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## International diversification, legitimacy, and corporate social performance of extractive industry multinationals

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#### Abstract

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Research Summary: This article examines how different international diversification strategies impact the legitimacy challenges multinationals face and the way they manage their corporate and social responsibilities. Analyzing these questions in a sample of companies in extractive industries, we find that those who pursue resource-seeking investments that involve locating extraction operations overseas respond with the largest improvement in their corporate-level social performance (CSP). Those pursuing efficiency-seeking by establishing processing subsidiaries abroad increase their CSP less, with the smallest increase for those pursuing market-seeking through marketing and sales operations overseas. For each type of activity established overseas, the increase in CSP becomes greater the more developed the company's home country and the larger its international footprint, but is not dependent on the host country's level of development. These findings suggest that, in today's globalized world, the legitimacy challenges that result from subsidiaries' activities increasingly need to be managed at a global, corporate level. Managerial Summary: This article investigates the

relationships between different international diversification strategies, the different legitimacy challenges they

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create, and corporate-level social performance (CSP) responses. For multinationals operating in the extractive industries, we find important legitimacy spillovers from different types of subsidiary activities on the corporation, but these also vary, leading it to respond with differential increases in global CSP. These increases are greatest for resource-seeking diversification, involving the location of extractive activities abroad, moderate for efficiencyseeking diversification, involving the location processing activities and least for market-seeking diversification, involving the location of marketing and sales activities. For each type of subsidiary activity, we also find that the increases in CSP are larger the more developed the company's home country and the larger its international footprint, but are not dependent on the host country's level of development. We show how these results extend existing theory and draw implications for management practice.

#### **KEYWORDS**

corporate social performance, extractive industries, foreign subsidiary activities, international diversification, legitimacy

#### **1** | INTRODUCTION

A growing body of international business literature has focused on the relationships between the internationalization strategies adopted by multinational corporations (MNCs) and the way they manage corporate social performance (CSP).<sup>1</sup> Husted and Allen (2006) found that MNCs generally replicated their existing product-market organizational strategies, responding to local institutional pressures, in their management of CSP. Kostova and Zaheer (1999) pointed out that potential for bi-directional, "legitimacy spillovers" between the actions of subsidiaries and the corporation need to be taken into account in CSP decisions. Kostova, Roth, and Dacin (2008) reiterated the importance of modeling these interactions in future research. More recently, Zhou and Wang (2020) found a positive relationship between the parent corporation's strategy as it impacts reputation risk and the CSP activities of its foreign subsidiaries.

One of the gaps in our understanding left unaddressed by this literature, however, is how the international diversification strategies adopted by MNCs influence their management of global corporate CSP (Brammer, Pavelin, & Porter, 2006). In particular, it remains unclear how different motivations for international diversification, and the resulting decisions about where different types of activities are located, impact the legitimacy challenges firms face and how these might influence their management of CSP (Strike, Gao, & Bansal, 2006). Nor is it clear how any subsequent behavioral responses stemming from international diversification decisions reflect the interaction between different pressures on an MNC at the corporate and

subsidiary levels as a result of its "dual embeddedness" (Meyer, Mudambi, & Narula, 2011; Pu & Soh, 2018; Rosenzweig & Singh, 1991). In particular, it is unclear what role corporate-level characteristics, such as the MNC's country of origin and its overall level of international diversification, play in shaping CSP responses that arise from the legitimacy challenges associated with location of particular types of activities in particular countries (Ioannou & Serafeim, 2012). Likewise, it is uncertain whether the level of economic or institutional development of the host countries where particular types of activities are located impact corporate-level decisions about global CSP rather than stimulating purely local responses (Rathert, 2016).

In this article, we seek to shed light on these questions via a multilevel analysis of the implications of different international diversification strategies, leading to the location of particular types of activities in particular host countries, by MNCs from different home countries for their management of global CSP. We have chosen to examine these questions in the context of international diversification by Extractive Industry Multinationals (EIMs), believing that this research context is likely to be particularly rich in potential insights for several reasons. First, compared with other industries, EIMs face relatively severe legitimacy challenges as they expand internationally in search of natural resource deposits, processing sites and sometimes markets. As a result, we can expect them to pay particular attention to how their legitimacy can be established and maintained through the management of CSP (Newenham-Kahindi & Stevens, 2018; Symeou, Zyglidopoulos, & Williamson, 2018). Moreover, because the extractive industries tend to be highly globalized, their legitimacy and social license to operate  $(SLO)^2$ challenges (Prno & Scott Slocombe, 2012) are likely to require managerial responses at the corporate level (Kostova & Zaheer, 1999). EIMs are also subject to legitimacy pressures stemming from both their home countries and from global pressure groups that react to the extent and configuration of their global activities, requiring CSP responses at both subsidiary and corporate levels.

Second, physical and geographic constraints (such as where ore bodies, or large amounts of cheap energy for processing, are found) often sharply constrain where EIMs can locate their operations when they diversify internationally. These constraints limit the scope for EIMs to deal with legitimacy challenges by choosing sites where the standards expected by stakeholders are lower, a strategy that is adopted in some other industries (Davies & Vadlamannati, 2013). EIMs, therefore, are more likely to need to rely on CSP initiatives to deal with unavoidable legitimacy challenges compared with industries that enjoy more flexibility in where they can locate.

Third, it is possible to more easily identify discrete, delineated activities within the value chains of most extractive industries compared with many other industries (Rezk, Srai, & Williamson, 2016). Thus, focusing on extractive industries enables us to examine the managerial challenges that arise, ex post, of siting specific activities in particular locations overseas as a consequence of an international diversification strategy.

We draw on three streams of literature. The body of IB literature examining international diversification (Hitt, Tihanyi, Miller, & Connelly, 2006) and interactions between roles and decision making of subsidiaries and corporate headquarters (Kostova, Marano, & Tallman, 2016; Meyer, Li, & Schotter, 2020; Wang & Li, 2019) that together shed light on the strategies MNCs use to respond to the tensions arising from dual embeddedness within both a global and local context (Meyer et al., 2011; Pu & Soh, 2018; Rosenzweig & Singh, 1991). The literature on firms' management of CSP and their SLO (Prno, 2013; Prno & Scott Slocombe, 2012); and finally, the extensive literature exploring the distinctive characteristics of extractive

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industries (Du & Vieira Jr, 2012; Gifford, Kestler, & Anand, 2010; Oh, Shapiro, Ho, & Shin, 2020; Shapiro, Hobdari, & Oh, 2018; Symeou et al., 2018).

Our contributions are threefold. First, we contribute to the IB literature that examines the relationships between the internationalization strategies adopted by MNCs and the way they manage CSP by going beyond product–market strategy to include their supply chain strategies. Specifically, we show the implications of different types of international diversification for the management of global CSP, extending the work of Husted and Allen (2006) and Strike et al. (2006). We also show how the implications of these decisions are further shaped by the MNC's country of origin and its overall level of international diversification.

Second, we contribute to the extensive international business literature that has studied the relationships between headquarters, corporate-level decisions in an MNC and pressures created by the activities of its subsidiaries (Meyer et al., 2020). Building on existing work on dual embeddedness (Meyer et al., 2011; Pu & Soh, 2018; Rosenzweig & Singh, 1991), we show how legitimacy challenges stemming from the activities of subsidiaries interact with challenges to the legitimacy of the MNC generated at the home-country and global levels to jointly shape the corporation's global CSP response (Christmann, 2004). This allows us to widen the focus of existing literature that has concentrated on CSP responses at the subsidiary level (Jacqueminet, 2020; Rathert, 2016) and the impacts of corporate legitimacy on the CSP behavior of subsidiaries (Jacqueminet, 2020; Zhou & Wang, 2020). Our findings suggest that home-country embeddedness matters more than host-country embeddedness in shaping an MNC's management of CSP, even in response to the particular subsidiary's activities.

Third, we contribute to the literature that explores the distinctive issues of strategic management in extractive industries (Casarin, Lazzarini, & Vassolo, 2020). In particular, our paper draws attention to the fact that, while the basic technologies in extractive industries are relatively mature, their nonmarket strategies are dynamic and exhibit substantial interfirm variation in behavior both within the sector and across countries, as predicted by Shapiro et al. (2018). We also extend the argument advanced by Oh et al. (2020) that localized negative externalities of extractive industry activities created when a firm locates near environmentally sensitive sites increase the incentive of local stakeholders to undertake collective action, leading to a stock-market response. Specifically, we demonstrate that such investments associated with international diversification also call forth internal organizational responses in the management of CSP at the corporate level.

Our results are based on testing our hypotheses using novel data from a sample of 340 EIMs from 29 home countries for the years 2000–2015 that have diversified internationally in 158 countries.

#### 2 | THEORETICAL PROPOSITIONS

# 2.1 | Implications of the types of activities EIMs choose to locate abroad

The international diversification literature distinguishes four main motivations for foreign direct investment: natural resource seeking, efficiency seeking, market seeking, and strategic asset seeking (Buckley et al., 2007; Dunning, 1998; Makino, Lau, & Yeh, 2002). Drawing on the extractive industries literature (Cameron & Stanley, 2017; Tordo, Tracy, & Arfaa, 2011), we argue that these different motivations will each result in EIMs locating a different activity

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abroad. Natural resource seeking will lead to EIMs internationally diversifying their extraction activities (Ramasamy, Yeung, & Laforet, 2012). These activities involve the extraction of natural resources from the earth or, in the oil and gas industries, drilling wells to bring crude oil or raw natural gas to the surface. In the mining industry, extraction includes the recovery of metals, minerals and aggregates, such as dredging and quarrying.

Efficiency seeking will lead to an MNC locating its processing activities abroad (Dunning, 1998). In the case of EIMs, these include: natural gas processing plants that purify the raw natural gas as well as removing and producing elemental sulfur and natural gas liquids as finished end products; oil refineries that process crude oil into products such as petroleum naphtha, gasoline, diesel fuel, asphalt base, heating oil, kerosene, and liquefied petroleum gas and, in the mining industry, processes for separating commercially valuable minerals from their ores by crushing, grinding, and washing, or using chemical means, such as smelting or electrolytic reduction, to separate valuable metals or minerals from their gangue. The costs of these activities generally represent a very significant proportion of the total cost of the finished material. The electric power used in processing alone, for example, represents between 20 and 40% of the total cost of producing aluminum (Aluminum Association, 2020). Costs also vary substantially across different locations (Boularnanti & Moya, 2016). Improving cost efficiency is therefore a critical motivation for EIMs' location choices for processing activities.

Market seeking will result in the international diversification of marketing, sales, and distribution activities.<sup>3</sup> EIMs' processed products are marketed, sold, and distributed to wholesale, retail, or direct industrial clients. Some of the investment in these activities may be focused on logistics in the country where the natural resource is located, but this generally involves a relatively limited number of sites compared with the number of distribution and marketing touch points required to reach customers. Market seeking will, therefore, be the primary determinant for location of in marketing, sales, and distribution activities abroad.

Driven by these different motivations for international diversification, EIMs will necessarily face constraints on which locations are viable sites for particular types of activities. This is particularly true for extraction activities, which clearly need to be located in sites where ore deposits or oil reservoirs have been identified (Oh et al., 2020). At any point in time, the sites available to an EIM for new investment are likely to be very limited once considerations such as ore quality, accessibility and permissions are taken into account. Suitable locations for processing are also likely to be constrained to a substantial degree by the fact that these activities often require large supplies of low-cost energy and access to efficient, large-scale logistics facilities, such as ports. Even in the case of marketing, sales, and distribution subsidiaries, suitable locations may be limited by the need for proximity to users. These inherent constraints on an EIM's choice set open up an interesting research context where we can look beyond the large body of literature that has examined how MNCs make location choices (Cui, Fan, Liu, & Li, 2017; Cui, Meyer, & Hu, 2014) and consider the underresearched issue of how companies deal with the managerial challenges that arise after location choices have been decided (Chung, Xiao, Lee, & Kang, 2016).

Once an EIM has adopted an international diversification strategy specifying which types of activities it has chosen to locate in which host countries, it will be faced with ongoing challenges associated with managing in each location. Prominent among these managerial challenges for an EIM will be winning and maintaining legitimacy, which previous studies suggest is a crucial resource in securing its SLO in different environments (Chiu & Sharfman, 2011; Jamali, 2010; Kostova & Zaheer, 1999).

