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Internationalization as a Driver of the CSP of Extractive Industry Firms

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Internationalization as a Driver of the Corporate Social Performance of Extractive Industry Firms

Abstract

In this paper, we investigate the impact of internationalization on the corporate social performance (CSP) of extractive industry firms (EIFs). We argue that internationalization positively impacts their CSP because, as they internationalize, they increasingly benefit from actions that help them enhance their social licenses to operate (SLOs) and hence have a greater need to increase both the overall social (SP) and environmental (EP) aspects of their CSP. We hypothesize that as EIFs internationalize, both their SP and EP grow; that SP grows more relative to EP; and that the level of development of EIFs' home countries moderates these relationships.

Key Words: Extractive Industry Firms, Corporate Social Performance, Environmental Performance, Social Performance, Developed Country Multinationals and Developing Country Multinationals.

Internationalization as a Driver of the Corporate Social Performance of Extractive Industry Firms

INTRODUCTION

Internationalization is an important driver of corporate social performance (CSP)[1] (Kang, 2013; Zyglidopoulos et al., 2016). This is particularly so for extractive industry firms (EIFs). As they internationalize, in search of mineral deposits and sometimes markets, EIFs often use their CSP to address the major social and environmental disruptions their extractive operations can cause (Warnaars, 2012; Slack, 2012). EIFs often use their CSP to deal with the negative externalities their operations can create (Slack, 2012), share with local communities the benefits from their operations (Prno & Slocombe, 2012), or make up for public service and regulatory deficiencies in the areas in which they operate, especially since many EIFs operate in developing countries, where such deficiencies are common (Banerjee, 2001; Hilson, 2012). Given then these unique aspects of EIFs, what is the impact of internationalization on their CSP?

Drawing on the literatures investigating the internationalization of multinational corporations (MNCs) and extractive industries, we develop a number of hypotheses regarding the impact of internationalization on the CSP of EIFs, which we perceive as consisting of two parts: environmental performance (EP) and social performance (SP)[2]. EP refers to those aspects of CSP addressing issues related to the natural environment, while SP refers to aspects related to the EIF's social environment. In agreement with the extant literature on the internationalization of

[1] According to Wood (1991, p. 693), CSP is "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."

[2] When we refer to the SP or EP of EIFs, we mean their global (both home and abroad) SP or EP.

MNCs (Kang, 2013; Becker & Henderson, 2000; Zyglidopoulos et al., 2016; Attig et al., 2016), we expect internationalization to have a positive impact on both of these aspects of the CSP of EIFs. However, counter intuitively, we hypothesize that as EIFs internationalize, their SP increases more than their EP. Furthermore, we expect these relationships to be positively moderated by the level of development of an EIF's home country (Jamali, 2010; Muller, 2006). Of course one could argue that it is not internationalization that drives CSP, but vice versa. However, while capabilities to manage CSP might help firms internationalize (Attig, Boubakri, El Ghoul, & Guedhami, 2016; Blake, 2016), we do not believe that such capabilities alone are sufficient to underpin internationalization. It seems more likely that the relationship between internationalization and CSP capability would be iterative such that as a firm internationalizes it is forced to improve its CSP and internationalization, in turn, leads to improved capabilities in managing CSP which can assist its further expansion abroad. This view is supported by the extensive international business literature, which suggests that firm-specific advantages (FSAs) of types beyond CSP are necessary to motivate and underpin internationalization (Kirca et al., 2011; Williamson & Zeng, 2009; Dunning, 1980).

We make two major contributions. First, through a more fine-grained investigation into the impact of internationalization on the CSP of EIFs, we contribute to the literature that investigates the links between CSP and internationalization. We highlight the different impacts that internationalization has on different aspects of CSP and the role that the level of development of the firm's home country has in this relationship. Second, we contribute to the extractive industries literature by better understanding the role different CSP aspects play as EIFs internationalize. Within this literature, researchers have argued that in order for EIFs to operate effectively, they

have to acquire a social licence to operate (SLO), which exists "when a mining project is seen as having the ongoing approval and broad acceptance of society to conduct its activities" (Prno & Slocombe, 2012, p. 346). Given that EIFs try to acquire an SLO through their CSP (Slack, 2012; Prno & Slocombe, 2012; Ernst & Young, 2016), our contribution consists of a better understanding of the different roles that EP and SP play in the acquisition of SLOs.

To achieve these goals, the remainder of the paper proceeds as follows. First, we discuss the role that CSP (EP and SP) can play for EIFs in their attempt to acquire an SLO. Second, we investigate the relative importance of SP and EP, as EIFs internationalize. Third, we investigate whether EIFs from less developed countries are more or less sensitive to pressures associated with internationalization. We test our hypotheses using hierarchical linear modeling on data from a sample of 363 EIFs from 15 home countries for the years 2002-2014.

THEORETICAL DEVELOPMENT

The Role of CSP for Extractive Industry Firms

EIFs often face social and environmental issues, which not only have the potential to seriously disrupt their operations, but can also damage the environment and neighboring communities. First, given the nature of their business, EIFs can cause environmental problems in the areas they operate in (Warnaars, 2012; Slack, 2012). For example, as Gifford et al. (2010) report, gold mining typically takes place in large open pit mines that leave large areas of scarred earth and waste including toxins like lead, mercury and arsenic. As a result, the potential for pollution and environmental accidents is ever-present even if EIFs take all possible precautions (Perrow, 2011). Unfortunately, EIFs do not always do so, and the resulting pollution can not only

cause environmental damage but also disruptive boycotts, hold-ups and campaigns against the EIFs responsible by many stakeholders, including local communities, international NGOs and the media (Doh & Guay, 2006; Teegen et al., 2004).

Second, EIFs frequently locate their extractive operations in developing countries[3] with poor populations, which provide the labor for their various extraction operations, but often do not benefit in proportion to the wealth generated for foreign investors, governments and other stakeholders (Gifford et al., 2010). The result of this "unfair" distribution of benefits, even if this unfairness is sometimes only perceived, can seriously disrupt the extraction operations, as surrounding communities increasingly demand a greater share of the benefits (Prno, 2013). Moreover, given that developing countries often suffer from poor government services and infrastructure, EIFs are often asked to provide such services, as a way of sharing the benefits they generate (Banerjee, 2001).

Third, extraction operations can often disrupt more traditional ways of life. In addition to pollution, even the simple selection of a location as a site for operations can disrupt the cultural life of such communities. As Kraemer et al. (2013) report, the selection of the Niyamgiri mountain range in India as the location for a mine, given that the area had deep religious significance for a local tribe, led to a resistance movement, supported by international NGOs, which eventually prevented the relevant EIF from developing its plans. EIFs try to address these issues by acquiring an SLO (Prno & Slocombe, 2012; Prno, 2013).

In trying to insulate themselves from the effects of the potentially negative consequences of their operations, EIFs try to acquire, maintain, repair, and enhance their SLO. An SLO is important in the extractive industries as a way of avoiding the

[3] Gifford et al. (2010) report that about 70% of gold mining takes place in poorer areas of developing nations.

numerous conflicts with local communities and NGOs that have caused project delays and cancelations in many mining operations over recent decades (Davis & Franks, 2011). An SLO is the industry's response to the stakeholder opposition that EIFs have frequently experienced over the years (Owen & Kemp, 2013), which has led some to conclude that the industry is "distrusted by many of the people it deals with day to day" (IIED/MMSD, 2002, p. xiv). Of course, the SLO concept is imperfect and has been criticized for its intangibility/informality and the fact that it can often limit the discussion on the sustainable development implications of EIF activities (Owen & Kemp, 2013). Nevertheless, for our purposes in this paper, the SLO concept encapsulates the nature of the intangible assets that EIFs are trying to build, preserve and sometimes repair through their EP and SP activities.

Through their EP, EIFs try to address the potential negative impact their operations have on the natural environment (i.e. pollution, environmental accidents). These negative externalities can have important negative consequences for the communities close (and sometimes not so close) to their operations, resulting in boycotts or other stakeholder mobilizations against their current or future operations, which can damage or even revoke the EIFs' SLO (Ali & O'Faircheallaigh, 2007). As Velásquez (2012) reports, a Canadian mining company decided to conduct extensive quality water studies at a site in Ecuador it wanted to mine, beyond meeting its legal obligations, as a way of securing the support of the local farmers, who initially resisted its presence.

