the relationship between CSR / sustainability strategy and IB. First, this study contributes to shifting attention from 'whether it pays to be good' and 'when it pays to be good' to 'where it pays to be good.' While whether and when it pays to be good has been discussed frequently in management strategy literature, focusing on firm factors affecting the relationship between ESG and financial performance (Awaysheh et al., 2020; McWilliams & Siegel, 2000; Zhao & Murrell, 2016), a 'where it pays to be good' question has not been addressed. Considering that many firms operate their business internationally, answering this question is necessary for MNEs. Thus, there is a need to study external or country-level factors that have been continuously discussed (Aguinis & Glavas, 2012; Grewatsch & Kleindienst, 2017). Extending this discussion, we attempt to answer where it pays to be good, specifically, why some companies are paid more for ESG activities in a specific country and why some are not. Adopting a framework of legitimacy and national business system of Matten and Moon (2008), we seek an answer to which cultural aspects of society give firms more incentives when engaging in ESG practices. In this study, we use national cultures as external contingency factors that affect the relationship between ESG performance and financial performance and find that different cultures contribute different financial returns on ESG performance. Comparing various cultural aspects across countries, we shed light on where firms are rewarded financially more for their ESG efforts in a country with high individualism and masculinity.

Second, we extend the literature in the field by revealing important moderating and contingency factors at the macro level. On the one hand, previous studies in CSR explained that while there are abundant studies on firm-level moderating and mediating factors, studies on the country- or institutional-level moderating factors in the relationship between ESG performance and financial performance are rare. Although IB is mainly interested in the country's culture and institutional aspects of firms (Srivastava et al., 2020), the dominant discussion about CSR/sustainability in the IB field is about factors that drive firms' ESG performance

(Gallego-Álvarez & Ortas, 2017; Jamali et al., 2020). In those IB studies, national culture has been prone to antecedent factors that produce different levels of ESG performance among MNEs (Aguinis & Glavas, 2012; Ioannou & Serafeim, 2012; Young & Makhija, 2014). For instance, studies have uncovered how cross-national cultural and institutional differences yield different levels of ESG performance based mainly on institutional theory (Ioannou & Serafeim, 2012; Liang & Renneboog, 2017; Matten & Moon, 2008; Young & Makhija, 2014).

In this study, we suggest that national culture can be a significant contingency factor that affects the relationship between ESG performance and financial performance, explaining how it shapes stakeholders' perceptions and expectations, and affecting incentives for firms to perform ESG activities.

Finally, this study uses multilevel analysis with a large sample of 17 years of panel data from 48 countries to test the research model. Previous literature pointed out the importance of multilevel analysis and approach combining macro-level and micro-level factors (Aguinis & Glavas, 2012). Some studies provide multilevel research design with a literature review but have not been operationalised with multilevel analysis. Overcoming this limitation from previous studies, we utilise a multilevel approach with a large sample considering firm- and country-level separately in the analysis, a most suitable approach in our research design.

5.1. Managerial implications

Our study presents important managerial implications for MNE managers. First, not all ESG activities can be rewarded financially. ESG activities can contribute to firm performance when stakeholders place more value on them. Thus, when deciding on ESG programmes and strategies, managers should consider their firm's resources and capabilities and the external environment of the country in which their firm is operating. That is particularly important for MNEs operating in multiple countries with different institutional characteristics (Wiig & Kolstad, 2010). For example, drawing from our empirical results, MNEs operating in a country with high individualism, i.e., the U.S. and U.K., would engage in ESG practice more actively.

Second, MNE managers expect different financial returns, even if firms allocate similar resources on ESG performance to markets. Our findings show that the extending appreciation of ESG performance differs across countries, meaning some countries emphasise MNEs' ESG performance and appreciate it more. In some countries, MNEs must engage in ESG practice knowing that the incentives MNE get are not substantial since stakeholders consider many kinds of ESG practices as a social norm, which is a minimum condition for legitimacy. If so, firms may do business in host countries based on their current ESG strengths. Therefore, our findings have managerial implications concerning the location choices of MNEs.