According to Suchman (1995, p. 574), organizational legitimacy is the "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." The legitimacy challenges faced by an EIM are likely to be particularly acute compared with other industries, for two reasons. First, an EIM faces the risk of creating serious environmental problems (Gifford et al., 2010; Slack, 2012; Warnaars, 2012), which would undermine its legitimacy. The ever-present potential for environmental accidents means this risk is inherent in the extraction industry even if EIMs take all possible environmental precautions (Perrow, 2011). Moreover, EIMs do not always take such precautions, as evidenced by investigations into environmental disasters such as the BP Deepwater Horizon (Hendry, 2011). The risks of legitimacy challenges are magnified by constraints on the locations suitable for an EIM to undertake particular activities, noted above, often requiring them to operate at "difficult" sites (Kraemer, Whiteman, and Banerjee (2013).

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Second, extractive projects are usually large-scale and capital intensive, with long gestation periods (Halland, Lokanc, & Nair, 2015), often located in developing countries with challenging institutional environments and multiple diverse stakeholders (Cameron & Stanley, 2017; Shapiro et al., 2018), and frequently occupy an "outsize space in the economies of many resource-rich countries" (Halland et al., 2015, p. 1). These characteristics mean there is often plenty of time and motivation for stakeholders to become dissatisfied and act in ways that might threaten legitimacy and the EIM's SLO (Oh et al., 2020). The result may be pressure to withdraw the activity from a host country. On the other hand, if ways can be found to mitigate these risks and improve legitimacy, an EIM may be able to move from local acceptance (being let through the door to operate, but not welcomed), through to approval (where the project is welcomed), or even the highest level of SLO, identification, where stakeholders trust and to some extent identify with the EIM's operations.

#### 2.2 | Responding to legitimacy and SLO challenges as an MNC

Examining how MNCs respond to legitimacy and SLO challenges, a growing body of literature has shown that improvements in a company's CSP<sup>4</sup> can play an important role in addressing suspicions, negative perceptions and other challenges to its legitimacy as well as gaining and maintaining necessary SLOs (Du & Vieira Jr, 2012; Gardberg & Fombrun, 2006; Suchman, 1995). We can conceive of CSP as having two main dimensions: environmental performance (EP), which covers initiatives designed to protect the natural environment; and social performance (SP), which covers initiatives designed to contribute to social development (Symeou et al., 2018). Recent evidence suggests that MNCs use improvements in their CSP to establish and maintain legitimacy as they diversify internationally (Kang, 2013; Marano, Tashman, & Kostova, 2017; Symeou et al., 2018). This effect works through a number of mechanisms.

First, CSP can assist MNCs in gaining and maintaining both their overall legitimacy and their legitimacy in different countries (Gardberg & Fombrun, 2006). Extensive empirical research shows that as MNCs increase their international diversification, they tend to enhance their CSP (Kang, 2013; Symeou et al., 2018; Zyglidopoulos, Williamson, & Symeou, 2016). Second, CSP can help MNCs generate positive legitimacy spillovers and address potential negative ones. For example, by engaging in CSP, an MNC can build its global legitimacy, which newly located subsidiaries can then draw upon (Kostova & Zaheer, 1999). The global legitimacy of an

MNC can also create a kind of a buffer to enable it to withstand a negative spillover from something going wrong in any of its subsidiaries (Luo et al., 2018). Third, CSP can help MNCs create social capital to deal with risks that arise from increased visibility such as attacks led by nongovernmental organizations (Godfrey, 2005). Fourth, as CSP requirements become more stringent, even in developing countries (Jamali, 2010), investing in CSP can help MNCs stay ahead of the game and avoid any delegitimizing crises.

When using CSP to respond to legitimacy and SLO challenges, however, MNCs have the option to respond at the corporate level, the subsidiary level, or both (Marano & Kostova, 2016). The nature of the response and the level at which is implemented, in turn, will depend on a number of factors including: whether the pressures to bolster legitimacy and reinforce an SLO originate in the home country, a host country or from global actors; how these pressures interact between local and global levels; and the policies, governance structures and decision-making processes within the MNC (Kostova et al., 2016).

Early institutional theory assumed that a firm faced a homogeneous institutional environment that imposed certain legitimation requirements and hence focused on firms' CSP responses solely at the headquarters level (Oliver, 1991). Many studies have since explored the different CSP responses taken at the subsidiary level to the legitimacy and SLO challenges subsidiaries face in their local countries (Baum & Oliver, 1992; Chiu & Sharfman, 2011; Yang & Rivers, 2009). More recently, Zhou and Wang (2020) have examined how CSP at the subsidiary level can be used to handle negative reputational spillovers emanating from the corporate level. There is a paucity of research, however, exploring how effects of legitimacy and SLO pressures at the subsidiary and corporate levels *interact* in shaping a corporation's global CSP.

In the presence of legitimacy spillovers (Kostova & Zaheer, 1999), these interactions are likely to be important in determining CSP responses. If activities undertaken by a subsidiary impact corporate legitimacy, a response at the subsidiary level in the host country will be insufficient to address the problem. A corporate-level CSP response will be necessary. However, theory also suggests that the CSP required by the location of a particular type of activity in a particular host country will be greater the more developed is the EIM's home country and the higher its overall level of international diversification.

The first of these effects arises because, as we discussed above, EIMs from developed countries of origin are likely to face greater legitimacy challenges stemming from their home country when they locate an activity overseas, than those headquartered in developing countries. This difference in CSP response is likely to be reinforced by the superior CSP capabilities EIMs from developed countries will tend to enjoy. Because EIMs from less developed countries tend to be latecomers to internationalization (Ramamurti & Williamson, 2019), and so have had less time to build capabilities that would enable them to respond to legitimacy challenges with CSP, they are less likely to deploy CSP as a tool in dealing with legitimacy challenges compared with more experienced firms from developed countries. The importance of these differential CSP capabilities in reacting to legitimacy challenges has been established by earlier studies such as Bu and Wagner (2016). Moreover, EIMs from developed home countries are likely to benefit from an institutional and economic environment that provides easier access to the resources, knowledge, and technological solutions required to invest effectively in increased CSP (Wan & Hoskisson, 2003).

The second corporate effect arises because the greater an EIM's overall level of international diversification, the larger the number of more diverse stakeholders it will encounter, leading to increased visibility. This increased visibility can be expected to lead to greater awareness of its

CSP, increasing the effectiveness of this tool, encouraging improvements in CSP as a way to deal with a given level of legitimacy and SLO challenges (Doh & Guay, 2006).

#### 2.3 | Hypotheses development

As we have seen from theory, the precise legitimacy and SLO challenges an EIM faces depends first on the type of activity it locates abroad. When an EIM locates extractive activities in a host country, it will find it harder to acquire and maintain the levels of legitimacy required to enter and continue operating there. We have already noted that EIMs are prone to experiencing environmental problems and industrial accidents (Kapelus, 2002; Slack, 2012; Warnaars, 2012) that lead to severely negative externalities (Durand & Vergne, 2015; Hampel & Tracey, 2017; Hudson, 2008). Even single, anomalous infractions or "event stigmas" (Hudson, 2008), can stigmatize the global corporation involved or even their whole extractive industry (Slack, 2012).<sup>5</sup> This means that when EIMs locate extractive activities in a host country, the stakeholders are likely to impose stringent requirements, making it harder for them to build the necessary level of legitimacy to earn an SLO.

Despite greater difficulties, EIMs diversifying by locating extractive activities abroad will also wish to build an SLO that goes beyond mere acceptance, for a number of reasons. First, given that extractive projects are long-term and involve multiple diverse stakeholders (Shapiro et al., 2018), EIMs will want to build an SLO strong enough to act as a buffer in future stakeholder disagreements or environmental crises. Second, given the size, visibility, media scrutiny, and political importance of extractive activities (Casarin et al., 2020; Shapiro et al., 2018), EIMs will have to respond to greater institutional pressures if they are to maintain their legitimacy and further strengthen their SLO (Baum & Oliver, 1992; Oliver, 1991). Third, given that extraction activities are likely to disrupt the lives of surrounding communities (Kapelus, 2002; Prno, 2013; Slack, 2012), EIMs locating these activities abroad will need to build relational foundations and in-depth ties (Cattani, Ferriani, Negro, & Perretti, 2008) if they are to secure access to the resources they need for the long term.

Compare this with the case of EIMs which diversify internationally through processing activities. While the risk of negative impacts on legitimacy is still very much present, SLO-related challenges are generally less severe. Processing activities can create external negative legitimacy spillovers because of the dirty image of their industry, numerous industrial accidents that processing operations have suffered in the past (Velásquez, 2012), and the ever-present probability of future similar events (Perrow, 2011). Unlike extraction, however, international diversification of processing activities will not be limited to sites where the natural resources are found and hence enjoy the option of choosing sites with reduced likelihood of challenges arising from organizational visibility, stakeholder diversity and conflict (Oh et al., 2020). By balancing economic, environmental and other limitations, processing activities can be located so as to avoid the challenge of building their SLO in the most difficult locations.

Second, processing operations are generally not as visible as extractive operations. Not only can they be sited in less visible locations, they are also more easily divided into smaller units and distributed across multiple sites. Moreover, because processing does not generally require such long-term commitment as extraction, the political importance of the project is usually not as salient to host governments as extractive operations (Halland et al., 2015). Third, a smaller range of stakeholders tend to be impacted by processing operations compared with extraction because processing operations usually cause less environmental and social disruption compared



with that inherent in extractive operations (Kapelus, 2002; Prno, 2013; Slack, 2012). Together these considerations mean that the legitimacy and SLO challenges arising when processing operations are sited abroad will generally be lower than those for extractive activities.

We can expect EIMs that diversify internationally by establishing marketing, sales, and distribution activities abroad, meanwhile, to face the least legitimacy and SLO challenges. Compared to extractive and processing subsidiaries, they face lower risks of causing environmental damage or industrial accidents (Halland et al., 2015). Moreover, because very few EIMs market consumer products under their own brand names (exceptions are mostly oil majors such as Exxon, BP, and Shell), the public does not necessarily make the connection between the commodity and the EIM (Casarin et al., 2020). EIMs generally market their final products through impersonal exchanges, reducing their visibility and making it difficult to trace the potential disruptive environmental impacts of these sales activities back to the source of the commodities being traded. Nor do marketing, sales, and distribution subsidiaries have the same location limitations as extractive activities or attract the same visibility or need for political support (Shapiro et al., 2018). These activities will tend to develop only "transactional linkages" with commodity suppliers and buyers, and "fiscal linkages" (Bloch & Owusu, 2012) such as those arising from state taxation of the commodity income streams. This means that their SLO requirements will generally be much lower than those for extraction or processing activities.

Taken together, these arguments lead to the following multilevel hypothesis:

**Hypothesis (H1).** In decreasing order of magnitude, the establishment of an (a) extractive, (b) processing, and (c) marketing, sales and distribution activity in an overseas country is associated with an increase of corporate-level CSP.

## 2.3.1 | Legitimacy and SLO challenges and the characteristics of the MNC

In addition to the type of activity EIMs have located abroad, their legitimacy and SLO challenges will also depend on their overall levels of international diversification, their home country, and the portfolio of host countries in which their operations are located.

For an MNC, these challenges to its legitimacy and SLO that arise from the nature of the activities performed by subsidiaries in particular countries may result from stakeholder pressures arising in the host country, in the MNC's home country, or from global activists and supranational institutions. These different sources of stakeholder pressure open the way for legitimacy spillovers (Kostova & Zaheer, 1999): judgments about the legitimacy of an organizational unit within a particular institutional environment, based on the legitimacy of other organizational units that are perceived by the relevant stakeholders to belong to the same organizational unit. As a result, legitimacy challenges that result from siting operations in any one location may generate additional legitimacy challenges for the corporation as a whole (Strike et al., 2006).

Consideration of these spillover effects would lead us to expect that an MNC's overall level of international diversification will increase the legitimacy and SLO challenges it faces as a corporation (Kostova & Zaheer, 1999). The more an MNC diversifies internationally, the more attention it is likely to attract, both because it will encounter an increased number of stakeholders and because its growing international spread increases the chances of getting onto the radar of global activists and institutions. This effect is reinforced by the trend toward greater reporting of non-financial consequences of MNCs' behavior, including possible negative environmental and social externalities (Kolk, 2008). This increased global visibility means that an action by the MNC that might be perceived as suspect, even a highly localized one, can cause legitimacy problems for the corporation as a whole. Such events will more likely be picked up by the international media (Zyglidopoulos, 2001) and global nongovernmental organizations (Doh & Guay, 2006), causing negative legitimacy spillovers that impact the whole firm.

Moreover, as an MNC expands its international footprint, it will also likely face a more diverse set of stakeholders (Kang, 2013). This increases the chances that a stakeholder will take exception to some specific action an MNC may take, creating a new legitimacy challenge (Kolk & Van Tulder, 2010). In the case of an EIM, for example, this means that even minor environmental or industrial incidents may be picked up by a specific type of stakeholder and escalate through negative legitimacy spillovers that produce negative stakeholder reactions in another country (Zyglidopoulos, 2002). This leads us to hypothesize that:

## **Hypothesis (H2).** The greater the overall level of international diversification of an EIM, the greater will be the increase in its CSP associated with each type of activity it locates abroad.