However, EP is not enough. EIFs need to engage in SP, which addresses the social issues surrounding its operations. EP alone, even if the firm operates above full compliance levels and has an outstanding EP record, cannot deal with the issues arising from distribution of benefits between parties and disruption of the traditional

way of life, which often cause societal opposition to the EIF's operations and damage to their SLO. In order to address benefit redistribution, EIFs might need to engage with local communities, which are "key arbiters" (Prno & Slocombe, 2012), to provide increased job opportunities for community members, support community development projects, engage with and take into consideration local culture and so on. As Prno & Slocombe (2012) note, "full legal compliance with state environmental regulations has thus become … increasingly insufficient" (p. 347) to acquire, maintain or repair an SLO. Nor can EP generally deal with the full range of threats to the SLO from various parties. Governments, pressure groups and other national or international stakeholders may threaten the SLO not because they are concerned with the EP of an EIF, but because they regard the broader benefits to the country and its society as insufficient or even net negative. A recent industry report found that many mining projects fail to acquire an SLO for political reasons (Ernst & Young, 2015). To mitigate these risks, EIFs rely on their SP.

According to Boutilier & Thomson (2011), EIFs use their CSP activities not only to acquire, maintain, or repair their SLO, but also to enhance it. They identify four levels of SLO: withdrawal, acceptance, approval and identification, which are inversely related to the level of socio-political risk firms face. At the lowest level, a firm under threat of having its SLO withdrawn is in danger of being refused access to essential resources (mineral deposits in the case of EIFs). The next level involves acceptance, where a firm has acquired enough legitimacy[4] to be accepted by the relevant stakeholders. The third SLO level is approval, where a firm has passed a "credibility boundary" and is not only accepted, but also positively evaluated by its stakeholders. The fourth and highest SLO level is identification, where stakeholders

[4] Legitimacy refers to 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" (Suchman, 1995, p. 574).

trust[5] it and the risk for SLO withdrawal is low. But in order to move their SLOs from a possible withdrawal level to acceptance, approval and eventually identification, EIFs need to go beyond the avoidance of "negative events" (pollution and environmental accidents) through their EP, to the creation of "positive events" (such as increasing the benefits for different communities, or contributing towards local cultures and customs) through their SP. Of course, EIFs operating in competitive environments would benefit from better environmental records, but, first, not all EIFs operate in such environments. Second, it is only through SP that EIFs can deal with the demands from local communities for increased participation in the benefits from their operations (Prno, 2013).

The Impact of Internationalization

According to Kang (2013), internationalization has a positive impact on the CSP of MNCs. First, as firms internationalize, they face a greater range of stakeholder demands and social issues, as various countries give different priorities to different issues (Becker & Henderson, 2000). Zyglidopoulos (2002) argues that MNCs face social and environmental responsibility pressures greater than their national counterparts because actions taken in one country can elicit negative stakeholder reactions in another. Therefore, as firms internationalize, they increase their CSP and are more stringent about their practices, because they do not want to suffer negative responses from some of their more diverse stakeholders. Second, by diversifying geographic sources of income, internationalization releases "managers from shareholder pressures" and enables them "to pay more attention to stakeholder and social issues" (Kang, 2013, p. 99). Third, internationalization provides firms with

[5] We assume that trust refers to the "the level and type of vulnerability the public is willing to assume with regard to business relations" (Bolton et al., 2009, p. 6).

economies of scope advantages, as they can leverage any intangible assets their CSP activities generate across their worldwide subsidiaries (Kang, 2013). Fourth, increased international visibility could make firms popular targets for campaigns by international NGOs (Rehbein et al., 2004; Doh & Guay, 2006), increasing the value of CSP as a protective shield.

These reasons also apply to EIFs, but because of the importance of the SLO for EIFs, there are additional reasons. First, as they internationalize, EIFs not only need to make sure that their EP is fully compliant with regulations, but often have to go beyond that to minimize the risk of environmental accidents. EP becomes more important for the SLO of multinational EIFs because environmental accidents can damage their SLO beyond their local operations. They could also result in the withdrawal of the SLO at new and often foreign sites. As Gifford et al. (2010) report, in Peru in 2004, farmers and communities stopped the expansion of the operations of the mining company Newmont to a new site because of the firm's past environmental failures. In 2000, an accident led to major environmental contamination, the exposure of about 1200 people, and the hospitalization of more than 200. This accident was picked up by the international media and triggered scrutiny of the operations of the company and its EP in other sites around the world. The negative publicity contributed to the subsequent failure of Newmont to acquire an SLO to operate in the new site. Following the terminology of Boutilier & Thomson (2011), EP can be instrumental in assuring the firm's SLO remains within "acceptance" levels and does not deteriorate into "withdrawal" levels, not only locally, but globally.

Furthermore, higher levels of SLO (approval and identification) can be very useful for internationalizing EIFs. First, given the nature of the industry, even EIFs with the highest levels of EP are not immune to risks from environmental accidents

(Perrow, 2011). Thus higher SLO levels, where the firm's stakeholders evaluate an EIF positively, or even identify with it because they trust it, can be seen as a kind of moral capital that the firm can use to shield itself from any potential negative consequences from its operations. Godfrey (2005) argued that when bad things happen, positive moral capital can act as insurance against losses of relational wealth. Thus, higher-level SLOs, as forms of moral capital, can perform a similar role.

Second, as EIFs internationalize, enhanced SLOs in pre-existing locations can be used to acquire SLOs in new countries. When EIFs expand to new locations, they need to negotiate with local stakeholders including communities, governments and NGOs to acquire SLOs (Gunningham et al., 2004; Thompson & Zakaria, 2004). In such cases, enhanced SLOs in prior locations, which foster credibility and trust by existing stakeholders, can be of great help in acquiring new SLOs. Conversely, lower level SLOs in existing locations can hinder EIFs from expanding.

However, in order to move from acceptance to approval and identification, EIFs cannot rely solely on their EP, which is important, but cannot on its own deal with all relevant stakeholder demands, and need to invest in SP as well (Prno, 2013). As Bridge (2004, p. 206) maintains, "a range of nontraditional, non-state institutions – from financial institutions to environmental organizations and human-rights groups – increasingly intrude on areas of decision making," with "the canvas of environmental issues" being very broad and extending significantly beyond technological matters to matters of cultural integrity, the distribution of benefits and sustainable development. Faced with such demands, EIFs will need to engage in a broad array of SP activities, such as investment in local job creation initiatives, engagement with local communities as to what are culturally acceptable alternatives to resource exploitation, the reinvestment of profits into the local infrastructure and so on. Furthermore, it is

such activities, through the creation of positive events, which can help EIFs acquire higher SLO levels. Hypotheses 1a and 1b follow:

H1a: Internationalization will have a positive impact on the SP of EIFs.

H1b: Internationalization will have a positive impact on the EP of EIFs.

However, as EIFs internationalize, does their SP increase at the same rate as their EP? In spite of the importance of EP for EIFs, we maintain that as they internationalize, SP will tend to increase more than EP. First, because, no matter how good their EP is, the nature of the business means that there are technological limits beyond which EIFs cannot go. A gold mining company, having to use poisonous substances like mercury, lead and arsenic, always faces the danger of environmental accidents, no matter how careful it is (Gifford et al., 2010) and the same applies to most extractive subsectors. Of course many EIFs have managed to achieve and maintain outstanding environmental records, but the possibility of an accident in complex systems, as Perrow (2011) maintains, is ever-present. In contrast, SP does not face such limits. But EIFs will not engage in SP simply because they cannot do any more through their EP. SP is not a way to fill the gap between EP and SLO. Another, second, reason why EIFs engage in SP is because the demands (i.e. redistribution of benefits) from certain stakeholders cannot be satisfied otherwise. Third, SP matters because of what we could call a "positive news" effect. Even when a firm avoids environmental accidents, this only guarantees that the EIF suffers no negative impacts. Under competitive conditions, no negative impacts can significantly contribute to a firm's reputation, but if EIFs have suffered mishaps in the past, or if they want to build their social capital in a more active way, they need to increase their

SP. Social initiatives produce immediate positive news related to issues like jobs, schools, parks and so on, which are easier to communicate and could have more of an immediate impact on a firm's SLO levels. Hypothesis 2 follows:

H2: As the internationalization of EIFs increases, they will tend to increase their SP more compared to their EP.

The Moderating Effects of Home-Country Development

We expect that the home-country level of development of an EIF to positively moderate the impact of internationalization on CSP. Recent work in international business points at the persisting effects of home-country attributes on firms even after they internationalize (Zhou & Guillén, in press) and many have noted the impact that the home-country level of development has on CSP (Visser, 2008; Baskin, 2006; Jamali, 2007; Jamali & Karam, 2016; Yang & Rivers, 2009; Marano et al., 2017). We understand the level of development of a country to broadly refer to its level of economic development, associated with higher per capita income levels, but encompassing many closely related dimensions, such as institutional development and human capital (Meyer & Sinani, 2009; Borensztein et al., 1998).