5.2. Limitations and future research suggestions

This study has several limitations. First, we follow the tradition of treating each country as a unit of observation and thus do not examine individual stakeholder groups separately. In reality, these groups can exhibit different attitudes and perceptions of ESG activities depending on their social positions (Mitchell et al., 1997). Moreover, the influence wielded by stakeholders can vary by country. Godfrey et al. (2010) suggest that when a firm experiences a negative event, engagement in institutional ESG designed for secondary stakeholders is more likely to prevent a decline in firm value than involvement in technical ESG, which comprises activities intended for primary stakeholders. The power differential among stakeholders is another factor affecting the relationship between ESG performance and financial performance. Future studies should delve deeper into heterogeneous stakeholder demands and power levels to describe how institutions moderate the relationship between ESG performance and financial performance in a

given country.

Second, the nationalities of MNEs in our sample are assigned according to their country of incorporation, positing that firms are primarily under the institutional influence of their home country. Considering that MNEs operate in multiple countries with diverse institutional environments and are hence affected by diverse institutions, a comparison of the impact of ESG performance in both home and host countries can be a critical issue that needs to be investigated. However, our research design did not capture the impact of ESG performance in both home and host countries, even though most companies in our sample are MNEs. Firms operating in multiple countries may be subject to pressures from diverse institutional environments. While we attempt to address this issue by restricting our sample to firms with a low foreign asset ratio in a robustness check, we encourage future researchers to address these limitations.

Lastly, although Hofstede's cultural dimension framework is a commonly used framework in IB (Beugelsdijk et al., 2017), it has also received criticism. For example, originally, Hofstede et al. (2010) received limited responses on long-term vs. short-term orientation and indulgence vs. restraint in terms of the number of countries, which was around 23. To solve this problem, in 2010, they imputed the data to expand the country's scope. In addition, as we mentioned, alternative frameworks exist, such as GLOBE (House et al., 2004) and Schwartz (1999). Therefore, conducting a study with an alternative cultural framework in future research may be interesting as it allows scholars to engage in comparative analysis.

Declaration of interest statement

None

Data Availability

Data will be made available on request.

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References

Adams, R. B., & Funk, P. (2012). Beyond the glass ceiling: Does gender matter. *Management Science, 58*(2), 219–235. https://doi.org/10.1287/mnsc.1110.1452

Aguinis, H., Boyd, B. K., Pierce, C. A., & Short, J. C. (2011). *Walking new avenues in management research methods and theories: Bridging micro and macro domains.* Los Angeles. In CA: SAGE Publications Sage CA,.

Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility a review and research agenda. *Journal of Management, 38*(4), 932–968. https://doi.org/10.1177/0149206311436079

Ahmadjian, C. L., & Robinson, P. (2001). Safety in numbers: Downsizing and the deinstitutionalization of permanent employment in Japan. *Administrative Science Quarterly, 46*(4), 622–654. https://doi.org/10.2307/3094826

Aupperle, K. E., Carroll, A. B., & Hatfield, J. D. (1985). An empirical examination of the relationship between corporate social responsibility and profitability. *Academy of Management Journal, 28*(2), 446–463. https://doi.org/10.5465/256210

Awaysheh, A., Heron, R. A., Perry, T., & Wilson, J. I. (2020). On the relation between corporate social responsibility and financial performance. *Strategic Management Journal, 41*(6), 965–987. https://doi.org/10.1002/smj.3122

Backhaus, K. B., Stone, B. A., & Heiner, K. (2002). Exploring the relationship between corporate social performance and employer attractiveness. *Business & Society, 41*(3), 292–318. https://doi.org/10.1177/0007650302041003003

Barnett, M. L. (2007). Stakeholder influence capacity and the variability of financial returns to corporate social responsibility. *Academy of Management Review, 32*(3), 794–816. https://doi.org/10.5465/amr.2007.25275520

Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic Management Journal, 27*(11), 1101–1122. https://doi.org/10.1002/smj.557

Barton, T. L., Shenkir, W. G., & Walker, P. L. (2002). *Making enterprise risk management pay off.* FT Press.