Second, the extent of the legitimacy pressures an MNC faces may be influenced by its country of origin. Even when an MNC diversifies internationally, country-of-origin effects persist (Marano et al., 2017; Symeou & Merchant, 2019; Zhou & Guillén, 2015). Extant research also suggests that the most significant country of origin dimension to consider is its level of development. This includes its level of economic development along with many closely related dimensions, such as institutional development and human capital (Meyer & Sinani, 2009).

We therefore expect the more developed an MNC's home country, the greater will be the legitimacy and SLO challenges it faces as it diversifies internationally. There is evidence that major stakeholders from developed countries are most likely to mount legitimacy challenges to an MNC as it expands, wherever that may be in the world, compared with stakeholders from less developed countries who are much less likely to become involved (Gugler & Shi, 2009). Meanwhile, the institutional environments in less developed countries are often characterized by institutional voids (Doh, Rodrigues, Saka-Helmhout, & Makhija, 2017; Marano et al., 2017). These voids mean that an MNC headquartered in a developing country is less likely to face legitimacy challenges mounted by local institutions, although it may still be subject to challenges from global activists (Dowell, Hart, & Yeung, 2000). A counter argument would be that MNCs from developed countries might be viewed as more responsible in general and hence face fewer challenges to their legitimacy when they locate any given activity abroad (Doh et al., 2017; Marano et al., 2017). However, unless this final effect dominates, we can expect the MNC's country of origin to increase the extent of legitimacy and SLO challenges it faces when diversifying activities internationally. Thus, we propose that:

# **Hypothesis (H3).** The increase in CSP stimulated by locating each type of activity overseas will be larger for EIMs that originate from more developed countries compared with EIMs from less developed home countries.

Finally, existing literature also points to the influence of the economic and institutional environments of the host countries into which an MNC has chosen to diversify its activities on the legitimacy challenges it faces. Jamali and Karam (2018, p. 35) suggest these influences

include: "geopolitical landscape of the past and present; political system and governance; financial system, economics and business operations; cultural system, societal values and customs; and local ecosystems."

Again, institutional voids seem to be particularly important (Doh et al., 2017; Marano et al., 2017) because these voids in developing countries may mean that MNCs who locate in these countries will face lower legitimacy challenges than would be the case in developed countries (Zyglidopoulos et al., 2016). This reflects the observation that most environmental regulations are developed at the nation-state level (Marcus, Aragon-Correa, & Pinkse, 2011).

On the other hand, as global treaties such as the Kyoto Protocol, the Paris Climate Accord, and the Extractive Industries Transparency Initiative (EITI) become more important, it may be these global institutions and activists that determine the legitimacy challenges an MNC faces, rather than host-country institutions (Aragón-Correa, Marcus, & Hurtado-Torres, 2016). Moreover, global stakeholders may be particularly sensitive to the potential for harm associated with locating activities with potentially large negative externalities in less developed countries where they doubt local institutions have the capacity to regulate these subsidiaries effectively.

This latter argument would suggest that MNCs may also face considerable legitimacy pressures when they locate activities in a less developed host country. Nevertheless, institutional voids are likely to hinder local stakeholders from exerting effective pressures on MNCs. Oh et al. (2020) showed that the ability of local stakeholders to engage in effective collective action within the context of the global mining industry was stronger in countries with stronger institutions. Evidence outside the mining industry also concurs (Zyglidopoulos et al., 2016), which leads us to postulate that the former argument will predominate, leading to:

**Hypothesis (H4).** The increase in CSP stimulated by locating each type of activity overseas will be larger the more developed is the host country.

#### 3 | METHODS

#### 3.1 | Sample and data collection

We draw on Thomson Reuters' ASSET4 database to obtain corporate financial and SP data, an established source of environmental, social, and governance information used for empirical research on CSP (Cheng, Ioannou, & Serafeim, 2014; Zyglidopoulos et al., 2016). Initially, we selected the whole universe of companies reported by ASSET4 for the mining and oil and gas industries that respond to the 2-digit SIC codes: (10) "Metal Mining" (165 firms); (12) "Coal Mining" (32 firms); (13) "Oil and Gas Extraction" (173 firms); and (14) "Mining and Quarrying of Nonmetallic Minerals, Except Fuels" (7 firms). Our initial sample consisted of an unbalanced panel of 377 companies observed over the period 2000–2015. To be included in the study, however, firms had to meet the following criteria: (a) they had active physical presence in a country other than the country of incorporation in the form of subsidiaries, which reduced the sample size by 11 firms; and (b) they had to engage in the actual extraction, processing, or marketing, sales, and distribution activities and not solely offer secondary services such as seismic data acquisition and processing, formation evaluation, software and information management, geophysical surveys, and other forms of consulting. This resulted in the exclusion of a further three firms. For reasons we discuss in the Estimation Methods section, our final sample comprises

340 EIMs from 29 countries for the period 2000–2015 with foreign subsidiaries in 158 host countries that total 7,565 observations (see Tables A1 and A2).

#### 3.2 | Measures

#### 3.2.1 | Dependent variables

We test the effects of foreign activities on EIMs' CSP by examining their separate impact on EIMs' EP and SP. The theoretical reasons are twofold. First, the number of initiatives a company can adopt in SP is almost unlimited—there is always more the company can do. By contrast, the initiatives and impact that are possible with environmental EP are limited by available technology. Second, Symeou et al. (2018) found that the MNCs' improvement in SP was more sensitive to international diversification than for EP.

#### Social performance

We operationalize SP using ASSET4's social pillar, which measures a company's capacity to generate trust and loyalty among its workforce, customers, and society through its use of management best practices at a global firm level. ASSET4 generates SP scores by examining seven factors including employment quality, health and safety issues, training, diversity, human rights, community involvement, and product responsibility. The variable takes values between 0 and 100, with higher values reflecting higher SP levels.

#### Environmental performance

We measure EP using ASSET4's environmental pillar, which measures a company's impact on living and nonliving natural systems and ecosystems and reflects how a company uses management practices to generate long-term shareholder value at a global firm level. It is based on three categories: resource reduction, emission reduction, and product innovation and takes numerical values from 0 to 100, with higher values reflecting better EP. In calculating the environmental pillar, ASSET4 uses information on the firm's energy use, water and waste recycling,  $CO_2$  emissions, and spills and pollution controversies.

#### 3.2.2 | Independent variables

#### Foreign activity type

Guided by industry classifications in the relevant literature (Cameron & Stanley, 2017; Tordo et al., 2011), one of the authors and a research assistant with expertise in the extractive industries developed our variable coding system that classified EIMs' operations into three main types: (a) extraction; (b) processing; and (c) marketing, sales, and distribution. We began by randomly selecting 5% of our sample (20 firms) and used an iterative process of reading and coding the applicable sections of the annual reports; meeting to discuss coding agreements, disagreements, and difficulties; and modifying the coding system. Once we were confident the process was robust, all remaining sample firms were processed by the researcher, provided: (a) all identified foreign operations for every host country for every year could be coded within one of the categories in the system and (b) a reasonable level of intercoder agreement was achieved (>70%). Once the researcher had processed the whole sample, the same author coded another



20 randomly selected annual reports. We calculated Scott's Pi reliability score (Scott, 1955) at 0.82, suggesting the variable was coded with a sufficient level of reliability.<sup>6</sup> Finally, we used the coded information to create a categorical variable (*Foreign Activity Type*) signaling whether a focal EIM had extraction activities, or processing activities, or marketing, sales, and distribution activities in a particular host country in a given year. In the empirical models, this variable appears as three dichotomous variables (i.e., *extraction; processing;* and *marketing, sales, and distribution*) that take the value 1 if the relevant activity is performed in a particular host country and 0 if not (the latter variable is omitted from the model as it represents the comparison group). Where an EIM might have multiple types of operations in a single host country, we treat them as separate observations. In the empirical model, we also control for the number of different types of operations in a single country in a given year.

#### International diversification

Following precedent in the literature (Hitt et al., 2006; Wan & Hoskisson, 2003), we drew on information on firms' annual reports to measure a firm's international diversification with (the logarithm of) the number of host countries in which the firm has active physical presence, other than the country of incorporation, in the form of joint venture or wholly owned subsidiary in a given year. Our sample firms have foreign presence in at least two host countries with a maximum of 96, sample median is 14, and sample mean is 23.

#### Country (home/host) development

We adopt a continuous yearly index of a country's development level, as suggested by Symeou et al. (2018). The index combines yearly measures of economic development (gross national income per capita) and institutional quality from the World Bank's World Development Indicators (voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption). This measure enables us to capture a country's temporal position along a development continuum, accounting for both the economic conditions and institutional quality of the country. Higher values of the measure suggest a higher level of development.

#### 3.2.3 | Control variables

At the firm level, we control for multiple other aspects of EIMs' international diversification. We measure a firm's foreign market dependence with its Foreign Sales to Total Sales (FSTS) ratio and international asset dispersion with Foreign Assets to Total Assets (FATA) ratio (Kwok & Reeb, 2000; Tallman & Li, 1996). Data for FSTS and FATA were collected from ASSET4. Information from the annual reports was also employed to develop *Foreign Activity Ownership Type* to signify whether a host-country operation was run by a joint venture or a wholly owned subsidiary. Ownership type may alter the attention an operation attracts from host-country constituents and thus shape legitimacy pressures. Finally, we control for the number of different types of activities the EIM undertakes in the same host country in a given year to account for the possibility that legitimacy pressures are influenced by the local scale of an EIM's operations (*Host Country Projects*).

We control for the EIM's strength of governance mechanisms that are aimed at promoting managerial accountability to shareholders and therefore the firm's responsiveness to demands for social and environmental responsibility (*Corporate Governance*). We use ASSET4's pillar of

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corporate governance performance (Hawn & Ioannou, 2016) that measures a company's commitment and effectiveness toward following best practice governance principles. The measure ranges from 0 to 100, with higher values reflecting stronger corporate governance.

We also control for *Firm Size* by including the logarithm of the firm's total sales, since larger firms have a higher level of visibility to the general public and the government, and are more likely to institutionalize their CSP programs (Orlitzky, 2001). Given that the existence of a possible relationship between CSP and financial performance has been debated for more than 60 years (Margolis & Walsh, 2003), we control for *Financial Performance* using return on assets. According to Chen, Patten, and Roberts (2008), as a firm matures, its reputation and history of involvement with social responsibility activities can become entrenched. To account for the years of experience of the firm in the industry, we include in the analysis the year of establishment of the firm (*Firm Age*). We use dummy variables to denote a firm's industry membership (2-digit SIC).

At the country level, we use data and measures from several sources to control for potential domestic and host-country contingency factors. First, we obtained data from World Bank's World Development Indicators database to measure a host country's net inflows of foreign direct investment (as a percentage of gross domestic product [GDP]) to capture the conduciveness of a host country environment to foreign companies (*Country Openness*). We use the home country's total rents from natural resources (as a percentage of GDP) to account for the economy's munificence in natural resources and its comparative advantage in the extractive industries (*Natural Resources Munificence*). The corresponding measure for the host country accounts for the host country's attractiveness as a target location and strategic importance to the EIM. Similarly, we measure the (logarithm of the) volume of extracted material outputs (solid, gaseous, and liquid materials) in tons for the home and host countries (*Extracted Material*) using data from the United Nations Environment Program.

We account for the *Quality of Environmental Institutions* in the home and host countries using the EP index (EPI) (Hsu, Esty, Levy, de Sherbinin, 2018). EPI ranks countries on 24 performance indicators in categories including air quality, water, heavy metals, and biodiversity. These categories track performance and progress on two broad policy objectives: environmental health and ecosystem vitality. We expect EPI to affect the social and EP of EIMs associated with the initial conditions of the country of origin (Symeou & Merchant, 2019) as well as the host country constituents' expectations of CSP.

Finally, we consider the likely impact of "distance" between the EIM's home and each of the host countries, a key concern in the internationalization of the multinational (Beugelsdijk, Ambos, & Nell, 2018). These controls enable us to capture the influence of an EIM's liability of foreignness on its legitimacy in the host country. First, we draw on Bailey, Strezhnev, and Voeten (2017) who developed Idealpoint, a measure of the convergence of nations' foreign political preferences. By taking the absolute value of the difference in Idealpoint between country pairs, we developed a proxy of political distance (*Political Distance*). Second, we used data from JuriGlobe (University of Ottawa) on the legal systems in the world to develop a dichotomous variable (*Legal Distance*) that signifies whether the home and host countries share the same legal systems, as an indicator of administrative distance and institutional similarity (Marano & Kostova, 2016).