We expect, then, that the level of development of a home country to positively moderate the CSP of its EIFs, as they internationalize. First, as Gugler & Shi (2009) point out, globally, CSP has been driven by the concerns of major stakeholders based in more developed countries, with stakeholders from less developed countries far less involved. Given lower per capita income levels, there is evidence that consumers in less developed countries are more concerned with price and quality of goods issues rather than CSP (Gugler & Shi, 2009; Visser, 2008). Second, less developed countries

are often characterized by relatively underdeveloped institutions, such as governance mechanisms, the rule of law, or effective regulatory systems (North, 1990), a phenomenon referred to in the literature as "institutional voids" (Doh et al., 2017; Marano et al., 2017). These institutional voids can impact the CSP of local firms by increasing their operating cost, thus reducing profitability and consequently CSP (Orlitzky et al., 2003), and by allowing firms to get away with lower CSP levels in their home markets (Dowell et al., 2000). Third, EIFs from less developed countries are a relatively recent phenomenon (Alden, Institute & Society, 2007; Pegg, 2012; Taylor, 2009), and have had less time to learn, in contrast to the older and more established EIFs from more developed countries. For example, Sinopec, the first Chinese oil company that entered Nigeria, did so in 2004 (Pegg, 2012), whereas Shell started doing business in Nigeria in 1937. EIFs from more developed countries, then, being older, have had more experience in dealing with CSP matters and crises such as operational shutdowns, slow-ups and coordinated multi-stakeholder campaigns (Prno & Slocombe, 2012). Therefore, EIFs from less developed countries are likely to have weaker CSP capabilities than their more developed counterparts.[6]

This capability differential between more- and less-developed country EIFs should be more relevant for SP than EP. First, EIFs from less developed countries will suffer a disadvantage in both their EP and SP capabilities, which they will be pressured to increase as they internationalize. But, EP is to a great extent regulated, with mandatory compliance to environmental regulations for all EIFs, no matter their origin. Moreover, the danger of environmental accidents is obvious to all EIFs. Second, the know-how related to EP is based on existing technologies, which are easier to codify and transfer, making its diffusion easier. On the other hand, SP know-

[6] We expect an "imprinting" effect, in the sense that organizations during their founding are shaped by their social environment (Stinchcombe, 1968).

how requires more harder-to-codify experience in dealing with a variety of stakeholders. So, it should be easier for EIFs from less developed countries to improve their EP capabilities than their SP capabilities. Hypotheses H3a, H3b and H3c, follow:

H3a: The level of development of the home country of EIFs will positively moderate the impact that internationalization has on their SP.

H3b: The level of development of the home country of EIFs will positively moderate the impact that internationalization has on their EP.

H3c: As the internationalization of EIFs increases, the level of development of their home country will positively influence their SP more than it will influence their EP.

METHODS

Sample and Data Collection

We draw on Thomson Reuters' ASSET4 database to obtain corporate financial and social performance data, an established source of environmental, social, and governance information used for empirical research on CSP (Zyglidopoulos et al., 2016; Cheng et al., 2014). ASSET4 relies on a team of 125 specially trained analysts to collect data on over 500 separate data points from multiple sources, including company reports, filings, and websites, NGO websites, CSR reports, and established and reputable media outlets, for a sample of over 3,500 globally traded public firms. These data points are combined into 226 key performance indicators (KPIs), which form the basis for the rating process of firms' three performance pillars: environmental, social, and corporate governance. ASSET4 then transforms these data into objective and meaningful ratings through a system that assigns weights to each

KPI following several industry or regional considerations. To produce a firm's rating for each pillar, ASSET4 first sums the products of each KPI and its weight for each pillar. These scores are then normalized, adjusted for skewness, and fitted to a bell curve to derive ratings between 0 and 100.

We intended to select the whole universe of companies reported by ASSET4 for the extractive industries that includes 2-digit SIC codes 01-14. However, the industries of agriculture, forestry, and fishing (i.e. 2-digit SIC codes 01-09) were much less represented in ASSET4 and firms in these industries had several missing values for relevant variables. Therefore, we focused our analysis on 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). These firms originate from 25 countries of varying levels of development. Our initial sample consisted of an unbalanced panel of 377 companies observed over the period 2002–2014 that total 2,385 observations. For reasons we discuss in the Estimation Methods section, we base our analysis on country sample sizes of at least three firms. Thus, our final sample pertains to 15 countries and 363 EIFs that total 2,249 observations[7].

Measures

Dependent variables:

Social Performance (SP): We operationalize SP using ASSET4's social pillar, which measures a company's capacity to generate trust and loyalty amongst its workforce, customers, and society through its use of management best practices. ASSET4

[7] The final country sample includes Australia, Brazil, Canada, China, Hong Kong, India, Indonesia, Japan, Malaysia, Mexico, Norway, Russia, South Africa, UK, and the USA. Belgium, Egypt, France, Germany, Ireland, Netherlands, Peru, Sweden, Thailand, and Turkey were dropped from the sample.

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 (EP): We measure EP using ASSET4's environmental pillar, which measures a company's impact on living and non-living natural systems and ecosystems and reflects how a company uses management practices to generate long-term shareholder value. It is based on three categories: resource reduction, emission reduction, and product innovation and takes numerical values from 0-100, 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.

SP to EP ratio (SPEP): This measure captures the relative performance of a firm's SP over the firm's EP. It can be construed as a reflection of the firm's differential performance on the two aspects of CSP. A higher SPEP would suggest that the firm has higher SP levels relative to its EP.

Independent variables:

Internationalization: Following considerable precedent (Wan & Hoskisson, 2003; McGahan & Victer, 2009; Hitt et al., 2006), we measured a firm's internationalization with the yearly number of host countries in which the firm has foreign activities. For our purposes, the number of host countries is a justifiable measure of internationalization, on both theoretical and empirical grounds. First, it is aligned with our SLO-view of CSP because it is a measure of the breadth of a firm's internationalization and therefore reflects the breadth of SLOs a firm must obtain as it

internationalizes. Second, the CSP of MNEs is more immediately related to MNEs' geographic scope than the relative importance of foreign markets. Third, measures of a firm's foreign market penetration (e.g. foreign sales to total sales ratio) and foreign production (e.g. foreign assets to total assets ratio) (Thomas & Eden, 2004) are less relevant to the breadth of SLOs firms need to obtain in foreign host countries. On the contrary, Goerzen & Beamish (2003) show that the sheer number of countries is a robust operationalization of MNEs' "international asset dispersion" (an entropy measure that considers both the number of national markets and the relative importance of these markets to the firm). We developed our measure of internationalization using information collected from the sample firms' annual reports. We use our measure in logarithmic form to smooth the variable's distribution.

Home-country Development (HcD): We combined yearly measures of economic development and institutional quality, collected from the World Bank's World Development Indicators, to develop a continuous yearly index of a home-country's development level (HcD). We used a country's gross national income (GNI) per capita to measure its yearly economic welfare, a useful and easily available indicator that is closely correlated with other, non-monetary measures of quality of life, such as life expectancy at birth, child mortality, and school enrollment rates[8]. We used the World Bank's six indicators of governance to capture the home-country's institutional quality for every year over the sample period: Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. These indicators combine the views of a large number of enterprise, citizen, and expert survey respondents in industrial and developing countries. They are based on over 30 individual data sources produced by

[8] https://datahelpdesk.worldbank.org/knowledgebase/articles/378831-why-use-gni-per-capita-to-classify-economies-into. Visited: 08/01/2016.

a variety of survey institutes, think-tanks, nongovernmental organizations, international organizations, and private sector firms. We used exploratory factor analysis with orthogonal rotation to assess the relationships between the economic measure and the six governance indicators. Separate factor analyses for each year of observation and a pooled factor analysis for all sample years produced very similar results. All measures were loaded highly on a single factor (all factor loadings were higher than 0.85). To derive a composite measure of the home-country's development, we standardized all seven variables and took their average value. Our measure enables us to capture a home country's temporal position along a development continuum, which accounts for both the economic conditions and institutional quality of the country. Higher values of the measure suggest a higher level of HcD.

Control variables:

To account for possible confounding factors, we control for several firm-level and country-level effects. All control variables are time-varying and take yearly values for every year the information during the sample period. At the firm level, we control for aspects of the firm's internationalization beyond that accounted for by our main independent variable, as they may influence EIFs' CSP in different ways. We control for firms' depth of foreign operations by considering the ratio of foreign sales to total sales (FSTS) and the ratio of foreign assets to total assets (FATA). We also account for the portfolio of EIFs' host countries that has been shown to be associated with firms' CSP (Zyglidopoulos et al., 2016), by using the firm's ratio of the number of

developing host countries to the total number of host countries (Ratio)[9]. Lastly, we use a binary variable to indicate whether an EIF engages solely in exporting activities (Exporter). Data for FSTS and FATA have mainly been collected from ASSET4 and complemented with data from the sample firms' annual reports, on which we also relied for information to construct the variables Ratio and Exporter.