Bearden, W. O., Money, R. B., & Nevins, J. L. (2006). A measure of long-term orientation: Development and validation. *Journal of the Academy of Marketing Science, 34*(3), 456–467. https://doi.org/10.1177/0092070306286706

Beugelsdijk, S., Kostova, T., & Roth, K. (2017). An overview of Hofstede-inspired country-level culture research in international business since 2006. *Journal of International Business Studies, 48*(1), 30–47. https://doi.org/10.1057/s41267-016-0038-8

Beugelsdijk, S., Maseland, R., & Van Hoorn, A. (2015). Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal, 5*(3), 223–240. https://doi.org/10.1002/gsj.1098

Beutel, A. M., & Marini, M. M. (1995). Gender and values. *American Sociological Review, 60*(3), 436–448. https://doi.org/10.2307/2096423

Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal, 29*(12), 1325–1343. https://doi.org/10.1002/smj.714

Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics, 69*(2), 111–132. https://doi.org/10.1007/s10551-006-9071-z

Campbell, J. L. (2006). Institutional analysis and the paradox of corporate social responsibility. *American Behavioral Scientist, 49*(7), 925–938. https://doi.org/10.1177/0002764205285172

Capelle-Blancard, G., & Petit, A. (2017). The weighting of CSR dimensions: One size does not fit all. *Business & Society, 56*(6), 919–943.

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal, 35*(1), 1–23. https://doi.org/10.1002/smj.2131

Chun, D., Zhang, Z., Cohen, E., Florea, L., & Genc, O. F. (2021). Long-term orientation and the passage of time: Is it time to revisit Hofstede's cultural dimensions? *International Journal of Cross Cultural Management, 21*(2), 353–371. https://doi.org/10.1177/14705958211026342

Cronqvist, H., & Yu, F. (2017). Shaped by their daughters: Executives, female socialization, and corporate social responsibility. *Journal of Financial Economics, 126*(3), 543–562. https://doi.org/10.1016/j.jfineco.2017.09.003

Cuervo-Cazurra, A., Dieleman, M., Hirsch, P., Rodrigues, S. B., & Zyglidopoulos, S. (2021). Multinationals' misbehavior. *Journal of World Business, 56*(5), Article 101244. https://doi.org/10.1016/j.jwb.2021.101244

Demirbag, M., Wood, G., Makhmadshoev, D., & Rymkevich, O. (2017). Varieties of CSR: Institutions and socially responsible behaviour. *International Business Review, 26*(6), 1064–1074. https://doi.org/10.1016/j.ibusrev.2017.03.011

Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review, 20*(1), 65–91. https://doi.org/10.5465/amr.1995.9503271992

El Ghoul, S. E., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies, 48*(3), 360–385. https://doi.org/10.1057/jibs.2016.4

Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & De Colle, S. (2010). *Stakeholder theory: The state of the art.* Cambridge: Cambridge University Press.

Freeman, R. E., & Liedtka, J. (1991). Corporate social responsibility: A critical approach. *Business Horizons, 34*(4), 92–98. https://doi.org/10.1016/0007-6813(91)90012-K

Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times*. Retrieved from ⟨https://www.nytimes.com/1970/09/13/archives/a-friedman-doctrine-the-social-responsibility-of-business-is-to.html⟩.