#### 3.3 | Estimation methods

Given the multilevel nature of our data (host countries nested within firms, nested within home countries), we analyze our data using hierarchical linear modeling (HLM). HLM decomposes the total variance in SP and EP responses into between-cluster variance and within-cluster variance, which renders the HLM estimator more efficient than OLS estimators (Rabe-Hesketh & Skrondal, 2012).<sup>7</sup> To enable a 1-year lagged structure for our main independent variables and controls, we dropped from the sample 15 firms that appeared in the sample for only 1 year and 8 more firms because of missing values. Thus, our final sample pertains to 29 countries and 340 EIMs with foreign presence in 158 host countries that total 7,565 observations. Our sample compares favorably with other studies of CSP in multinational settings that use HLM (Mueller, Hattrup, Spiess, & Lin-Hi, 2012; Zyglidopoulos et al., 2016).

We specified a random coefficient HLM model that allows for home-country-level, firmlevel, and host-country-level variation. We examined the appropriateness of this model specification for describing our data vis-à-vis other model specifications using likelihood ratio tests. This model specification was preferred against models that omitted any of the above random effects.<sup>8</sup> Following Aguinis, Gottfredson, and Culpepper (2013), before adding any explanatory variables, we centered our firm-level variables around their country mean and our country-level variables around the overall sample mean. We estimated our models using a restricted maximum likelihood estimation with bootstrapping, that leads to better estimates of the variance components in smaller samples (Maas & Hox, 2005).

In Table 1, we report the descriptive statistics and bivariate correlations of the variables used (summary statistics are based on variable values prior to centering). EIMs that are larger, more experienced, more internationally diversified, have stronger governance mechanisms, and come from home countries with higher Quality of Environmental Institutions and higher development are associated with higher SP and EP. Overall, we observe very small correlation coefficients between the control variables. Some notable exceptions apply to the correlations between Firm Size and international diversification (Pearson's R = .52, p < .05); FSTS and FATA (Pearson's R = .49, p < .05); Natural Resources Munificence (Host) and Quality of Environmental Institutions (Host) (Pearson's R = -.40, p < .05), and Country Development (Host) and Quality of Environmental Institutions (Host) (Fearson's R = .60, p < .05). To minimize the possibility of introducing multicollinearity, we omitted Firm Size, FATA, and Quality of Environmental Institutions (Host) from the main analysis, although we estimated their impacts using additional models in the robustness section below. The resulting mean of the variance inflation factors was 1.34, which is substantially lower than the accepted threshold of 10 for multicollinearity (Allison, 2012).

#### 4 | FINDINGS

Table 2 shows the results of our analysis where the dependent variables are SP (Models 1–7) and EP (Models 8–14). Models 1 and 8 show only the control variables. Expectedly, for most control variables, the estimated coefficients across models have similar signs and statistical significance. Corporate governance, company age, foreign market dependence (FSTS), the number of projects in the host country, and home-country quality of environmental institutions contribute positively to both SP and EP. Conversely, financial performance and the volume of extracted material in the home country are negatively associated with SP and EP. Political distance is

positively associated with SP and EP, but the relationship is statistically significant only for EP. Legal distance is positively associated with SP and EP, but the relationship is statistically significant only for SP.

Models 2 and 9 add international diversification, home- and host-country development. International diversification and home-country development have positive and statistically significant relationships with SP and EP. These results support our underlying logics. First, that international diversification exposes MNEs to a diversity of legitimacy pressures, which they might address through their CSP and second, that MNEs that come from more developed countries are more likely to resort to CSP in response to domestic intensity of stakeholder pressures combined with greater availability of CSP solutions in their countries. Conversely, host-country development is statistically nonsignificant and has the opposite signs for SP and EP. This is not surprising as we did not expect host-country development to have a direct effect on global corporate CSP. This finding echoes the findings of Oh et al. (2020) in the context of corporate stock performance of mining firms.

We test Hypothesis (H1) with Models 3 and 10 that add the dichotomous variables extraction and processing (marketing, sales, and distribution is omitted as the comparison group variable). The addition of these variables does not affect the previous results. Both extraction and processing are positive and statistically significant, suggesting that they contribute more to SP and EP compared to marketing, sales, and distribution. Moreover, the size of the effects of extraction on SP and EP is larger than the size of the effects of processing. The differences are statistically significant according to Wald tests (chi<sup>2</sup> = 6.16, p = .01; chi<sup>2</sup> = 3.55, p = .05, respectively). These results provide support to Hypothesis (H1).

To test Hypothesis (H2), Models 4 and 11 add the interaction terms between extraction and processing with international diversification. All existing variables maintain their relationships and statistical significance with SP and EP apart from the baseline effects of extraction and processing, which lose statistical significance. Most importantly, the interaction terms are positive and statistically significant, which suggests that international diversification bolsters the baseline effects of extraction and processing on SP and EP. Moreover, their moderation effects are greater, on average, compared to that of international diversification on marketing, sales, and distribution, which is the effect of the comparison group of activities not reported.

To depict all three moderation effects, we graphically present how the marginal effects of extraction, processing; and marketing, sales, and distribution activities vary with international diversification. Figure 1a,b presents the interaction effects on SP and EP, respectively. We observe that marketing, sales, and distribution activities at very low levels of international diversification are associated with a slightly higher SP and EP ( $\sim$ 4 percentage points) compared to extraction and processing. This finding is not surprising as their starting SP and EP levels might be higher compared to extraction and processing, whose negative social and environmental externalities are more immediate and inherently impactful. EIMs respond to the escalating legitimacy pressures they experience as they increasingly engage in international activities, which is manifest in the average baseline effects we obtained associated with each activity type as well as in the moderation effects of international diversification, particularly on extraction and processing and shown by the graphs. Our results support Hypothesis (H2), which suggested that greater international diversification of EIMs will be associated with an increase in the baseline impact of their foreign activities on global CSP.

In Models 5 and 12, we add the interaction terms between extraction and processing with home-country development. All existing variables maintain their relationships and statistical significance with SP and EP, including extraction and processing. Most importantly, the

interaction terms are positive and statistically significant, which suggests that home-country development moderates the baseline effects of extraction and processing by bolstering their baseline effect on SP and EP. Moreover, their moderation effects are greater, on average, compared to that on marketing, sales, and distribution (the comparison group). Figure 2a,b presents the interaction effects on SP and EP, respectively. We thus find support for Hypothesis (H3).

Finally, we test Hypothesis (H4) with Models 6 and 13, where we add the interaction terms between extraction and processing with host-country development. All existing variables maintain their relationships and statistical significance with SP and EP, including extraction and processing. However, the interaction terms are statistically nonsignificant and have the opposite signs for SP and EP. Thus, we fail to find support for Hypothesis (H4), which suggested that the increase in corporate CSP stimulated by locating each type of activity overseas will be larger the more developed is the host country. This lack of statistical significance can be attributed to the fact that our models already capture several aspects of host-country effects. However, there is also a possible theoretical explanation: a shift in dominant drivers of corporate CSP away from challenges to legitimacy from local stakeholders toward global activists and supranational institutions. Research has shown that the rise of these institutions and meta-norms promote expectations for global, corporate MNC behavior (Kostova et al., 2008) and that EIMs, like other MNCs, now use improvements in CSP to seek global legitimacy (Marano et al., 2017).

We drew on these insights to develop a multidimensional construct to capture the effect of global meta-institutions on EIMs' CSP. In doing so, we developed a measure of the yearly cumulative number of countries that have signed the EITI to account for the global governance along the value chain of extractives (Carbonnier, 2011); used the yearly STOXX Global ESG Leaders index to capture the impact of the evolving global movement of ethical investing (Flammer, 2013); developed a yearly average of corporate CSP to consider industry-wide competitive CSP pressures (Symeou, Zyglidopoulos, & Gardberg, 2019); and calculated a global yearly average measure of the Quality of Environmental Institutions (Hsu et al., 2018) to account for the overall performance of nations globally. The Cronbach's alpha statistic was .67, suggesting acceptable internal consistency among the set of variables and all variables loaded to a single factor. Factor loadings were greater than 0.79, suggesting unidimensionality. We used the lagged values of the factor as an additional control in the main models. The coefficient of the variable was positive and statistically significant for both SP and EP, while the main results remained unaffected. This suggests that supranational institutional effects are at play and a shift in dominant drivers of CSP away from host-country institutional pressures toward global pressures.

#### 4.1 | Robustness checks

We conducted several tests to examine the robustness of our results. First, we tested for Granger causality (Granger, 1969), that is, whether the relationships between EIMs' foreign activity type and SP and EP are strictly unidirectional (already suggested by the fact that we entered our independent variables in the model with 1-year lags). We found no contradicting evidence.<sup>9</sup>

Second, we assumed that subsidiary activities carry diverse levels of risk of negative events, which partly explains a differential effect on their SP and EP. This assumption is aligned with the risk perspective of the multinational firm (Kwok & Reeb, 2000), which suggests a diversification benefit for MNCs, leading often to lower levels of risk. In other words, EIMs exhibiting higher diversity of foreign operations should encounter a lower level of risk of engendering

negative events. We reestimated our main models by replacing activity type variables with a yearly Herfindahl–Hirschman index (HHI) of foreign operations. We found a positive and statistically significant HHI for both SP and EP. This suggests that lower diversity makes it more compelling for EIMs to draw on CSP as a countermeasure to the higher accompanying risks. These findings are supportive of our risk-centric argument of the strategic decision of EIMs to resort to CSP and suggest robustness in our main results.

Previous research has shown that the portfolio of MNCs' host countries is associated with their CSP (Symeou et al., 2018; Zyglidopoulos et al., 2016). We account for the EIM's hostcountry portfolio with the EIM's ratio of its number of developing host countries to its total number of host countries (*Developing to Total Host Countries*). We employ the World Bank's income groupings to classify countries as developed if they have a gross national income per capita of \$12,476 or more at a given year and developing otherwise. Adding the variable to our models does not affect the main results. The ratio of developing to total host countries is negative and statistically significant, suggesting that EIMs with comparably more developing host countries in their global country portfolio exhibit lower SP and EP. Arguably, EIMs experience lower legitimacy pressures in developing host countries and therefore a lesser need to address them through their global CSP, which concurs with Zyglidopoulos et al. (2016).

In their evaluation of the risks of foreign entry, less responsible EIMs might avoid locations with stringent institutions, and hence stronger legitimacy challenges. This possibility contradicts our position that EIMs use CSP to address the managerial challenges that arise ex post of siting specific activities in particular locations overseas. Although the literature indicates that legitimacy pressures in the extractive industries are substantial throughout the life cycle of a project (Oh et al., 2020), we took explicit account of this concern by estimating a location selection model (McFadden, 1974) to test whether the probability that an EIM will choose a more (less) developed country among the 158 host countries covered in our sample in a given year will be conditional on the EIM's CSP.<sup>10</sup> We found that, overall, EIMs favored more developed countries, but CSP had no effect on this preference. We also used the probabilities of the location choice decision as an additional control variable in our main models. The new control was never statistically significant.

We tested the effect of adding back all omitted variables (Firm Size, FATA, and Quality of Environmental Institutions [Host]) that were highly correlated with the main independent variables, to the empirical models. As expected, this caused some changes in the signs of the relationships for highly correlated variables but without affecting the tests of our hypotheses. Finally, we tested year-specific and host-country-specific fixed effects, adding dummy variables for the 157 host countries and each of the 15 years in our sample, with no effect on our main results.