We also control for firm size (Size) by including the logarithm of the firm's total assets. 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 (ROA). 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. As the extractive industries are highly capital and technology intensive, investments in research and development and new technologies may enable firms to better address the social and environmental implications of their operations. To account for these effects, we include in the analysis the ratio of the firm's capital expenditure to its sales (CAPEX). Additionally, slack resources have been associated with the firms' capacity to engage in EP (Bowen, 2002). We consider this effect by including in the analysis the ratio of the firm's total inventory to its sales as a measure of the firm's slack resources (Voss et al., 2008). We use dummy variables to denote a firm's industry membership (2-digit SIC) and also include in the analysis a year trend to obtain an impression of the average yearly change in SP, EP and SPEP of the sample firms during the sample period.

At the country level, we use data obtained from the World Bank's World Development Indicators database to account for additional home-country conditions, beyond economic and institutional conditions captured by HcD. Jointly, these

[9] We employ the World Bank's income groupings to classify countries as developed if they have a GNI per capita of $12,476 or more at a given year and developing otherwise.

conditions characterize an indigenous firm's external environment that might influence the firm's propensity and capability for CSP. We use the dollar cost of exports per container (in its logarithm) to account for any "home-based impediments" in a firm's foreign activities. We also use the country's net outflows of foreign direct investment (as a percentage of gross domestic product [GDP]) to capture the outward orientation of the economy and thus the conduciveness of a firm's domestic environment to international business. We use the country's total rents from natural resources (as a percentage of GDP) to account for the economy's munificence in natural resources and its competitive advantage in the extractive industries. We draw on demographic measures, such as the country's education expenditure (as a percentage of GNI), total population (in logarithm), and unemployment level (as a percentage of total labor force), to capture the size and quality of human labor in the country.

Estimation Methods

Given the multilevel nature of our data (yearly observations, nested within firms, nested within countries) in our analysis, we use a hierarchical linear model (HLM). HLM decomposes the total variance in SP, EP, and SPEP responses into between-cluster variance and within-cluster variance, which renders the HLM estimator more efficient than OLS estimators (Rabe-Hesketh & Skrondal, 2012). Indeed, in retrospect, a likelihood ratio test indicates that the HLM estimator is more appropriate than an OLS estimator for our data ($chi^2 = 6{,}562.73$, $p < 0.001$).

In our initial sample, a number of countries had small sample sizes. To ensure the presence of sufficient within-country variance for our dependent variables, we

base our main analysis on country sample sizes of at least three firms[10]. Furthermore, to enable a lagged structure for our main independent variables and firm-level controls, we dropped from three firms that appeared in the sample for only one year. Thus, our final sample consists of 15 countries, 363 EIFs with a total of 2,249 observations (sample size means: 24.2 EIFs/country, 6.4 observations/firm; sample size medians: 12 firms/country and 5.33 observations/firm). Our sample compares favorably with other studies of CSP in multinational settings that use HLM (Fu et al., 2004; Mueller et al., 2012; Zyglidopoulos et al., 2016; Mathieu et al., 2012).

Although research has shown that for samples of as small as 10 groups of five units, regression estimates are unbiased (Maas & Hox, 2005), we took several steps to improve the statistical power of our analysis. First, we minimized the loss of observations by complementing our ASSET4 data with firms' annual report data. Second, we controlled for what we believe is an exhaustive number of theoretically relevant confounding factors, both at the firm and country levels that has been suggested to improve statistical power (Scherbaum & Ferreter, 2009; Maas & Hox, 2005). Third, we estimated our models using a restricted maximum likelihood estimation (RML) with bootstrapping that lead to better estimates of the variance components in smaller samples (Maas & Hox, 2005).

We specified a random slope HLM model that allows for country-level variation and each firm's random effect to vary with time. 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 a model without country-level variation ($chi^2 = 605.9$, $p < 0.001$), a model with random slopes for both the country and firm levels ($chi^2 = 0.75$, $p = 0.68$),

[10] We thank an anonymous reviewer for this suggestion.

and a strictly random coefficient model ($chi^2 = 127.49$, $p < 0.001$). Following Bliese & Ployhart (2002), we checked for the presence of autocorrelation and heteroscedasticity in the residuals. The respective likelihood ratio tests ($chi^2 = 310.91$, $p < 0.000$; $chi^2 = 0.06$, $p > 0.1$) rejected the null hypothesis of no autocorrelation and did not reject the presence of heteroscedasticity. Thus, in our model we also employ a first-order autoregressive structure and account for heteroscedasticity.

We performed the analysis using specialized procedures in the software package Stata 13 and proceeded as follows. We began our preliminary analysis by first estimating the null model (i.e. a model without any explanatory variables) to examine how much variation in SP (and separately, EP and SPEP) is explained by firm differences and country differences (Mathieu et al., 2007). Intra-class correlation (ICC) at the country level was 0.27 and ICC at the country-firm level was 0.81. These values suggest that 27% of the variation in SP can be attributed to the countries and 81% to the firms (within the countries). Thus, annual SP is slightly correlated within the same country, but highly correlated within the same country-and-firm. Following Aguinis et al. (2013) and Hofmann & Gavin (1998), 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. The mean value of the variance inflation factors (VIFs) for our firm-level variables is 2.04 and 4.34 for our country-level variables, substantially lower than the accepted threshold of 10 for multicollinearity (Allison, 2012).

In Table 1, we report the descriptive statistics and bivariate correlations of the variables used. Apart from a handful of instances, we observe very small correlation coefficients between the independent and control variables. This is also the case with the variables that capture distinct aspects of internationalization that suggests the

presence of discriminant validity in our measures. The very high correlation (Pearson's $R = 0.79$, $p < 0.05$) between FSTS and FATA suggested that we should not include them both in the same model. Therefore, separate analyses were conducted for each, which gave consistent results. For brevity, we only report FSTS results. Additionally, our sample firms' internationalization, in terms of the firms' yearly number of host countries, exhibits substantial variation (mean = 8.15; SD = 11.85), as firms follow varying patterns of internationalization, with some firms entering or leaving multiple host countries in short periods of time, and others preserving their positions for prolonged periods.

Insert Table 1 about here

Findings

Table 2 shows the results of our analysis. There are nine models, three for each of our dependent variables (SP, EP, SPEP): the Control models (1-3) include only the control variables, the Internationalization models (4-6) test hypotheses 1a, 1b and 2, and the Interaction models (7-9) test hypotheses 3a, 3b, and 3c.

To derive models 4-6 (testing H1a, H1b, and H2), we add to the Controls models our independent variable for internationalization (Number of Host Countries) and the Home-country Development (HcD) variable. Our findings indicate that the impact of internationalization on SP ($b = 5.925$; $p < 0.001$), EP ($b = 3.540$; $p < 0.001$) and SPEP ($b = 0.112$; $p < 0.01$) is in all cases statistically significant, supporting H1a, H1b and H2. Moreover, we find that the effects of HcD are statistically insignificant across all models, suggesting that EIFs' SP and EP does not rely on home-country development.

In models 7-9 (testing H3a, H3b and H3c), we include the interaction between Internationalization and HcD. We find that the interaction effect is statistically significant for SP ($b = 2.353$; $p < 0.05$) and SPEP ($b = 0.132$, $p < 0.001$), whereas it is not significant for EP ($b = 1.277$; $p > 0.1$). These results support hypothesis H3a, suggesting that the higher the level of development of the EIF's home country, the greater the impact of its internationalization on its SP. We also find that the higher the level of development of the EIF's home country, the higher its SP relative to its EP will be (supporting H3c). Yet, the lack of statistical significance for the interaction effect on EP suggests that HcD does not – on average – moderate the impact of EIFs' internationalization on their EP (in rejection of H3b).

Insert Table 2 about here

Sensitivity Analysis

Following Maas & Hox (2005) and Mueller et al. (2012), we examine whether the choice of different criteria of country sample sizes affected the results and by extension the statistical power of our models. In a first step, we estimate our models using the whole sample, in congruence with several studies (Scherbaum & Ferreter, 2009; Maas & Hox, 2005; Rabe-Hesketh & Skrondal, 2012), which suggest that regardless of the country sample size, a larger number of countries should have a positive impact on statistical power. According to Rabe-Hesketh & Skrondal (2012), it does not matter if there are group sample sizes of one. Such singleton group sample sizes (e.g. Abrevaya, 2006) may not provide information on the within-country correlations or on how the total variance is partitioned into between/within-cluster variance, but they do contribute to the estimation of β and overall variance. In a

second step, we used country sample sizes of 5, 13, 17, and 28 as the criterion. Apart from some minor discrepancies in the models with very small country sample sizes, the sensitivity analysis (results available from the authors) adds support to the main results.