Gallego-Álvarez, P. I., & Ortas, P. E. (2017). Corporate environmental sustainability reporting in the context of national cultures: A quantile regression approach. *International Business Review, 26*(2), 337–353. https://doi.org/10.1016/j.ibusrev.2016.09.003

Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR Research in corporate finance. *Journal of Corporate Finance, 66*, Article 101889. https://doi.org/10.1016/j.jcorpfin.2021.101889

Glynn, A. N., & Sen, M. (2015). Identifying judicial empathy: Does having daughters cause judges to rule for women's issues? *American Journal of Political Science, 59*(1), 37–54. https://doi.org/10.1111/ajps.12118

Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. *Academy of Management Review, 30*(4), 777–798. https://doi.org/10.5465/amr.2005.18378878

Godfrey, P. C., Hatch, N. W., & Hansen, J. M. (2010). Toward a general theory of CSRs: The roles of beneficence, profitability, insurance, and industry heterogeneity. *Business & Society, 49*(2), 316–344. https://doi.org/10.1177/0007650308315494

Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal, 30*(4), 425–445. https://doi.org/10.1002/smj.750

Graafland, J., & Noorderhaven, N. (2018). National culture and environmental responsibility research revisited. *International Business Review, 27*(5), 958–968. https://doi.org/10.1016/j.ibusrev.2018.02.006

Gras, D., & Krause, R. (2020). When does it pay to stand out as stand-up? Competitive contingencies in the corporate social performance–corporate financial performance relationship. *Strategic Organization, 18*(3), 448–471. https://doi.org/10.1177/1476127018805252

Graves, S. B., & Waddock, S. A. (1994). Institutional owners and corporate social performance. *Academy of Management Journal, 37*(4), 1034–1046. https://doi.org/10.5465/256611

Grewatsch, S., & Kleindienst, I. (2017). When does it pay to be good? Moderators and mediators in the corporate sustainability–corporate financial performance relationship: A critical review. *Journal of Business Ethics, 145*(2), 383–416. https://doi.org/10.1007/s10551-015-2852-5

Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes. *Journal of Economic Perspectives, 20*(2), 23–48. https://doi.org/10.1257/jep.20.2.23

Handley, S. M., & Angst, C. M. (2015). The impact of culture on the relationship between governance and opportunism in outsourcing relationships. *Strategic Management Journal, 36*(9), 1412–1434. https://doi.org/10.1002/smj.2300

Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal, 22*(2), 125–139, 10.1002/1097-0266(200101)22:2<125::AID-SMJ150>3.0.CO;2-H.

Ho, F. N., Wang, H.-M. D., & Vitell, S. J. (2012). A global analysis of corporate social performance: The effects of cultural and geographic environments. *Journal of Business Ethics, 107*(4), 423–433. https://doi.org/10.1007/s10551-011-1047-y

Hofstede, G. (1980). Motivation, leadership, and organization: Do American theories apply abroad. *Organizational Dynamics, 9*(1), 42–63. https://doi.org/10.1016/0090-2616(80)90013-3

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values, 5.* Sage.

Hofstede, G. (1985). The interaction between national and organizational value systems. *Journal of Management Studies, 22*(4), 347–357. https://doi.org/10.1111/j.1467-6486.1985.tb00001.x

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviours, institutions, and organizations across cultures.* Thousand Oaks, CA: Sage.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. Online readings in Psychology and Culture. Retrieved from 〈http://scholarworks.gvsu.edu/orpc/vol2/iss1/8〉.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (third edn.). New York: McGraw-Hill,.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies.* Sage Publications,.

Hull, C. E., & Rothenberg, S. (2008). Firm performance: The interactions of corporate social performance with innovation and industry differentiation. *Strategic Management Journal, 29*(7), 781–789. https://doi.org/10.1002/smj.675

Husted, B. W., & Allen, D. B. (2006). Corporate social responsibility in the multinational enterprise: Strategic and institutional approaches. *Journal of International Business Studies, 37*(6), 838–849. https://doi.org/10.1057/palgrave.jibs.8400227

Ioannou, I., & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies, 43*(9), 834–864. https://doi.org/10.1057/jibs.2012.26

Jamali, D., Jain, T., Samara, G., & Zoghbi, E. (2020). How institutions affect CSR practices in the Middle East and North Africa: A critical review. *Journal of World Business, 55*(5), Article 101127. https://doi.org/10.1016/j.jwb.2020.101127

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics, 3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Jiang, G. F., Jung, J. C., & Makino, S. (2020). Parent firm corporate social responsibility and overseas subsidiary performance: A signaling perspective. *Journal of World Business, 55*(6), Article 101141. https://doi.org/10.1016/j.jwb.2020.101141