#### 4.2 | Sensitivity analysis

We performed several tests to examine the sensitivity of our empirical findings. First, we examined the sensitivity of our results to EIMs' industry classification. We reestimated our main models by successively omitting all firms from each of the SIC2-digit industries included in our sample. Statistical support for all our hypotheses persisted when any of the SIC2 industries 10, 12, or 14 were omitted from the analysis although we lost statistical support when we removed SIC2 13 "Oil and Gas Extraction." This might be explained by the weight of oil and gas EIMs (58% of the overall sample observations as detailed in Table 1). To examine whether

| 1. Social performance 58.03  |                                       |   |                        |                       |                       |                        |                                      |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
|--|---------------------------------------|---|------------------------|-----------------------|-----------------------|------------------------|--------------------------------------|------------------------|-------------------------|-------------|--------------------------|--|------------|-------------|-------------|------------|------------|-------------|-----------|--------------|------------|------------|------------|--------|
|  |                                       | 22.26 1.00                                      |                        |                       |                       |                        |                                      |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 2. Environmental performance 57.33   | 22.81                                 | 81 0.82*  | 1.00                   |                       |                       |                        |                                      |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 3. Foreign activity type <sup>a</sup> 1.73   | 0.73                                  | 0.01  | 0.07*                  | * 1.00                | c                     |                        |                                      |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 4. International diversification 2.54  | 1.02                                  | 2 0.14*   | $0.14^{*}$             | * 0.06*               | * 1.00                | Q                      |                                      |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 5. Corporate governance 54.73  |                                       | 18.97 0.33*                                     | 0.27*                  | * 0.04*               | ¢* 0.32               | 32* 1.00               | 0                                    |                        |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 6. Firm size 13.97   | 4.16                                  | 5 0.33*   | 0.36*                  | * 0.06*               | * 0.52*               | 52* 0.36*              | 6* 1.00                              | 6                      |                         |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 7. Foreign sales to total sales 56.12  | 35.69                                 | 9 0.04*   | -0.02                  | 2 0.00                | 0.15*                 | 15* 0.08*              | 8* 0.10*                             | 0* 1.00                | 6                       |             |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 8. Foreign assets to total assets 39.49  | 31.90                                 | 0 -0.02   | -0.08*                 | 8* -0.04*             | 04* 0.04**            |                        | $-0.03^{*}$ $-0.01$                  | .01 0.49*              | 9* 1.00                 | -           |                          |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 9. Firm age 1971.9   | 9 30.76                               | 76 -0.39*                                       | * -0.48*               | 8* -0.06*             |                       | -0.07* -0.             | $-0.11^{*}$ $-0.$                    | $-0.16^{*}$ $0.06^{*}$ | 6* 0.08*                | 3* 1.00     | c                        |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 10. Financial performance 0.06   | 0.49                                  | ) -0.06*  | * -0.07*               | 17* -0.02*            | 02* 0.09*             | 9* 0.08*               | 8* 0.18*                             | 8* 0.11*               | 1* 0.00                 | 0.02*       | 2* 1.00                  |  |            |             |             |            |            |             |           |              |            |            |            |        |
| 11. Industry SIC <sup>b</sup> 15.16  | 8.83                                  | \$ 0.06*  | $0.16^{*}$             | * 0.22*               |                       | -0.05* 0.04**          | 4** 0.06*                            |                        | $-0.11^{*}$ $-0.07^{*}$ |             | $-0.14^{*}$ $-0.0$       | $-0.06^{*}$ 1.00   |            |             |             |            |            |             |           |              |            |            |            |        |
| 12. Foreign activity ownership 3.55 type <sup>c</sup>  | 0.50                                  | ) -0.04*  | * -0.00                | 0 0.30*               | • 0.01                |                        | -0.01 -0.                            | -0.05* -0.             | -0.06* -0.04*           | 04* 0.06*   | 6* -0.08*                | <b>)8* 0.18*</b>   | 1.00       |             |             |            |            |             |           |              |            |            |            |        |
| 13. Host country projects 2.48   | 1.10                                  | ) -0.06*  | * -0.10*               | .0* -0.09*            |                       | -0.12* -0.             | $-0.10^{*}$ $-0.$                    | -0.03* 0.20*           | 0* 0.17*                | 7* 0.05*    | 5* 0.09*                 | * -0.04**  | ¦** −0.30* | * 1.00      |             |            |            |             |           |              |            |            |            |        |
| 14. Country development (host) -0.06   | 6 0.93                                | 3 -0.04**                                       | ** -0.02*              | 0.14*                 | * 0.01                | 1 0.06*                | 6* 0.05*                             | 5* -0.02               | .02 -0.10*              | 10* -0.00   | .00 0.02                 | 0.07*  | $0.11^{*}$ | $0.18^{*}$  | 1.00        |            |            |             |           |              |            |            |            |        |
| <ol> <li>Quality of environmental 53.29<br/>institutions (host)</li> </ol>   | 10.69                                 | 0.01  | 0.01                   | 0.08*                 | * 0.05*               | )5* 0.02               | 2 0.04**                             | 4** 0.02               | 2 0.01                  | -0.01       | .01 -0.00                | 00 0.02  | 0.05*      | 0.05*       | 0.60*       | 1.00       |            |             |           |              |            |            |            |        |
| <ol> <li>Natural resources</li> <li>9.52 munificence (host)</li> </ol>   | 12.56                                 | 66 -0.00  | 0.01                   | -0.09*                | 0.0 *60               |                        | -0.00 0.03**                         | 3** -0.00              |                         | -0.03* 0.01 | 1 0.01                   | -0.01  | -0.09*     | * -0.03*    | 3* -0.33*   | 3* -0.40*  | )* 1.00    |             |           |              |            |            |            |        |
| 17. Extracted material (host) 19.69  | 1.83                                  | 0.00  | 0.01                   | 0.01                  |                       | -0.02 0.02             | 2 0.00                               |                        | -0.00 - 0.01            | 01 -0.02    | .02 0.00                 | 0.01   | -0.04*     | * 0.12*     | 0.12*       | -0.05      | 5* -0.23*  | 3* 1.00     |           |              |            |            |            |        |
| 18. County openness (host) 5.02  | 10.97                                 | 10.0 70   | 0.02                   | 0.01                  | 0.02                  | 0.01                   | 1 0.00                               | 0 0.00                 | 0 0.01                  | -0.02       | .02 0.02                 | 0.02*  | 0.01       | 0.01        | $0.11^{*}$  | • 0.07*    | -0.04**    | t** -0.18*  | * 1.00    |              |            |            |            |        |
| 19. Country development (home) -0.04   | 4 0.85                                | 5 0.19*   | 0.23*                  | * -0.11*              |                       | 0.03** -0.             | -0.04* -0.                           | -0.05* 0.02            | 2 0.03*                 | 3* 0.12*    | 2* 0.07*                 | * -0.32*   | * -0.25    | * 0.07*     | -0.05*      | 5* -0.03*  | 3* -0.01   | l -0.01     | -0.02     | 1.00         |            |            |            |        |
| <ol> <li>Quality of environmental 58.81<br/>institutions (home)</li> </ol>   |                                       | 10.14 0.13*                                     | 0.12*                  | * -0.03*              | 03* 0.09*             |                        | -0.00 0.09*                          | 9* 0.04**              | 4** 0.01                |             | -0.05* -0.08*            | <b>)8* 0.02</b>  | -0.06*     | *0.08       | 8* -0.07*   | 7* 0.01    | -0.01      | l0.06*      | * 0.02    | -0.04** 1.00 | * 1.00     |            |            |        |
| <ol> <li>Natural resources</li> <li>A.96<br/>munificence (home)</li> </ol>   | 6.78                                  | 3 -0.01   | -0.02                  | 2 0.01                | *60.0                 |                        | -0.07* 0.09*                         | 9* -0.01               | 0.0 10.                 | 0.00        | 0 0.05*                  | * 0.07*  | 0.03**     | -0.10*      | 0* 0.01     | 0.04*      | 0.06*      | -0.06*      | * 0.02*   | -0.02        | -0.04**    | * 1.00     |            |        |
| 22. Extracted material (home) 21.04  | 0.99                                  | ) -0.02   | -0.00                  | 0 0.02                | 0.07*                 | 0.06*                  | 6* 0.07*                             | 7* 0.02                | 2 0.03*                 |             | -0.02* -0.02             | 00 -0.00   | 0.02*      | $-0.12^{*}$ | 2* -0.03*   | 3* -0.04** | t** 0.03*  | $-0.05^{*}$ | * 0.01    | 0.05*        | $0.11^{*}$ | $0.14^{*}$ | 1.00       |        |
| 23. Political distance 1.50  | 0.91                                  | -0.07   | * -0.10*               | .0* -0.08*            | 08* 0.00              |                        | -0.04** -0.02                        | .02 0.02               | 2 0.05*                 | 5* 0.02     | 2 0.00                   | -0.20*   | )* -0.19*  | * 0.02      | $-0.35^{*}$ | 5* -0.25*  | 5* 0.20*   | $0.05^{*}$  | -0.09*    | * 0.35*      | 0.02       | -0.01      | 0.02       | 1.00   |
| 24. Legal distance 0.55  | 0.50                                  | 0.07*   | 0.12*                  | * 0.03**              |                       | -0.07* 0.05*           | 5* 0.02                              | 2 -0.01                | .01 -0.07*              |             | -0.11* 0.02              | 0.08*  | 0.03*      | $0.08^{*}$  | 0.07*       | -0.03      | 3* -0.02   | 2 -0.04*    | t* 0.02   | $-0.15^{*}$  | -0.02      | -0.07*     | * -0.03*   | -0.22* |
| <i>Note:</i> * <i>P</i> < .05. Summary statistics are based on precentered values.<br><sup>23</sup> , 320 (43.89%) of foreign activities are extractive, 3,001 (39.67%) are processing, and 1.244 (16.44%) are marketing, sales, and distribution<br><sup>13</sup> , 415 (45.14%) are IVs and 4.150 (54.86%) subsidiaries.<br><sup>53</sup> STC2 (10) "Metal Mining" (155 firms, 2,561); SIC2 (12) "Coal Mining" (43 firms, 602 obs); SIC2 (13) "Oil and Gas Extraction" (134 firms, | d on pi<br>active,<br>subsidi<br>SIC: | ecenterec<br>3,001 (39<br>iaries.<br>2 (12) "Co | d values.<br>0.67%) an | e proces<br>ng" (43 1 | ssing, ai<br>firms, 6 | nd 1,244<br>02 obs); 5 | (16.44%) :<br>SIC2 (13) <sup>(</sup> | are mark<br>"Oil and   | eting, sal<br>Gas Extr  | es, and e   | distributic<br>(134 firm | ocessing, and 1,244 (16.44%) are marketing, sales, and distribution.<br>(43 firms, 602 obs); SIC2 (13) "Oil and Cas Extraction" (134 firms, 4,326 obs); and SIC2 (14) "Mining and Quartying of Nonmetallic Minerals, Except Fuels" (8 firms, 76 obs) | s); and SI | C2 (14)     | "Mining     | and Qua    | urrying of | Nonmeta     | llic Mine | rals, Exce   | pt Fuels"  | (8 firms,  | . 76 obs). |        |

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| n activity type on SP and EP |
|------------------------------|
| foreig                       |
| The effects of EIMs'         |
| TABLE 2                      |