Furthermore, we examined whether our finding that HcD does not interact with the impact of internationalization on EP holds across the range of HcD levels (Mathieu et al., 2012). We therefore plotted the interaction effect on EP along with its confidence interval to identify the range of values of the interaction term for which the effect could possibly be statistically significant. Graph (a) shows the statistical significance of the interaction effect over the full range of values of the variable of HcD. The graph indicates that even though the interaction effect of HcD on EP (presented in model 9 in Table 2) is on average statistically non-significant at conventional levels, statistical significance exists for values of HcD above the sample mean minus one standard deviation. In Graph (b) we can also observe how EP changes over Internationalization at selected values of HcD. As Graph (b) shows, EP is positively related to Internationalization and this relationship is bolstered at higher values of HcD. Therefore, Graphs (a) and (b) combined suggest that for a range of values H3b is supported.

Insert Graphs (a) and (b) about here

Robustness Checks

We conducted two tests to examine the robustness of our results. First, we tested for Granger causality (Granger, 1969), i.e. whether the relationships between internationalization and SP, EP, and SPEP are strictly unidirectional (as already

suggested by the fact that we enter our independent variables in the model with one-year lags). This was implemented by separately regressing our main independent variable (i.e. Number of Host Countries) on its lagged values, the lagged values of SP/EP/SPEP, and all control variables, to test whether lagged SP/EP/SPEP drives internationalization. In all models, lagged SP/EP/SPEP was statistically insignificant, suggesting a strictly unidirectional relationship between internationalization and SP/EP/SPEP. This is in agreement with the extant internationalization literature, which does not identify CSP as an internationalization driver.

Second, we replaced several of the control variables with alternative measures. For instance, we attempted to include in the analysis the ratio of the firm's R&D expenses to its sales, since prior research has shown that a firm's R&D is related to its CSP (McWilliams & Siegel, 2000). We considered the use of the firm's selling, general, and administrative expenses to its sales ratio as a proxy of R&D expenses, but though it correlated highly with the R&D to sales ratio (Pearson's R = 0.74) it caused a multicollinearity problem because of its high correlation with the Capital Expenditure to Sales ratio (Pearson's R = 0.63). Given that the Capital Expenditure to Sales ratio also captures the firm's investments in infrastructure and technology investments, we are confident that our model accounts for related effects on the firm's CSP. We also replaced our slack resources variable (Inventory to Sales ratio) with the logarithm of cash. The two have been proposed by the literature to operationalize two different aspects of slack resources (absorbed and unabsorbed resources, respectively) and to have a different impact on CSP. Yet, the logarithm of cash correlated highly with our firm size measure (Pearson's R = 0.68) and thus we preserved our initial slack variable in the analysis instead. Overall, the robustness of our empirical results gives us confidence in our findings.

DISCUSSION

In this article, we investigate the impact that internationalization has on the CSP of EIFs. We find that internationalization has a positive effect on both the SP and EP of EIFs. EIFs tend to increase their SP comparatively more than their EP. Importantly, our findings indicate that Home-country Development moderates most of these relationships. Specifically, EIFs from more developed countries respond to the pressures on their SLO arising from internationalization by increasing their SP rather than their EP. However, we found partial support for the moderating role of HcD in the relationship between internationalization and EP, with the relationship statistically significant for EIFs from more developed countries.

Contributions

Our work contributes to the extractive industries literature and the literature investigating the role of CSP in the internationalization of MNCs. First, regarding the literature on extractive industries, we show the importance that EIFs attribute to SP and EP as they internationalize, helping to deepen our understanding of the relationships between internationalization, CSP and SLO discussed in the literature (Prno, 2013; Owen & Kemp, 2013). Our findings support the proposition that, in order to acquire higher SLO levels, EIFs increase their SP to a greater extent than their EP. This builds on the arguments in the existing literature (Prno & Slocombe, 2012), by showing the limitations of EIFs relying on EP alone to acquire, maintain, repair or enhance their SLO. Our findings also indicate that SP entails a significantly greater amount of discretion compared to EP, as social activities enable EIFs to build bonds with local communities and are more likely to enable them to enhance their SLOs. Moreover, our findings indicate that, as they internationalize, EIFs increase

their SP more than their EP, an effect that is more pronounced for EIFs from more developed countries. One explanation of this could be that EIFs from more developed countries are better equipped to invest in SP.

Second, our findings indicate that an SLO can be seen as an intangible asset from which EIFs can benefit, because they can use an enhanced SLO in country A to improve their competitive position when entering country B. As they internationalize, EIFs can benefit from enhanced SLOs in their existing locations and enjoy economies of scope (Kang, 2013). Likewise they can suffer the consequences of problems with their existing SLOs as they try to invest in new operations in foreign countries, adding to their liability of foreignness (Zaheer, 1995; Bhanji & Oxley, 2013).

Our findings also have potential implications for the CSP-related capabilities of multinational EIFs. Our findings suggest that the know-how required for SP and EP might differ in both the time required for firms to accumulate the required capabilities and the potential for these capabilities to be transferred to different locations. If the capabilities to successfully increase SP are slow and costly to accumulate and the benefits of SP in one country can be transferred to acquiring, maintaining and enhancing the SLO in other countries, then it would make sense for international EIFs to centralize activities aimed at increasing their SP (Muller & Kolk, 2010). The advantages of centralization are arguably less for EP, as all EIFs appear to increase their EP as they internationalize regardless of their home country. This would be consistent with EP capabilities being easier to obtain.

Our research also has implications for the literature investigating internationalization and CSP. Our findings indicate that the SLO of firms can be seen as an intangible asset that can impact the entry of firms in other countries. Of course, previous literature has made similar arguments regarding the CSP, reputation and

legitimacy of firms as they internationalize (Zyglidopoulos et al., 2016), but our findings here imply that the notion of SLO may be a more suitable construct to capture these positive or negative interaction effects across countries as firms internationalize. This deployment of the concept of SLO could be useful beyond its main EIF domain. Moreover, our research points towards the existence of CSP differences between firms from home countries of varying levels of development that has been inadequately explored in the literature. Also, while the CSP of EIFs context may not accurately represent the complete universe of economic activities of MNEs in host countries, it vividly illustrates the interface between MNEs and host countries.

Our research also has managerial and policy implications for multinational EIFs. First, it seems that the important role that SP plays for the enhancement of SLO means that managers of multinational EIFs have to pay particular attention to the soft, culturally specific, stakeholder relationships that surround their operations. As one of the co-authors can attest to from his interaction with numerous EIF executives during executive education courses, this need to focus on SP is often counterintuitive for the managers of EIFs, who more often than not have engineering backgrounds and find it easier to deal with the technical requirements surrounding the EP of their operations. In other words, EIFs, especially those from less developed countries, should make efforts to train and often convince their managers of the importance of SP for the SLO of their firms and their internationalizing prospects.

Second, our findings imply that home governments, especially governments of less developed countries, should not regard higher CSP standards within their own jurisdictions negatively (even when imposed upon them by external pressures from other governments or international NGOs). It might be that higher CSP standards make life harder for locally owned EIFs in the short term, but they also help them

internationalize and therefore succeed on a global scale over the longer term. This is especially the case since, as they internationalize, EIFs from less developed countries have to increasingly compete with older and larger EIFs, which tend to have higher CSP levels.

Moreover, host governments can benefit from the increased CSP of EIFs. A better understanding of the CSP efforts of EIFs would enable host governments to design their own policies so that they can maximize the benefits from the CSP of EIFs (Andrews et al., 2017). For example, the building of schools by an EIF for a local community does not benefit anyone, unless the host government also provides the necessary teachers. This potential coordination of host governments with EIFs can be of particular significance in developing countries, which often depend a great deal on the inward FDI of EIFs for their economic development.

Limitations and Future Directions

Despite the above contributions, our work has a number of limitations. First, we used company specific data to explore the impact of internationalization on the CSP of EIFs, as our data did not allow us to go further and investigate the role of country-specific CSP data. Future research could address this by using country-specific CSP data in conjunction with global company measurements. A second limitation is related to the proprietary nature of the ASSET4 panel data. This data is an unbalanced longitudinal panel, with the number and years of observations varying across firms and countries, generated through the use of particular ranking procedures. Hence, one direction for future research would be to replicate this study using other sources of data, such as the MSCI research-based indexes, or the KLD data from KLD Research & Analytics. Third, our extended efforts to account for all

possible confounding country-level effects on EIFs' CSP may raise concerns about the comparatively small number of countries used in the analysis. Though our sample is comparable to other related studies and our sensitivity analysis of different sample sizes supports our main results, future researchers should attempt to use larger country samples. Fourth, our work implies that the SLO concept, in spite of its limitations (Owen & Kemp, 2013), can be seen as a concept capturing or bridging both the CSP requirements and the intangible aspects of EIFs. It is possible then that this SLO concept can be useful in better understanding the successful operations of firms in other industries, as they internationalize. This is something that further research should investigate by, among other things, developing a more direct measurement of the SLO concept.