Kang, C., Germann, F., & Grewal, R. (2016). Washing away your sins? Corporate social responsibility, corporate social irresponsibility, and firm performance. *Journal of Marketing, 80*(2), 59–79. https://doi.org/10.1509/jm.15.0324

Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal, 34*(1), 94–109. https://doi.org/10.1002/smj.2005

Klassen, R. D., & McLaughlin, C. P. (1996). The impact of environmental management on firm performance. *Management Science, 42*(8), 1199–1214. https://doi.org/10.1287/mnsc.42.8.1199

Kotchen, M. (2006). Green markets and private provision of public goods. *Journal of Political Economy, 114*(4), 816–834.

Kotchen, M., & Moon, J. J. (2012). Corporate social responsibility for irresponsibility? *B. E. Journal of Economic Analysis & Policy, 12*(1). article 55.

Krüger, P. (2015). Corporate goodness and shareholder wealth. *Journal of Financial Economics, 115*, 304–329.

Li, X., Kim, J. B., Wu, H., & Yu, Y. (2021). Corporate social responsibility and financial fraud: The moderating effects of governance and religiosity. *Journal of Business Ethics, 170*(3), 557–576. https://doi.org/10.1007/s10551-019-04378-3

Liang, H., & Renneboog, L. (2017). On the foundations of corporate social responsibility. *Journal of Finance, 72*(2), 853–910. https://doi.org/10.1111/jofi.12487

Lindgreen, A., Swaen, V., & Maon, F. (2009). Introduction: Corporate social responsibility implementation. *Journal of Business Ethics, 85*(2), 251–256.

Litz, R. A. (1996). A resource-based-view of the socially responsible firm: Stakeholder interdependence, ethical awareness, and issue responsiveness as strategic assets. *Journal of Business Ethics, 15*(12), 1355–1363. https://doi.org/10.1007/BF00411820

Mackey, A., Mackey, T. B., & Barney, J. B. (2007). Corporate social responsibility and firm performance: Investor preferences and corporate strategies. *Academy of Management Review, 32*(3), 817–835. https://doi.org/10.5465/amr.2007.25275676

Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly, 48*(2), 268–305. https://doi.org/10.2307/3556659

Matten, D., & Moon, J. (2008). "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review, 33*(2), 404–424. https://doi.org/10.5465/amr.2008.31193458

Matten, D., & Moon, J. (2020). Reflections on the 2018 decade award: The meaning and dynamics of corporate social responsibility. *Academy of Management Review, 45*(1), 7–28. https://doi.org/10.5465/amr.2019.0348

McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: Correlation or misspecification? *Strategic Management Journal, 21*(5), 603–609, 10.1002/(SICI)1097-0266(200005)21:5<603::AID-SMJ101>3.0.CO;2-3.

Meyer, J. W. (2008). Reflections on institutional theories of organizations. *The sage Handbook of Organizational institutionalism,* 790–811.

Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review, 22*(4), 853–886. https://doi.org/10.5465/amr.1997.9711022105

Muller, A. (2020). When does corporate social performance pay for international firms. *Business & Society, 59*(8), 1554–1588. https://doi.org/10.1177/0007650318816957

Nevins, J. L., Bearden, W. O., & Money, B. (2007). Ethical values and long-term orientation. *Journal of Business Ethics, 71*(3), 261–274. https://doi.org/10.1007/s10551-006-9138-x

Orlitzky, M., Siegel, D. S., & Waldman, D. A. (2011). Strategic corporate social responsibility and environmental sustainability. *Business & Society, 50*(1), 6–27. https://doi.org/10.1177/0007650310394323

Orsato, R. J. (2006). Competitive environmental strategies: When does it pay to be green. *California Management Review, 48*(2), 127–143. https://doi.org/10.2307/41166341

Peng, Y.-S., Dashdeleg, A.-U., & Chih, H. L. (2012). Does national culture influence firm's CSR engagement: A cross country study. *International Proceedings of Economics Development and Research, 58,* 40.