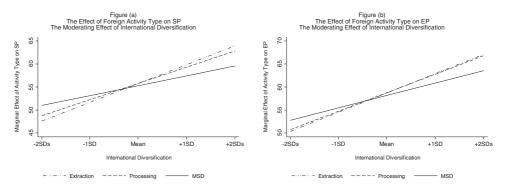
|   | SP                   |  |                                     |  |                       |   |                      | EP   |                      |                   |                    |                    |                    |                      |
|---|----------------------|--|-------------------------------------|--|-----------------------|---|----------------------|--|----------------------|-------------------|--------------------|--------------------|--------------------|----------------------|
|   | (1)                  | (2)  | (3)                                 | (4)  | (5)                   | (9)   | (1)                  | (8)  | (6)                  | (10)              | (II) (             | (12)               | (13) (1            | (14)                 |
|   | Controls             | Base   | H1a, b, c                           | H2   | H3                    | H4  | Full                 | Controls   | Base                 | H1a, b, c         | H2                 | H3                 | H4 ]               | Full                 |
|   | Coef./(SEs)          | Coef./(SEs)  | Coef./(SEs)                         | Coef./(SEs)                                      | Coef./(SEs)           | Coef./(SEs)   | Coef./(SEs)          | Coef./(SEs)  | Coef./(SEs)          | Coef./(SEs)       | Coef./(SEs) (      | Coef./(SEs)        | Coef./(SEs) (      | Coef./(SEs)          |
| Extraction  |                      |  | $0.788^{**}(0.287)$                 | 0.383 (0.296)                                    | $1.181^{***} (0.314)$ | $0.815^{**}(0.291)$   | 0.775* (0.327)       |  |                      | 0.846** (0.279)   | 0.485‡ (0.288)     | 1.090*** (0.306)   | 0.787** (0.283) (  | $0.751^{*}(0.318)$   |
| Processing  |                      |  | $0.740^{**}(0.278)$                 | 0.430 (0.286)                                    | $1.124^{***}$ (0.304) | 0.755** (0.283)   | 0.798* (0.316)       |  |                      | 0.805** (0.271)   | 0.533‡ (0.279)     | 1.084*** (0.296) ( | 0.797** (0.275) (  | $0.780^{*}(0.307)$   |
| International<br>diversification  |                      | 3.687*** (0.289)   | 3.687**** (0.289) 3.718**** (0.289) | 2.328*** (0.405)                                 | 3.729**** (0.289)     | 3.720*** (0.289)  | 2.348*** (0.406)     |  | 4.060*** (0.283)     | 4.094*** (0.283)  | 2.918*** (0.396)   | 4.100*** (0.283)   | 4.094*** (0.283)   | 2.920*** (0.396)     |
| Country development<br>(home)   |                      | 3.396** (1.302) 3.390** (1   | 3.390** (1.302)                     | 3.435** (1.300)                                  | 2.646* (1.321)        | 3.379** (1.302)   | 2.701* (1.319)       |  | 7.142**** (1.316)    | 7.137**** (1.315) | 7.120*** (1.313) ( | 6.583*** (1.335)   | 7.138*** (1.316)   | 6.577**** (1.332)    |
| Country development<br>(host)   |                      | -0.031 (0.173) -0.013 (0   | -0.013 (0.173)                      | -0.011 (0.172)                                   | -0.027 (0.173)        | 0.036 (0.257)   | -0.057 (0.257)       |  | 0.004 (0.171)        | 0.021 (0.171)     | 0.020 (0.170) (    | 0.012 (0.171)      | -0.008 (0.252)     | -0.084 (0.252)       |
| $\label{eq:Extraction} Extraction \times international diversification$ |                      |  |                                     | 2.094*** (0.392)                                 |                       |   | 2.075*** (0.392)     |  |                      |                   | 1.607*** (0.382)   |                    |                    | 1.607**** (0.383)    |
| Processing × international<br>diversification                           |                      |  |                                     | 1.483*** (0.385)                                 |                       |   | 1.481*** (0.386)     |  |                      |                   | 1.422*** (0.375)   |                    |                    | 1.432**** (0.376)    |
| Extraction × country<br>development (home)                              |                      |  |                                     |  | 0.898** (0.299)       |   | 0.862** (0.299)      |  |                      |                   | _                  | 0.619* (0.292)     | _                  | 0.598* (0.292)       |
| Processing × country<br>development (home)                              |                      |  |                                     |  | 0.802** (0.296)       |   | 0.787** (0.296)      |  |                      |                   | _                  | 0.637* (0.288)     | _                  | 0.640* (0.289)       |
| Extraction × country<br>development (host)                              |                      |  |                                     |  |                       | -0.019(0.281)   | 0.093 (0.281)        |  |                      |                   |                    |                    | 0.032 (0.274) (    | 0.122 (0.274)        |
| Processing × country<br>development (host)                              |                      |  |                                     |  |                       | -0.118 (0.275)  | -0.006 (0.275)       |  |                      |                   |                    |                    | 0.049 (0.268)      | 0.142(0.269)         |
| Corporate governance  | $0.264^{***}(0.013)$ | $0.264^{\texttt{stet}} \left( 0.013 \right)  0.254^{\texttt{stet}} \left( 0.013 \right)  0.254^{\texttt{stet}} \left( 0.013 \right)  0.253^{\texttt{stet}} \left( 0.013 \right)  0.254^{\texttt{stet}} \left( 0.013 \right)  0.25$ | 0.254*** (0.013)                    | 0.253*** (0.013)                                 |                       | $0.254^{***}(0.013)$  | 0.253*** (0.013)     | $0.151^{***}(0.013)  0.139^{***}(0.013)$   |                      | 0.139*** (0.013)  | 0.138*** (0.013) ( | 0.139*** (0.013)   | 0.139*** (0.013) ( | $0.138^{***}(0.013)$ |
| Firm age  | -0.105** (0.034      | $-0.105^{**}(0.034) - 0.087^{**}(0.033) - 0.087^{**}$  |                                     | $(0.033) -0.08^{**} (0.033) -0.088^{**} (0.033)$ |                       | -0.087** (0.033)  | -0.089** (0.033)     | $-0.113^{***} \left( 0.032 \right) \\ -0.089^{**} \left( $ | -0.089** (0.032)     | -0.089** (0.032)  | -0.090** (0.032)   | -0.089** (0.032)   | -0.089** (0.032)   | -0.090***<br>(0.032) |
| Financial performance   | -1.976***<br>(0.376) | -2.057***<br>(0.373)   | -2.049***<br>(0.373)                | -2.064***<br>(0.372)                             | -2.046*** (0.373)     | $-2.046^{***} (0.373) -2.049^{***} (0.373) -2.062^{***} (0.372) -0.771^{*} (0.368)$ | -2.062*** (0.372)    |  | -0.908* (0.362)      | -0.899* (0.362)   | -0.908* (0.361)    | -0.895* (0.362)    | -0.899* (0.362)    | $-0.904^{*}$ (0.361) |
| Foreign sales to total sales 0.022*** (0.006) 0.007 (0.006)             | 0.022*** (0.006)     |  | 0.007 (0.006)                       | 0.007 (0.006)                                    | 0.007 (0.006)         | 0.007 (0.006)   | 0.007 (0.006)        | 0.034*** (0.006)   | 0.016** (0.006)      | 0.016** (0.006)   | 0.016** (0.006) (  | 0.016** (0.006) (  | 0.016** (0.006) (  | 0.016** (0.006)      |
| Foreign activity ownership -0.238 (0.236)<br>type: WOS (1)/JV (0)       | -0.238 (0.236)       | -0.157 (0.234)   | -0.063 (0.236)                      | -0.010 (0.236)                                   | -0.028 (0.236)        | -0.060 (0.236)  | 0.022 (0.236)        | -0.393# (0.231)  | -0.259 (0.228)       | -0.162(0.230)     | -0.121 (0.230)     | -0.133 (0.230)     | -0.164 (0.230)     | -0.098(0.231)        |
| Host country projects   | $0.115^{*}(0.046)$   | 0.187**** (0.045) 0.186*** (0.045)   | $0.186^{***} (0.045)$               | 0.193*** (0.045)                                 | $0.186^{***}(0.045)$  | $0.186^{***}(0.045)$  | 0.193*** (0.045)     | 0.209*** (0.045)   | $0.294^{***}(0.044)$ | 0.293*** (0.044)  | 0.300*** (0.044) ( | 0.293*** (0.044)   | 0.293*** (0.044) ( | 0.299*** (0.044)     |
| Country openness (host)   | -0.008(0.010)        | -0.012(0.010) -0.012(0.010)  | -0.012(0.010)                       | $-0.012\ (0.010)$                                | -0.012(0.010)         | -0.012(0.010)   | -0.013 (0.010)       | 0.011 (0.010)  | 0.008 (0.010)        | 0.008 (0.010)     | 0.007 (0.010)      | 0.008 (0.010)      | 0.008 (0.010)      | 0.007 (0.010)        |
| Natural resources<br>munificence (host)                                 | -0.018 (0.011)       | $-0.023$ $\ddagger (0.012) -0.025$ $\ast (0.012)$  | -0.025* (0.012)                     | -0.025* (0.012)                                  | $-0.024^{*}(0.012)$   | -0.025* (0.012)   | $-0.024^{*}$ (0.012) | 0.001 (0.011)  | -0.007 (0.012)       | -0.008 (0.012)    | -0.009 (0.012)     | -0.008 (0.012)     | -0.008 (0.012)     | -0.008 (0.012)       |
| Extracted material (host)   | -0.028(0.082)        | -0.028(0.082) 0.001(0.082)   | -0.003 (0.082)                      | -0.011 (0.082)                                   | -0.000 (0.082)        | -0.002(0.083)   | -0.011 (0.082)       | 0.027 (0.081)  | 0.057(0.081)         | 0.053 (0.081)     | 0.045 (0.081) (    | 0.055 (0.081)      | 0.051 (0.082) (    | 0.043 (0.082)        |
| Natural resources<br>munificence (home)                                 | -0.012(0.044)        | -0.012(0.044) -0.014(0.043) -0.012(0   | -0.012(0.043)                       | -0.023 (0.043)                                   | -0.016(0.043)         | -0.012(0.043)   | -0.026 (0.043)       | -0.051(0.043)  | -0.046 (0.042)       | -0.045 (0.042)    | -0.053 (0.042)     | -0.047 (0.042)     | -0.045 (0.042)     | -0.055 (0.042)       |

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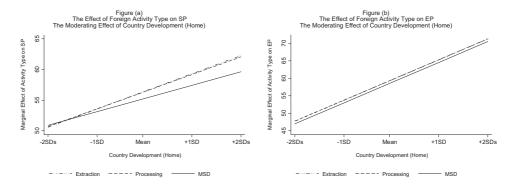
|   | SP   |  |                        |                            |                       |                       |                       | 1                     |                            |                            |   |                            |  |                       |
|---|--|--|------------------------|----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------------|----------------------------|---|----------------------------|--|-----------------------|
|   | (1)  | (2)  | (3)                    | (4)                        | (5)                   | (9)                   | (2)                   | (8)                   | (6)                        | (10)                       | (11)  | (12)                       | (13)   | (14)                  |
| Quality of environmental 0.317*** (0.022) 0.227*** (0.023) 0.226*** (0.023) 0.222*** (0.023) 0.226*** (0.023) 0.226*** (0.023) 0.222*** (0.023) institutions (home)   | 0.317*** (0.022)                                   | 0.227**** (0.023)                            | 0.226*** (0.023)       | 0.222*** (0.023)           | 0.226*** (0.023)      | 0.226*** (0.023)      |                       | 0.308*** (0.022)      | 0.199*** (0.022)           | 0.198**** (0.022)          | 0.308*** (0.022) 0.199*** (0.022) 0.198*** (0.022) 0.194*** (0.022) |                            | 0.198*** (0.022) 0.198*** (0.022) 0.194*** (0.022)   | 0.194*** (0.022)      |
| Extracted material (home) -10.354***<br>(0.810)   | ) -10.354***<br>(0.810)                            | -11.175***<br>(0.836)                        | -11.198****<br>(0.835) | $-11.011^{***}$<br>(0.835) | -11.226***<br>(0.835) | -11.198***<br>(0.835) | -11.039***<br>(0.834) | -11.951***<br>(0.796) | $-13.474^{***}$<br>(0.819) | $-13.496^{***}$<br>(0.818) | -13.321***<br>(0.818)   | $-13.518^{***}$<br>(0.818) | -13.496***<br>(0.818)  | -13.342***<br>(0.818) |
| Political distance  | $0.201\ (0.180)$                                   | 0.199(0.183)                                 | 0.201(0.183)           | 0.190 (0.183)              | 0.177 (0.183)         | 0.196 (0.184)         | 0.168(0.183)          | 0.508** (0.179)       | $0.508^{**}(0.181)$        | 0.508** (0.181)            | $0.498^{**}(0.180)$   | $0.493^{**}(0.181)$        | $0.510^{**}(0.181)$  | $0.490^{**}(0.181)$   |
| Legal distance  | 0.519‡ (0.302)                                     | 0.519‡ (0.302) 0.657* (0.303) 0.639* (0.303) | $0.639^{*}(0.303)$     | 0.649*(0.302)              | $0.642^{*}(0.303)$    | $0.638^{*}(0.303)$    | 0.648* (0.302)        | 0.263 (0.301)         | 0.411(0.300)               | 0.392(0.300)               | 0.399(0.299)  | 0.393 (0.300)              | 0.392(0.300)   | 0.397(0.299)          |
| Constant  | 55.484*** (2.526)                                  | ) 57.656*** (2.960)                          | ) 56.970*** (2.970)    | 57.232*** (2.969)          | 56.567*** (2.962)     | 56.940*** (2.970)     | 56.837*** (2.961)     | 56.903*** (2.414)     | 61.660*** (3.227)          | 60.948*** (3.235)          | 61.114*** (3.221)   | 60.647*** (3.229)          | 55484*** (2.326) 57.656*** (2.960) 56.970*** (2.970) 57.222*** (2.969) 56.567*** (2.962) 56.940*** (2.970) 56.837*** (2.961) 56.903*** (2.414) 61.660*** (3.227) 60.948*** (3.235) 61.114*** (3.221) 60.647*** (3.239) 60.960*** (3.236) | 60.853***<br>(3.216)  |
| Industry effects  | Yes  | Yes  | Yes                    | Yes                        | Yes                   | Yes                   | Yes                   | Yes                   | Yes                        | Yes                        | Yes   | Yes                        | Yes  | Yes                   |
| Observations  | 7,565  | 7,565  | 7,565                  | 7,565                      | 7,565                 | 7,565                 | 7,565                 | 7,565                 | 7,565                      | 7,565                      | 7,565   | 7,565                      | 7,565  | 7,565                 |
| Home countries/host<br>countries/firms  | 29/158/340   | 29/158/340                                   | 29/158/340             | 29/158/340                 | 29/158/340            | 29/158/340            | 29/158/340            | 29/158/340            | 29/158/340                 | 29/158/340                 | 29/158/340  | 29/158/340                 | 29/158/340   | 29/158/340            |
| Log-likelihood (restricted) -26,331.44  | ) -26,331.44                                       | - 26,240.66                                  | -26,237.90             | -26,224.00                 | -26, 233.98           | -26, 238.93           | -26,221.46            | -26,184.45            | -26,053.39                 | -26,050.04                 | -26,041.56  | -26,048.27                 | -26,051.30   | - 26,041.03           |
| Log-likelihood (comparison –32,884.14<br>model)   | on32,884.14  | - 32,806.51                                  | - 32,804.76            | -32,797.24                 | -32,801.44            | -32,803.39            | -32,792.10            | -32,802.54            | -32,759.05                 | -32,758.39                 | - 32,734.60   | -32,750.81                 | -32,757.26   | - 32,723.66           |
| Chi-squared   | 919.54   | 1,128.46                                     | 1,137.58               | 1,169.61                   | 1,148.32              | 1,137.73              | 1,179.74              | 736.26                | 1,033.98                   | 1,044.30                   | 1,063.32  | 1,050.16                   | 1,044.07   | 1,069.10              |
| Chi-squared (comparison 13,105.39<br>model)   | 13,105.39  | 13,131.70                                    | 13,133.72              | 13,146.48                  | 13,134.92             | 13,128.91             | 13,141.28             | 13,236.18             | 13,411.32                  | 13,416.69                  | 13,386.08   | 13,405.08                  | 13,411.93  | 13,365.26             |
| AIC   | 52,724,88  | 52,549.31                                    | 52,547.81              | 52,524.00                  | 52,543.96             | 52,553.87             | 52,526.93             | 52,430.89             | 52,174.78                  | 52,172.09                  | 52,159.13   | 52,172.54                  | 52,178.60  | 52,166.05             |
| BIC   | 52,939.75  | 52,784.98                                    | 52,797.33              | 52,787.38                  | 52,807.35             | 52,817.25             | 52,818.04             | 52,645.76             | 52,410.45                  | 52,421.61                  | 52,422.51   | 52,435.93                  | 52,441.99  | 52,457.17             |
| Note: $\frac{1}{7}p < .10$ , $\frac{1}{7}p < .05$ , $\frac{1}{7}p < .01$ , $\frac{1}{7}p < .001$ .<br>Abbreviations: EIMs, Extractive Industry Multinationals; EP, environmental performance; SP, social performance. | < .01, *** <i>p</i> < .001.<br>ive Industry Multin | ationals; EP, envir                          | onmental perform       | nance; SP, social p        | erformance.           |                       |                       |                       |                            |                            |   |                            |  |                       |