Fifth, while in our study here we examined the importance of the level of development of the home country of EIFs, future research could investigate the role of host country operations and the extent of the operations in particular countries. For example, it is possible that EIFs expanding to more (or less) developed countries than their home country are subject to different CSP pressures, if they want to acquire, maintain, repair or enhance their SLO to operate successfully. Relatedly, even though the type of activity an EIF engages in at a particular country was beyond the scope of our paper, the unique project-oriented nature of EIFs may influence firms' CSP in ways our measure of internationalization did not account for. This suggests new directions for more nuanced examinations of the internationalization – CSP relationship. Moreover, our measure of home country development combined institutional and economic factors that have been previously shown to exhibit distinct effects on firms' CSP. However, our measures were so strongly correlated that it was

impossible to use them separately and each one on its own did not make a difference to our results. This is an empirical limitation that future research should also consider.

Finally, while we feel comfortable about our result that internationalization is a driver of CSP, supported by our robustness tests, where we tested for Granger causality, we acknowledge that this relationship could be iterative given the importance of CSP in SLO gains (Attig et al., 2016; Blake, 2016). Internationalization may help a firm to learn how to better manage CSP, which, in turn, means its capability for further internationalization is enhanced. We do not examine this matter here, but hope that future research will investigate the possible iterative nature of the relationship between internationalization and CSP further.

CONCLUSION

Drawing on the relevant literatures, we investigated the impact that internationalization has on the CSP of EIFs. We found that while internationalization has a positive effect on both SP and EP, SP is comparatively more sensitive to internationalization pressures. Moreover, we found that the home-country level of development of EIFs positively moderates the impact of internationalization on SP, while this holds true only for EIFs from more developed countries, in the case of EP.

References

Abrevaya, J. (2006). Estimating the effect of smoking on birth outcomes using a matched panel data approach. *Journal of Applied Econometrics*, 21:4, 489-519.

Aguinis, H., Gottfredson, R. K. & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39:6, 1490-528.

Alden, C., International African Institute, Royal African Society & Social Science Research Council (2007). *China in Africa: partner, competitor or hegemon?* London: Zed Books.

Ali, S. H. & O'Faircheallaigh, C. S. (2007). Introduction: extractive industries, environmental performance and corporate social responsibility. *Greener Management International*, 52, 5-16.

Allison, P. (2012). When can you safely ignore multicollinearity? *Statistical Horizons*, 5:1.

Andrews, T., Elizalde, B., Le Billon, P., Oh, C. H., Reyes, D. & Thomson, I. 2017. *The Rise in Conflict Associated with Mining Operations: What Lies Beneath?* Vancouver, Canada: Canadian International Resources and Development Institute.

Attig, N., Boubakri, N., El Ghoul, S. & Guedhami, O. (2016). Firm internationalization and corporate social responsibility. *Journal of Business Ethics*, 134:2, 171-97.

Banerjee, S. B. (2001). Corporate citizenship and indigenous stakeholders. *Journal of Corporate Citizenship*, 2001:1, 39-55.

Baskin, J. (2006). Corporate responsibility in emerging markets. *Journal of Corporate Citizenship*, 24: 29-47.

Becker, R. & Henderson, V. (2000). Effects of air quality regulations on polluting industries. *Journal of Political Economy*, 108:2, 379-421.

Bhanji, Z. & Oxley, J. E. (2013). Overcoming the dual liability of foreignness and privateness in international corporate citizenship partnerships. *Journal of International Business Studies*, 44:4, 290-311.

Blake, L. J. (2016). Corporate social responsibility as competitive advantage. *Academy of Management Proceedings*, 17222.

Bliese, P. D. & Ployhart, R. E. (2002). Growth modeling using random coefficient models: model building, testing, and illustrations. *Organizational Research Methods*, 5:4, 362-87.

Bolton, R., Freeman, R., Harris, J., Moriarty, B., Nash, L. & Wing, M. (2009). *The Dynamics of Public Trust in Business – Emerging Opportunities for Leaders*. Rowman & Littlefield Publishers.

Borensztein, E., De Gregorio, J. & Lee, J.-W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45:1, 115-35.

Boutilier, R. & Thomson, I. (2011). Modelling and measuring the social license to operate: fruits of a dialogue between theory and practice. *Social Licence*.

Bowen, F. E. (2002). Organizational slack and corporate greening: broadening the debate. *British Journal of Management*, 13:4, 305-16.

Bridge, G. (2004). Contested terrain: mining and the environment. *Annual Review of Environment and Resources*, 29, 205-59.

Cheng, B., Ioannou, I. & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35:1, 1-23.

Davis, R. & Franks, D. M. (2011). The costs of conflict with local communities in the extractive industry. Paper presented at Proceedings of the First International Seminar on Social Responsibility in Mining, Santiago, Chile.
Doh, J., Rodrigues, S., Saka-Helmhout, A. & Makhija, M. (2017). *International Business Responses to Institutional Voids.* Houndsmills: Palgrave Macmillan.
Doh, J. P. & Guay, T. R. (2006). Corporate social responsibility, public policy, and NGO activism in Europe and the United States: an institutional–stakeholder perspective. *Journal of Management Studies,* 43:1, 47-73.
Dowell, G., Hart, S. & Yeung, B. (2000). Do corporate global environmental standards create or destroy market value? *Management Science,* 46:8, 1059-74.
Dunning, J. H. (1980). Toward an eclectic theory of international production – some empirical tests. *Journal of International Business Studies,* 11:1, 9-31.
Ernst & Young (2015). Business risks facing mining and metals, 2015-2016.
Ernst & Young (2016). Top 10 business risks facing mining and metals, 2016-2017.
Fu, P. P., Kennedy, J., Tata, J., Yukl, G., Bond, M. H., Peng, T.-K., Srinivas, E. S., Howell, J. P., Prieto, L. & Koopman, P. (2004). The impact of societal cultural values and individual social beliefs on the perceived effectiveness of managerial influence strategies: a meso approach. *Journal of International Business Studies,* 35:4, 284-305.
Gifford, B., Kestler, A. & Anand, S. (2010). Building local legitimacy into corporate social responsibility: gold mining firms in developing nations. *Journal of World Business,* 45:3, 304-11.
Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review,* 30:4, 777-98.
Goerzen, A. & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal,* 24:13, 1289-306.
Granger, C. W. J. (1969). Investigating causal relations by econometric models and cross-spectral methods. *Econometrica,* 37:3, 424-38.
Gugler, P. & Shi, J. Y. (2009). Corporate social responsibility for developing country multinational corporations: lost war in pertaining global competitiveness? *Journal of Business Ethics,* 87:1, 3-24.
Gunningham, N., Kagan, R. A. & Thornton, D. (2004). Social license and environmental protection: why businesses go beyond compliance. *Law & Social Inquiry,* 29:2, 307-41.
Hilson, G. (2012). Corporate social responsibility in the extractive industries: experiences from developing countries. *Resources Policy,* 37:2, 131-37.
Hitt, M. A., Tihanyi, L., Miller, T. & Connelly, B. (2006). International diversification: antecedents, outcomes, and moderators. *Journal of Management,* 32:6, 831-67.
Hofmann, D. A. & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: implications for research in organizations. *Journal of Management,* 24:5, 623-41.
IIED/MMSD (2002). *Breaking New Ground: The Report of the Mining, Minerals and Sustainable Development Project.* London: Earthscan.
Jamali, D. (2007). The case for strategic corporate social responsibility in developing countries. *Business and Society Review,* 112:1, 1-27.
Jamali, D. (2010). The CSR of MNC subsidiaries in developing countries: global, local, substantive or diluted? *Journal of Business Ethics,* 93:2, 181-200.