Porter, M. E., & Kramer, M. R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78–92.

Ringov, D., & Zollo, M. (2007). The impact of national culture on corporate social performance. *Corporate Governance, 7*(4), 476–485. https://doi.org/10.1108/14720700710820551

Rivera-Santos, M., Rufín, C., & Kolk, A. (2012). Bridging the institutional divide: Partnerships in subsistence markets. *Journal of Business Research, 65*(12), 1721–1727. https://doi.org/10.1016/j.jbusres.2012.02.013

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal, 40*(3), 534–559.

Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied Psychology, 48*(1), 23–47. https://doi.org/10.1111/j.1464-0597.1999.tb00047.x

Selznick, P. (1996). Institutionalism "*old*" and "*new*". *Administrative Science Quarterly, 41*(2), 270–277. https://doi.org/10.2307/2393719

Shi, W., & Veenstra, K. (2021). The moderating effect of cultural values on the relationship between corporate social performance and firm performance. *Journal of Business Ethics, 174*(1), 89–107. https://doi.org/10.1007/s10551-020-04555-9

Shiu, Y. M., & Yang, S. L. (2017). Does engagement in corporate social responsibility provide strategic insurance-like effects? *Strategic Management Journal, 38*(2), 455–470. https://doi.org/10.1002/smj.2494

Srivastava, S., Singh, S., & Dhir, S. (2020). Culture and International business research: A review and research agenda. *International Business Review, 29*(4), Article 101709. https://doi.org/10.1016/j.ibusrev.2020.101709

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571–610. https://doi.org/10.5465/amr.1995.9508080331

Thanetsunthorn, N. (2015). The impact of national culture on corporate social responsibility: Evidence from cross-regional comparison. *Asian Journal of Business Ethics, 4*(1), 35–56. https://doi.org/10.1007/s13520-015-0042-2

Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *Journal of International Business Studies, 41*(8), 1294–1315.

Vitolla, F., Raimo, N., Rubino, M., & Garegnani, G. M. (2021). Do cultural differences impact ethical issues? Exploring the relationship between national culture and quality of code of ethics. *Journal of International Management, 27*(1), Article 100823. https://doi.org/10.1016/j.intman.2021.100823

Waddock, S. A., & Graves, S. B. (1997). The corporate social performance-financial performance link. *Strategic Management Journal, 18*(4), 303–319, 10.1002/(SICI)1097-0266(199704)18:4<303::AID-SMJ869>3.0.CO;2-G.

Wang, H., & Qian, C. (2011). Corporate philanthropy and corporate financial performance: The roles of stakeholder response and political access. *Academy of Management Journal, 54*(6), 1159–1181. https://doi.org/10.5465/amj.2009.0548

Washington, E. L. (2008). Female socialization: How daughters affect their legislator fathers' voting on women's issues. *American Economic Review, 98*(1), 311–332. https://doi.org/10.1257/aer.98.1.311

Wiig, A., & Kolstad, I. (2010). Multinational corporations and host country institutions: A case study of CSR activities in Angola. *International Business Review, 19*(2), 178–190. https://doi.org/10.1016/j.ibusrev.2009.11.006

Yang, X., & Rivers, C. (2009). Antecedents of CSR practices in MNCs' subsidiaries: A stakeholder and institutional perspective. S2 *Journal of Business Ethics, 86*(Suppl. 2), 155–169. https://doi.org/10.1007/s10551-009-0191-0.

Young, S. L., & Makhija, M. V. (2014). Firms' corporate social responsibility behaviour: An integration of institutional and profit maximization approaches. *Journal of International Business Studies, 45*(6), 670–698. https://doi.org/10.1057/jibs.2014.29

Zhao, X., & Murrell, A. J. (2016). Revisiting the corporate social performance-financial performance link: A replication of Waddock and Graves. *Strategic Management Journal, 37*(11), 2378–2388. https://doi.org/10.1002/smj.2579

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