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**FIGURE 1** The moderating effects of international diversification. Interaction effects are statistically significant at the .001 level of significance



**FIGURE 2** The moderating effects of international diversification. Interaction effects are statistically significant at the .001 level of significance

sample size affected our results, we drew random subsamples of varying sizes and reestimated our models. We found statistical support for all our hypotheses persisted.

Estimating our models on only oil and gas EIMs, we found support for all hypotheses apart from Hypothesis (H4). To see if oil and gas EIMs exhibit unique features that might influence our results, we conducted tests of the differences in the means of several major variables describing metal mining and oil and gas EIMs. Oil and gas companies exhibited higher SP and EP (4 and 5 percentage points, respectively) and presence in double the number of host countries (25.2 vs. 12.5) compared to metal mining. These two findings are consistent with our hypotheses about the impact of an EIM's global footprint on its global CSP.

We then examined the sensitivity of our results to different country sample sizes. We excluded individual countries from the sample, with replacement, to examine the sensitivity of the results to specific countries, beginning with the ones with the largest percentage of observations: Australia (17.5%), Canada (12.70%), the United Kingdom (12.2%), France (11.5%), and the United States (10.8%). In each step, we reestimated our main models. After excluding Australia, Canada, the United Kingdom, or France, the proposed relationships continued to receive statistical support. When the United States was excluded, the effects relating to our hypotheses lost



some statistical significance. We attribute this effect to the fact that the US sample has a larger number of oil and gas EIMs (80% compared to metal mining companies 12%) compared to other countries.

Third, the effect of Firm Age (Table 2) implies that more experienced firms are better social and environmental performers than less experienced firms. Given that younger firms might be less geographically diversified and engage in less diverse foreign activities, the more established firms in our sample might be driving this result. To check this, we reestimated our main models, successively excluding EIMs whose year of establishment fell in the 5th, 10th, 25th, and 50th percentiles of the oldest firms in our sample, reducing the number of observations to 98, 95, 82, and 61% of the total sample, respectively. We found persistent statistical support for our main effects, suggesting that they are not driven by Firm Age.

#### 5 | DISCUSSION AND CONCLUSION

In this article, we explored the implications of different international diversification strategies adopted by MNCs from different home countries on their management of global CSP. We find that legitimacy spillovers resulting from the location of different types of subsidiary activities abroad appear to have an important impact on the corporation as a whole, leading it to respond with increases in global, corporate-level CSP. These increases are greatest for resource-seeking diversification involving the location of extractive activities abroad, moderate for efficiencyseeking diversification involving the location of processing activities and least for marketseeking diversification involving the location of marketing and sales activities. For each type of subsidiary activity, we also find that the increases in CSP are larger the more developed the company's home country and the larger its international footprint, but are not dependent on the host country's level of development.

#### 5.1 | Implications for theory

By demonstrating the importance of the nature of the activities a firm diversifies internationally, we show that a firm's management of CSP not only depends on its product–market strategy as it internationalizes (as explored by Husted and Allen (2006) and Strike et al. (2006)) but also its supply chain strategy: where it chooses to locate different activities as it diversifies internationally, driven by resource-seeking, efficiency-seeking, and market-seeking motivations.

Our findings that the activities of subsidiaries substantially impact corporate CSP provide strong evidence of the legitimacy spillover effects postulated by Kostova and Zaheer (1999). However, we also take this idea further to show how, in today's globalized environment, these spillover effects can dominate. Our results imply that when faced with the tensions arising from dual embeddedness (Meyer et al., 2011; Pu & Soh, 2018; Rosenzweig & Singh, 1991), home-country embeddedness matters more than host-country embeddedness. This suggests that the legitimacy challenges arising from the operations of subsidiaries do not remain hidden from home-country and global stakeholders, as had been assumed by some previous literature such as Surroca, Tribó, and Zahra (2013), and hence require a corporate CSP response. It is also consistent with the fact that our robustness and causality tests do not find evidence that firms with low CSP choose to exclude host countries with stronger institutions from their consideration, so as to avoid locating in institutionally demanding contexts.

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The evolving global movement for ethical investing (Flammer, 2013) will increase pressures to continue this shift from a subsidiary-level to a corporate-level response in the future. This trend is already evident in the fact that our global institutions index (a proxy of the effectiveness of global institutions in influencing firms' CSP behavior) showed a strong positive and statistically significant direct relationship with the CSP of firms in our sample. It underlines the need for theory and practice to take into account the increasing role of global governance of extractive resources (Carbonnier, 2011) and multistakeholder initiatives in the extractive sector, such as the EITI, when modeling the CSP behavior of firms that diversify their activities internationally.

These results thus contribute to filling a gap in the body of existing work that has focused on the local responses at the subsidiary level (Rathert, 2016) or on corporate-level CSP responses to home-country (Zyglidopoulos et al., 2016) or global legitimacy pressures (Marano et al., 2017) and more recent research that has explored the legitimacy spillovers from the parent company to its subsidiaries (Zhou and Wang (2020). Our results also shed new light on the numerous studies examining the influence of the host country environment on the CSP initiatives of local subsidiaries (Baum & Oliver, 1992; Chiu & Sharfman, 2011; Yang & Rivers, 2009). Consistent with Oh et al. (2020), we find that the host-country level of development does not significantly affect the level of corporate CSP. Contrary to their findings and our hypotheses, we also observe the lack of a statistically significant influence of host country institutions on the *increase* in corporate CSP associated with siting an activity there.

Our finding that the overall extent of a firm's international diversification also intensifies the corporate CSP response triggered by locating activities abroad reinforces the conclusion that a firm's SLO now needs to be earned and maintained at the corporate, as well as the local subsidiary level. It means that firms who are diversifying internationally from a home base in a less-developed country are likely to face particular challenges. First, because as latecomers to internationalization (Ramamurti & Williamson, 2019), they have had less time to build corporate capabilities to respond to legitimacy challenges with CSP, compared with more experienced firms from developed countries. Second, because firms from less developed home countries are likely to be hampered in increasing their corporate CSP by the lack of an institutional and economic environment at home that enables them to easily marshal the necessary resources, knowledge, and technological resources. Such capability gaps may increase the perceived risks of expanding abroad and constrain the level of their international diversification.

Finally, we contribute to the growing literature on extractive industries that shows that the risks of localized negative externalities associated with extractive activities (Oh et al., 2020) can have global implications for an MNC. These include not only implications for its stock market valuation, but also its management of CSP globally.

#### 5.2 | Managerial implications

Our results also have several managerial implications. The findings highlight the need for managers to give increased attention to the impacts on the firm's corporate legitimacy and SLO of the activities of subsidiaries associated with international diversification. It is clearly no longer sufficient to concentrate on a subsidiary's local legitimacy and SLO when considering the impacts of its activities. Corporate responses are called for even when the



immediate, potentially negative, externalities associated with a subsidiary's activities are local.

In crafting these responses, our results suggest that managers also need to be cognizant of the fact that the challenges to corporate legitimacy stemming from the activities of subsidiaries will vary depending on the MNC's country of origin and the overall extent to which its operations are internationally diversified. Clearly, potential externalities associated with the activities of each individual subsidiary are becoming an important influence on the thinking of global activists and supranational institutions and the global challenge to an MNC's legitimacy they may mount. Corporate CSP policies need to respond to this reality of today's globalized environment. Moreover, given the significance of corporate-level effects and responses we have demonstrated, managers would be advised to consider the advantages of global standardization of their environmental and social practices and policies.

#### 5.3 | Limitations and future research opportunities

Despite our contributions, the work we present in this article has a number of limitations, which suggest avenues for future research. First, while we chose extractive industries as a particularly fruitful context in which to examine the impacts of international diversification on the management of CSP because of the large, potential externalities associated with many of their operations, the long-term nature of the investments involved, constraints on viable international locations and the ability to delineate different activities in the value chain, this industry focus means that the generalizability of our conclusions is unproven. Further research might, therefore, usefully replicate our investigation of the differential impacts of international diversification of subsidiaries' activities on the management of CSP at the corporate level in other industry contexts. Second, the limitations of our dataset, which captures only corporate-level CSP, mean that we have been unable to analyze the potentially complex interactions between challenges to legitimacy arising at the subsidiary and corporate levels and joint optimization of the management of CSP across these different levels. Our results, however, hint that these interactions would be a fruitful topic for future research. Further research might extend our findings by including subsidiary-level CSP responses in the analysis of how MNCs respond to the legitimacy challenges they might face. Finally, while we contribute toward a better understanding of how MNCs deal with their legitimacy challenges, our research only deals with CSP and legitimacy spillovers or challenges in a broad sense. Future research might valuably investigate the link between particular types of legitimacy challenges and particular kinds of CSP. While we measured CSP by capturing it as SP and EP, further research might use more fine-grained CSP measurements investigating possible direct links to more specific legitimacy challenges.