Jamali, D. & Karam, C. (2016). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*.
Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal,* 34:1, 94-109.
Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perryy, M. Z., Akdeniz, M. B., Deligonul, S. Z., Mena, J. A., Pollitte, W. A. & Hoppner, J. J. (2011). Firm-specific assets, multinationality, and financial performance: a meta-analytic review and theoretical integration. *Academy of Management Journal,* 54:1, 47-72.
Kraemer, R., Whiteman, G. & Banerjee, B. (2013). Conflict and astroturfing in Niyamgiri: the importance of national advocacy networks in anti-corporate social movements. *Organization Studies,* 34:5-6, 823-52.
Maas, C. J. & Hox, J. J. (2005). Sufficient sample sizes for multilevel modeling. *Methodology,* 1:3, 86-92.
Marano, V., Tashman, P. & Kostova, T. (2017). Escaping the iron cage: liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies,* 48:3, 386-408.
Margolis, J. D. & Walsh, J. P. (2003). Misery loves companies: rethinking social initiatives by business. *Administrative Science Quarterly,* 48:2, 268-305.
Mathieu, J., Ahearne, M. & Taylor, S. R. (2007). A longitudinal cross-level model of leader and salesperson influences on sales force technology use and performance. *Journal of Applied Psychology,* 92:2, 528-37.
Mathieu, J. E., Aguinis, H., Culpepper, S. A. & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *Journal of Applied Psychology,* 97:5, 951-66.
McGahan, A. M. & Victer, R. (2009). How much does home country matter to corporate profitability? *Journal of International Business Studies,* 41:1, 142-65.
McWilliams, A. & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic Management Journal,* 21:5, 603-09.
Meyer, K. E. & Sinani, E. (2009). When and where does foreign direct investment generate positive spillovers? A meta-analysis. *Journal of International Business Studies,* 40:7, 1075-94.
Mueller, K., Hattrup, K., Spiess, S.-O. & Lin-Hi, N. (2012). The effects of corporate social responsibility on employees' affective commitment: a cross-cultural investigation. *Journal of Applied Psychology,* 97:6, 1186.
Muller, A. (2006). Global versus local CSR strategies. *European Management Journal,* 24:2, 189-98.
Muller, A. & Kolk, A. (2010). Extrinsic and intrinsic drivers of corporate social performance: evidence from foreign and domestic firms in Mexico. *Journal of Management Studies,* 47:1, 1-26.
North, D. C. (1990). *Institutions, institutional change and economic performance.* Cambridge, UK: Cambridge University Press.
Orlitzky, M., Schmidt, F. L. & Rynes, S. L. (2003). Corporate social and financial performance: a meta-analysis. *Organization Studies,* 24:3, 403-41.
Owen, J. R. & Kemp, D. (2013). Social licence and mining: a critical perspective. *Resources Policy,* 38:1, 29-35.
Pegg, S. (2012). Social responsibility and resource extraction: are Chinese oil companies different? *Resources Policy,* 37:2, 160-67.

Perrow, C. (2011). *Normal Accidents: Living with High Risk Technologies.* Princeton, NJ: Princeton University Press.
Prno, J. (2013). An analysis of factors leading to the establishment of a social licence to operate in the mining industry. *Resources Policy,* 38:4, 577-90.
Prno, J. & Slocombe, D. S. (2012). Exploring the origins of 'social license to operate' in the mining sector: perspectives from governance and sustainability theories. *Resources Policy,* 37:3, 346-57.
Rabe-Hesketh, A. & Skrondal, S. (2012). *Multilevel and Longitudinal Modeling using Stata.* New York: Stata Press.
Rehbein, K., Waddock, S. & Graves, S. B. (2004). Understanding shareholder activism: Which corporations are targeted? *Business & Society,* 43:3, 239-67.
Scherbaum, C. A. & Ferreter, J. M. (2009). Estimating statistical power and required sample sizes for organizational research using multilevel modeling. *Organizational Research Methods,* 12:2, 347-67.
Slack, K. (2012). Mission impossible?: Adopting a CSR-based business model for extractive industries in developing countries. *Resources Policy,* 37:2, 179-84.
Snijders, T. & Bosker, R. (1999). *Multilevel Analysis: an Introduction to Basic and Applied Multilevel Analysis*. London: Sage.
Stinchcombe, A. L. (1968). *Constructing Social Theories.* New York: Harcourt, Brace & World.
Taylor, I. 2009. *China's New Role in Africa.* Boulder, CO: Lynne Rienner Publishers.
Teegen, H., Doh, J. P. & Vachani, S. (2004). The importance of nongovernmental organizations (NGOs) in global governance and value creation: an international business research agenda. *Journal of International Business Studies,* 35:6, 463-83.
Thomas, D. E. & Eden, L. (2004). What is the shape of the multinationality-performance relationship? *Multinational Business Review,* 12:1, 89-110.
Thompson, P. & Zakaria, Z. (2004). Corporate social responsibility reporting in Malaysia. *Journal of Corporate Citizenship*, 13.
Velásquez, T. A. (2012). The science of corporate social responsibility (CSR): contamination and conflict in a mining project in the southern Ecuadorian Andes. *Resources Policy,* 37:2, 233-40.
Visser, W. (2008). Corporate social responsibility in developing countries. In A. Crane, A. McWilliams, D. Matten, J. Moon, & D. Siegel (Eds.) *The Oxford Handbook of Corporate Social Responsibility* (pp. 473-79). New York: Oxford University Press.
Voss, G. B., Sirdeshmukh, D. & Voss, Z. G. (2008). The effects of slack resources and environmental threat on product exploration and exploitation. *Academy of Management Journal,* 51:1, 147-64.
Wan, W. P. & Hoskisson, R. E. (2003). Home country environments, corporate diversification strategies, and firm performance. *Academy of Management Journal,* 46:1, 27-45.
Warnaars, X. S. (2012). Why be poor when we can be rich? Constructing responsible mining in El Pangui, Ecuador. *Resources Policy,* 37:2, 223-32.
Williamson, P. J. & Zeng, M. (2009). Chinese multinationals: emerging through new global gateways. In R. Ramamurti & J. V. Singh (Eds.), *Emerging Multinationals in Emerging Markets* (pp. 81-109). New York: Cambridge University Press.
Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review,* 16:4, 691-718.

Yang, X. & Rivers, C. (2009). Antecedents of CSR practices in MNCs' subsidiaries: A stakeholder and institutional perspective. *Journal of Business Ethics,* 86:2, 155-69.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38:2, 341-63.

Zhou, N. & Guillén, M. F. (in press). From home country to home base: a dynamic approach to the liability of foreignness. *Strategic Management Journal*.

Zyglidopoulos, S. C. (2002). The social and environmental responsibilities of multinationals: evidence from the Brent Spar case. *Journal of Business Ethics,* 36:1-2, 141-51.

Zyglidopoulos, S., Williamson, P. & Symeou, P. C. (2016). The corporate social performance of developing country multinationals. *Business Ethics Quarterly,* 26:3, 379-406.

Table 1: Descriptive Statistics

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Country-level measures															
1. SP	36.32	27.63	1												
2. EP	33.4	24.29	0.84*	1											
3. SPEP	1.14	0.65	0.36*	-0.11*	1										
4. Home-country Development	0.98	0.38	-0.13*	-0.17*	0.11*	1									
5. FDI (% of GDP)	2.28	1.84	0.05*	0.10*	-0.02*	0.11*	1								
6. Population (Log)	17.84	1.06	0.05*	-0.01	0.16*	-0.07*	0.04*	1							
7. Education Expenses (% of GNI)	4.85	0.4	0.02*	-0.05*	0.06*	0.21*	-0.21*	-0.29*	1						
8. Natural Resources Rents (% of GDP)	5.56	3.48	-0.11*	-0.07*	-0.13*	-0.34*	-0.13*	-0.35*	-0.11*	1					
9. Cost to export (US$ per container, Log)	7.17	0.24	-0.07*	0.01	-0.12*	-0.00	0.30*	-0.27*	0.11*	0.21*	1				
10. Unemployment (% of Labor Force)	6.85	2.16	0.04*	0.01*	0.09*	-0.22*	0.03*	0.14*	0.30*	-0.20*	0.29*	1			
Firm-level measures															
1. SP	36.32	27.63	1												
2. EP	33.4	24.29	0.84*	1											
3. SPEP	1.14	0.65	0.36*	-0.11*	1										
4. Internationalization (Log)	2.03	0.97	0.39*	0.33*	0.20*	1									
5. Foreign Sales to Total Sales (FSTS)	40.59	40.53	0.33*	0.28*	0.14*	0.32*	1								
6. Foreign Assets to Total Assets (FATA)	30.37	32.46	0.23*	0.18*	0.13*	0.19*	0.79*	1							
7. Ratio of Developing to Total Host Countries	0.75	0.89	0.31*	0.26*	0.16*	0.39*	0.35*	0.38*	1						
8. Exporter (% of purely exporting to total EIFs)	0.02	0.07	0.02*	0.03*	-0.02*	0.00	-0.04*	-0.04*	0.07*	1					
9. Year of establishment	1983.3	23.05	-0.30*	-0.29*	-0.08*	-0.30*	-0.11*	-0.07*	-0.18*	-0.00	1				
10. Inventory to Sales Ratio	0.33	3.34	-0.03*	-0.04*	0.01*	-0.03*	0.06*	0.07*	-0.02*	-0.00	0.04*	1			
11. Capital Expenditure to Sales Ratio	223.77	1589.38	-0.07*	-0.08*	-0.00	-0.06*	-0.02*	0.01*	-0.02*	-0.01*	0.05*	0.56*	1		
12. Total Assets (Log)	14.73	1.78	0.58*	0.58*	0.11*	0.23*	0.08*	-0.04*	0.20*	0.16*	-0.25*	-0.07*	-0.13*	1	
13. ROA	0.03	0.35	0.10*	0.11*	0.04*	0.10*	0.08*	0.03*	0.06*	0.01*	-0.08*	-0.06*	-0.09*	0.20*	1