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#### **ENDNOTES**

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- <sup>1</sup> We define global CSP as "a business organization's configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm's societal relationships" (Wood, 1991, p. 693). According to Carroll (2018, p. 231), "CSP is an extension of the concept of CSR that focuses on actual results achieved rather than the general notion of businesses' accountability or responsibility to society. CSP is a natural consequence or follow-on to CSR. Thus, the distinction between the two is often a matter of semantics."
- <sup>2</sup> The term "SLO" was first widely used in the extractive industries literature to describe the situation "when a mining project is seen as having the ongoing approval and broad acceptance of society to conduct its activities" (Prno & Scott Slocombe, 2012, p. 346). The ways in which a firm's SLO is intertwined with its legitimacy have been extensively discussed by Gehman, Lefsrud, and Fast (2017). For our purposes, it suffices to note that legitimacy can be viewed as an operational resource needed for MNCs to gain an SLO in different environments.
- <sup>3</sup> We believe that the fourth motivation identified in the literature, pure strategic asset seeking, would primarily lead to the international diversification of research and development and innovation activities, but because few companies publish data that enable these investments abroad to be separately identified, we exclude them from our analysis.
- <sup>4</sup> Of course, CSP covers a multitude of different activities, some more symbolic than others, which might exaggerate the real impact of CSP. For example, as Luo, Kaul, and Seo (2018) maintain, some oil firms might engage in philanthropy as a way of reputationally protecting themselves from expensive environmental CSP investments. In the empirical part of this article, we have therefore chosen measures of CSP that focus on measurable and impactful initiatives.
- <sup>5</sup> The term "stigma" here refers to a negative social evaluation that an event or an organization can suffer among its various audiences (Hudson, 2008).
- <sup>6</sup> Additional details concerning our coding scheme of foreign subsidiary type can be obtained from the authors.
- <sup>7</sup> We obtain ICCs for annual SP (EP). We find ICCs of 0.31 (0.41) at the home-country level, 0.83 (0.85) at the firm level, and 0.9 (0.92) at the host-country level. Thus, conditional on the fixed-effects covariates, we conclude that 31% (41%) of the variation in SP (EP) can be attributed to the home countries, 83% (85%) to the firms (which includes the home countries), and 90% (92%) to the host countries (which includes the home countries) and 90% (92%) to the host country, firm, and home country to the explanation of the variation in our sample firms' SP (EP) further supports our use of HLM.
- <sup>8</sup> We additionally attempted to estimate models that allowed for random slopes for the various random components, but due to the added model complexity, none of those models converged.
- <sup>9</sup> To implement the Granger causality test we estimated a multinomial logit model by regressing the categorical variable *Foreign Activity Type* on its lagged values and the lagged values of SP. All other variables from the main models were also used as controls. A separate model was estimated for EP. The coefficients of SP and EP, the ones of interest, were statistically non-significant (all *p*-values were greater than .3). This Granger causality test thus enabled us to examine possible causality and to capture the causal nature among the variables in our model. Although it is impossible to establish a direct causal relationship beyond doubt, the results suggest that EIMs' foreign activity type "Granger-causes" SP (EP) (Lev, Petrovits, & Radhakrishnan, 2010).
- <sup>10</sup> We thank an anonymous reviewer for bringing this issue to our attention. Additional details about this analysis can be requested from the authors.

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#### APPENDIX

TABLE A1 Final sample characteristics

| Home countries (29) | EIMs (340) | Observations (7,565) | Observations (%) |
|---------------------|------------|----------------------|------------------|
| Australia           | 77         | 1,329                | 17.57            |
| Belgium             | 2          | 23                   | 0.30             |
| Brazil              | 10         | 354                  | 4.68             |
| Canada              | 73         | 961                  | 12.70            |
| China               | 15         | 138                  | 1.82             |
| Colombia            | 1          | 25                   | 0.33             |
| Egypt, Arab Rep.    | 1          | 15                   | 0.20             |
| France              | 6          | 876                  | 11.58            |
| Germany             | 3          | 70                   | 0.93             |
| India               | 11         | 337                  | 4.45             |
| Indonesia           | 3          | 24                   | 0.32             |
| Ireland             | 1          | 5                    | 0.07             |
| Israel              | 1          | 16                   | 0.21             |
| Italy               | 1          | 350                  | 4.63             |
| Japan               | 15         | 311                  | 4.11             |
| Kazakhstan          | 1          | 12                   | 0.16             |
| Malaysia            | 4          | 18                   | 0.24             |
| Mexico              | 3          | 17                   | 0.22             |
| Netherlands         | 3          | 95                   | 1.26             |
| Norway              | 2          | 38                   | 0.50             |
| Peru                | 1          | 6                    | 0.08             |
| Poland              | 1          | 22                   | 0.29             |
| Russian Federation  | 12         | 356                  | 4.71             |
| South Africa        | 15         | 213                  | 2.82             |
| Sweden              | 2          | 59                   | 0.78             |
| Thailand            | 5          | 131                  | 1.73             |
| Turkey              | 3          | 20                   | 0.26             |
| United Kingdom      | 23         | 924                  | 12.21            |
| United States       | 45         | 820                  | 10.84            |

Abbreviation: EIMs, Extractive Industry Multinationals.

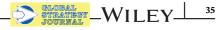


#### TABLE A2 Host country distribution

| Foreign country of operation (158) | Observations<br>(7,565) | Observations<br>(%) | Foreign country of operation (158) | Observations (7,565) | Observations<br>(%) |
|------------------------------------|-------------------------|---------------------|------------------------------------|----------------------|---------------------|
| Afghanistan                        | 4                       | 0.05                | Kyrgyz Republic                    | 15                   | 0.20                |
| Albania                            | 14                      | 0.19                | Lao PDR                            | 10                   | 0.13                |
| Algeria                            | 69                      | 0.91                | Latvia                             | 7                    | 0.09                |
| Angola                             | 60                      | 0.79                | Lebanon                            | 1                    | 0.01                |
| Antigua and Barbuda                | a 1                     | 0.01                | Lesotho                            | 2                    | 0.03                |
| Argentina                          | 141                     | 1.86                | Liberia                            | 33                   | 0.44                |
| Armenia                            | 9                       | 0.12                | Libya                              | 52                   | 0.69                |
| Australia                          | 310                     | 4.10                | Lithuania                          | 4                    | 0.05                |
| Austria                            | 31                      | 0.41                | Luxembourg                         | 21                   | 0.28                |
| Azerbaijan                         | 36                      | 0.48                | Madagascar                         | 30                   | 0.40                |
| Bahamas, The                       | 1                       | 0.01                | Malawi                             | 9                    | 0.12                |
| Bahrain                            | 15                      | 0.20                | Malaysia                           | 75                   | 0.99                |
| Bangladesh                         | 29                      | 0.38                | Mali                               | 54                   | 0.71                |
| Belarus                            | 5                       | 0.07                | Malta                              | 7                    | 0.09                |
| Belgium                            | 50                      | 0.66                | Mauritania                         | 58                   | 0.77                |
| Belize                             | 5                       | 0.07                | Mauritius                          | 28                   | 0.37                |
| Bolivia                            | 44                      | 0.58                | Mexico                             | 119                  | 1.57                |
| Bosnia and<br>Herzegovina          | 6                       | 0.08                | Moldova                            | 3                    | 0.04                |
| Botswana                           | 16                      | 0.21                | Mongolia                           | 36                   | 0.48                |
| Brazil                             | 158                     | 2.09                | Montenegro                         | 1                    | 0.01                |
| Brunei Darussalam                  | 13                      | 0.17                | Morocco                            | 31                   | 0.41                |
| Bulgaria                           | 33                      | 0.44                | Mozambique                         | 72                   | 0.95                |
| Burkina Faso                       | 32                      | 0.42                | Namibia                            | 43                   | 0.57                |
| Cambodia                           | 17                      | 0.22                | Nepal                              | 3                    | 0.04                |
| Cameroon                           | 21                      | 0.28                | Netherlands                        | 151                  | 2.00                |
| Canada                             | 218                     | 2.88                | New Zealand                        | 89                   | 1.18                |
| Central African<br>Republic        | 4                       | 0.05                | Nicaragua                          | 23                   | 0.30                |
| Chad                               | 2                       | 0.03                | Niger                              | 4                    | 0.05                |
| Chile                              | 107                     | 1.41                | Nigeria                            | 76                   | 1.00                |
| China                              | 219                     | 2.89                | Norway                             | 150                  | 1.98                |
| Colombia                           | 184                     | 2.43                | Oman                               | 46                   | 0.61                |
| Congo, Dem. Rep.                   | 46                      | 0.61                | Pakistan                           | 82                   | 1.08                |
| Congo, Rep.                        | 51                      | 0.67                | Panama                             | 5                    | 0.07                |
| Costa Rica                         | 9                       | 0.12                | Papua New Guinea                   | 199                  | 2.63                |
| Cote d'Ivoire                      | 63                      | 0.83                | Paraguay                           | 10                   | 0.13                |
| Croatia                            | 8                       | 0.11                | Peru                               | 132                  | 1.74                |

#### TABLE A2 (Continued)

| Foreign country of operation (158) | Observations<br>(7,565) | Observations<br>(%) | Foreign country of operation (158) | Observations (7,565) | Observations<br>(%) |
|------------------------------------|-------------------------|---------------------|------------------------------------|----------------------|---------------------|
| Cyprus                             | 25                      | 0.33                | Philippines                        | 87                   | 1.15                |
| Czech Republic                     | 27                      | 0.36                | Poland                             | 36                   | 0.48                |
| Denmark                            | 26                      | 0.34                | Portugal                           | 30                   | 0.40                |
| Dominica                           | 1                       | 0.01                | Qatar                              | 32                   | 0.42                |
| Dominican Republic                 | 9                       | 0.12                | Romania                            | 47                   | 0.62                |
| Ecuador                            | 35                      | 0.46                | Russian Federation                 | 95                   | 1.26                |
| Egypt, Arab Rep.                   | 73                      | 0.96                | Rwanda                             | 1                    | 0.01                |
| El Salvador                        | 9                       | 0.12                | Sao Tome and<br>Principe           | 7                    | 0.09                |
| Equatorial Guinea                  | 27                      | 0.36                | Saudi Arabia                       | 36                   | 0.48                |
| Eritrea                            | 11                      | 0.15                | Senegal                            | 41                   | 0.54                |
| Estonia                            | 6                       | 0.08                | Seychelles                         | 4                    | 0.05                |
| Ethiopia                           | 12                      | 0.16                | Sierra Leone                       | 14                   | 0.19                |
| Fiji                               | 6                       | 0.08                | Singapore                          | 95                   | 1.26                |
| Finland                            | 32                      | 0.42                | Slovak Republic                    | 11                   | 0.15                |
| France                             | 75                      | 0.99                | Slovenia                           | 5                    | 0.07                |
| Gabon                              | 78                      | 1.03                | Solomon Islands                    | 1                    | 0.01                |
| Georgia                            | 8                       | 0.11                | South Africa                       | 99                   | 1.31                |
| Germany                            | 72                      | 0.95                | Spain                              | 61                   | 0.81                |
| Ghana                              | 69                      | 0.91                | Sri Lanka                          | 13                   | 0.17                |
| Greece                             | 12                      | 0.16                | Suriname                           | 25                   | 0.33                |
| Grenada                            | 1                       | 0.01                | Sweden                             | 36                   | 0.48                |
| Guatemala                          | 17                      | 0.22                | Switzerland                        | 42                   | 0.56                |
| Guinea                             | 32                      | 0.42                | Tajikistan                         | 9                    | 0.12                |
| Guinea-Bissau                      | 13                      | 0.17                | Tanzania                           | 79                   | 1.04                |
| Guyana                             | 16                      | 0.21                | Thailand                           | 65                   | 0.86                |
| Haiti                              | 3                       | 0.04                | Togo                               | 3                    | 0.04                |
| Honduras                           | 11                      | 0.15                | Trinidad and Tobago                | 41                   | 0.54                |
| Hungary                            | 24                      | 0.32                | Tunisia                            | 43                   | 0.57                |
| Iceland                            | 8                       | 0.11                | Turkey                             | 60                   | 0.79                |
| India                              | 90                      | 1.19                | Turkmenistan                       | 11                   | 0.15                |
| Indonesia                          | 223                     | 2.95                | Uganda                             | 23                   | 0.30                |
| Iran, Islamic Rep.                 | 38                      | 0.50                | Ukraine                            | 33                   | 0.44                |
| Iraq                               | 48                      | 0.63                | United Arab Emirates               | 883                  | 1.10                |
| Ireland                            | 44                      | 0.58                | United Kingdom                     | 229                  | 3.03                |
| Israel                             | 6                       | 0.08                | United States                      | 593                  | 7.84                |
| Italy                              | 57                      | 0.75                | Uruguay                            | 14                   | 0.19                |



#### TABLE A2 (Continued)

| Foreign country of operation (158) | Observations<br>(7,565) | Observations<br>(%) | Foreign country of operation (158) | Observations<br>(7,565) | Observations<br>(%) |
|------------------------------------|-------------------------|---------------------|------------------------------------|-------------------------|---------------------|
| Jamaica                            | 8                       | 0.11                | Uzbekistan                         | 10                      | 0.13                |
| Japan                              | 34                      | 0.45                | Vanuatu                            | 8                       | 0.11                |
| Jordan                             | 3                       | 0.04                | Venezuela, RB                      | 71                      | 0.94                |
| Kazakhstan                         | 62                      | 0.82                | Vietnam                            | 73                      | 0.96                |
| Kenya                              | 56                      | 0.74                | Yemen, Rep.                        | 58                      | 0.77                |
| Korea, Rep.                        | 48                      | 0.63                | Zambia                             | 41                      | 0.54                |
| Kuwait                             | 6                       | 0.08                | Zimbabwe                           | 27                      | 0.36                |