Note:
Calculated based on the final sample of 2,249 observations with 363 EIFs from 15 countries. Calculations are weighted by country sample size. For firm-level measures, correlations are calculated across the final sample of firms (N = 363); for country-level measures, correlations are calculated at the country level (N = 15).
* Statistically significant at 0.05

Table 2: Internationalization's effect on Social Performance (SP), Environmental Performance (EP), and the ratio of SP to EP and the moderating role of Home-Country Development

	Controls			Baseline			Interactions		
	(1) SP Coeff./(SE)	(2) EP Coeff./(SE)	(3) SPEP Coeff./(SE)	(4) SP Coeff./(SE)	(5) EP Coeff./(SE)	(6) SPEP Coeff./(SE)	(7) SP Coeff./(SE)	(8) EP Coeff./(SE)	(9) SPEP Coeff./(SE)
Internationalization$_{t-1}$ (Log)				5.925***	3.540***	0.112**	5.550***	3.327***	0.090**
				(1.062)	(0.982)	(0.034)	(1.075)	(0.998)	(0.034)
Home-country Development$_{t-1}$				-3.303	-2.618	0.013	-3.932	-2.946	-0.016
				(4.896)	(4.624)	(0.088)	(4.888)	(4.649)	(0.090)
Internationalization$_{t-1}$ (Log) X Development$_{t-1}$							2.353*	1.277	0.132***
							(1.194)	(1.103)	(0.038)
Firm-level controls									
Foreign Sales to Total Sales (FSTS)$_{t-1}$	0.033**	0.016	0.001*	0.023‡	0.009	0.001	0.022‡	0.008	0.000
	(0.012)	(0.011)	(0.000)	(0.012)	(0.012)	(0.000)	(0.012)	(0.012)	(0.000)
Ratio of Developing to Total Host Countries$_{t-1}$	1.555**	-0.041	0.075***	0.504	-0.687	0.054**	0.371	-0.760	0.045*
	(0.578)	(0.543)	(0.020)	(0.602)	(0.570)	(0.021)	(0.604)	(0.573)	(0.021)
Exporter	-7.493	0.180	-0.457**	-4.334	2.088	-0.401**	-6.435	0.912	-0.505***
	(5.663)	(4.919)	(0.143)	(5.606)	(4.976)	(0.147)	(5.665)	(5.075)	(0.148)
Year of establishment	-0.138***	-0.155***	0.000	-0.115**	-0.142***	0.001	-0.111**	-0.140***	0.001
	(0.042)	(0.036)	(0.001)	(0.041)	(0.036)	(0.001)	(0.040)	(0.036)	(0.001)
Inventory to Sales Ratio$_{t-1}$	-0.070	-0.036	-0.003	-0.056	-0.027	-0.003	-0.057	-0.027	-0.003
	(0.099)	(0.099)	(0.004)	(0.099)	(0.099)	(0.004)	(0.099)	(0.099)	(0.004)
Capital Expenditure to Sales Ratio$_{t-1}$	-0.000*	-0.000	-0.000‡	-0.000*	-0.000	-0.000‡	-0.000*	-0.000	-0.000‡
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Total Assets$_{t-1}$ (Log)	6.554***	6.168***	0.026	5.839***	5.676***	0.009	5.902***	5.699***	0.011
	(0.518)	(0.473)	(0.017)	(0.531)	(0.491)	(0.017)	(0.529)	(0.491)	(0.017)
ROA$_{t-1}$	-1.112	-2.123	0.051	-0.866	-1.938	0.063	-0.882	-1.940	0.063
	(1.434)	(1.396)	(0.054)	(1.428)	(1.393)	(0.054)	(1.428)	(1.393)	(0.054)
Industry controls (2-digit SIC)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country-level controls									
FDI (% of GDP)	-0.169	-0.306*	0.005	-0.167	-0.302*	0.004	-0.162	-0.299*	0.004
	(0.131)	(0.130)	(0.005)	(0.133)	(0.131)	(0.005)	(0.133)	(0.131)	(0.005)
Population (Log)	1.815	2.705	-0.013	0.564	1.645	-0.015	0.193	1.446	-0.036
	(2.727)	(2.514)	(0.045)	(3.492)	(3.286)	(0.061)	(3.483)	(3.303)	(0.062)
Education Expenses (% of GNI)	-0.151	0.481	-0.025	-0.100	0.486	-0.033	-0.097	0.475	-0.039
	(1.471)	(1.441)	(0.047)	(1.463)	(1.437)	(0.049)	(1.463)	(1.438)	(0.049)
Natural Resources Rents (% of GDP)	0.412**	0.347*	0.005	0.425**	0.352*	0.005	0.402**	0.340*	0.004
	(0.149)	(0.146)	(0.005)	(0.150)	(0.147)	(0.005)	(0.150)	(0.147)	(0.005)
Cost to Export (US$ per container, Log)	-5.701‡	4.650	-0.388***	-6.279‡	4.300	-0.385***	-6.204‡	4.367	-0.393***
	(3.353)	(3.174)	(0.100)	(3.336)	(3.171)	(0.103)	(3.336)	(3.173)	(0.103)
Unemployment (% of Labor Force)	0.950***	-0.453*	0.037***	0.902***	-0.491‡	0.038***	0.895***	-0.496‡	0.039***
	(0.234)	(0.230)	(0.007)	(0.263)	(0.257)	(0.008)	(0.263)	(0.257)	(0.008)

Other controls									
Yearly effects (year trend)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	39.584***	44.018***	0.798***	37.506***	42.247***	0.793***	37.773***	42.382***	0.798***
	(5.259)	(4.783)	(0.109)	(5.555)	(5.151)	(0.113)	(5.535)	(5.170)	(0.114)
Observations	2249	2249	2249	2249	2249	2249	2249	2249	2249
Countries	15	15	15	15	15	15	15	15	15
Firms	363	363	363	363	363	363	363	363	363
Model statistics									
Log-likelihood (restricted)	-8860.72	-8782.61	-1581.18	-8841.65	-8772.59	-1579.99	-8838.63	-8770.91	-1576.47
Chi-squared (model overall statistical significance)	395.32***	323.47***	95.01***	443.61***	339.19***	106.37***	451.52***	340.78***	119.84***
Chi-squared (HLM VS OLS)	2480.68***	2105.59***	1187.41***	2243.13***	1887.10***	1132.79***	2210.82***	1884.08***	1104.34***
Akaike Information Criterion (AIC)	17785.44	17629.22	3226.36	17751.30	17613.19	3227.98	17747.27	17611.81	3222.94
Bayesian Information Criterion (BIC)	17968.43	17812.21	3409.35	17945.72	17807.61	3422.40	17943.41	17811.95	3423.08
Likelihood ratio test (Chi-squared for model comparison)	-	-	-	32.34***	13.77***	11.32***	7.11*	1.35	11.79***
ICC - Country level	0.16	0.18	0.02	0.15	0.18	0.03	0.15	0.18	0.03
ICC - Firm level	0.77	0.73	0.85	0.79	0.73	0.84	0.79	0.73	0.84
ICC – Year level	0.07	0.09	0.13	0.06	0.09	0.13	0.06	0.09	0.13
[1]Snijders/Bosker pseudo R-squared Level 1	0.37	0.35	0.06	0.43	0.4	0.09	0.44	0.4	0.14
[1]Snijders/Bosker pseudo R-squared Level 2	0.39	0.39	0.07	0.46	0.45	0.11	0.47	0.46	0.18
Variance components									
Within-Firm (L1) variance	81.04	82.33	0.13	80.71	81.94	0.14	80.77	81.93	0.14
Intercept (L2) variance	1033.75	706.23	0.92	1018.84	712.18	0.88	1019.61	711.4	0.87
Time Slope (L2) variance	7.49	4.86	0.006	7.33	4.85	0.006	7.38	4.85	0.006
Intercept-Time Slope (L2) covariance	-75.08	-49.4	-0.07	-74.3	-49.63	-0.068	-74.84	-49.66	-0.068
Intercept (L3) variance	202.58	174.37	0.019	193.53	172.2	0.003	191.78	174.16	0.003

‡ p<0.10, * p<0.05, ** p<0.01, *** p<0.001

[1]STATA 13 only reports pseudo R-squared up to two levels of hierarchical linear models; i.e. the year-level, and the firm-level. In multilevel analysis, there is no simple parallel to the R^2 obtained with standard OLS regression. As there has been disagreement about the best approach, we report the measure suggested by Snijders & Bosker (1999) that is perhaps the most widely used.

Results are estimated with Restricted Maximum Likelihood using bootstrapping with 100 repetitions. We account for the presence of autocorrelation and heteroscedasticity in the error variance-covariance matrix.

Graphs (a) and (b): The moderating effect of Home-Country Development on the effect of Internationalization on Environmental Performance (EP)