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ABSTRACT

The natural resources sectors have not been prominent in the recent international business (IB) or management literature. We argue that the natural resources sectors, if not unique, are certainly characterized by a set of features that make them different, and raise issues that are central to international business. We identify two broad areas: the theory of FDI and the MNE, and the link between MNEs and sustainable development. We survey the relevant literature, much of it from outside IB, and identify a rich menu of research opportunities for IB scholars, many of which are addressed in the papers in this Special Issue.

I live in a silver mine and I call it beggar's tomb

(Grateful Dead, Uncle John's Band)²

1. Introduction

The natural resource sectors continue to be critical components of the global economy, notably in the developing world where many countries rely on the extractive sectors for a considerable portion of their GDP (Hailu & Kipgen, 2017; ICMM, 2014; McKinsey Global Institute, 2013).³ According to the World Bank,⁴ some 3.5 billion people live in countries rich in oil, gas, or minerals and most of the output in these sectors is produced by foreign multinationals (McKinsey Global Institute, 2013). Extractive sector resources play a prominent role in the economies of 81 countries, which collectively account for a quarter of world GDP, up from 58 countries and 18 percent of GDP in 1995 (McKinsey Global Institute, 2013). In 20 mainly low- and middle-income countries the extractive sector accounts for at least 20 percent of exports and government revenues (Halland, Lokanc, Nair, & Kannan, 2015). The recently published Extractive Development Index (EDI-Fig. 1) (Hailu & Kipgen, 2017), indicates that all of the most extractive dependent countries in the world are developing economies. Some 69% of the population of these countries lives in poverty (McKinsey Global Institute, 2013). It is acknowledged that resource wealth does not automatically translate into national wealth; rather it is often the case that resources are sources of conflict and environmental damage, are sometimes associated with high levels of poverty and corruption, and resource rich countries are often characterized by weak institutions and weak governance structures (UNCTAD, 2007). In short, there is considerable debate over the role of extractive firms in promoting well-being and sustainable development.

Given its importance, it is not surprising that a considerable amount of academic attention has been paid to the extractive sector, and given the strong political and policy issues associated with these industries, it is also not surprising that much research related to the sector has been in the domain of political science, development studies and economics. Thus, the issues that extractives raise and the developmental challenges the sector poses have been approached from a wide range of perspectives, including the impact of resources on community development (Aragón & Rud, 2013; Barney, 2009; Horowitz, 2011); the links between national economic resource dependence, and developmental progress and growth (Asiedu & Lien, 2011; Dadush, 2015; Sachs & Warner, 2001; Ticci & Escobal, 2015; Ville & Wicken, 2012; van der Ploeg, 2011; Chuhan-Pole, Dabalén, Kotsadam, Sanoh & Tolonen, 2015; Chuhan-Pole, Dabalén, Land et al., 2015; Venables, 2016); and the links between resources, governance and conflict (Berman, Couttenier, Rohner, & Thoenig, 2017; Collier & Hoeffner, 2004; Robinson, Torvik, & Verdier, 2006; Banks, 2008; Stevens, Kooroshy, Lahn, & Lee, 2013).

However, extractives and natural resources play a limited role in the current mainstream international business literature even though the

¹ We are indebted to Mike Peng, who in his role as the Supervising Editor provided valuable input and support throughout the process of creating this Special Issue. We also thank Jonathan Doh, Rajneesh Narula and Eric Werker for helpful comments.

² Lyrics by Jerry Garcia and Robert Hunter.

³ In the call for papers for this Special Issue, we defined the extractive and natural resource sectors to include firms grouped in Code 11 (agriculture, forestry, fishing and hunting) and Code 21 (mining, quarrying, and oil and gas extraction) of the North American Industry Classification System (NAICS). However, for the purposes of discussion, we focus primarily on the extractive sector: mining, oil and gas where the vast majority of FDI occurs (UNCTAD, 2007). In fact all submitted papers but one were in the extractive sector, so defined.

⁴ <http://www.worldbank.org/en/topic/extractiveindustries/overview#1>, Accessed June 17, 2017.

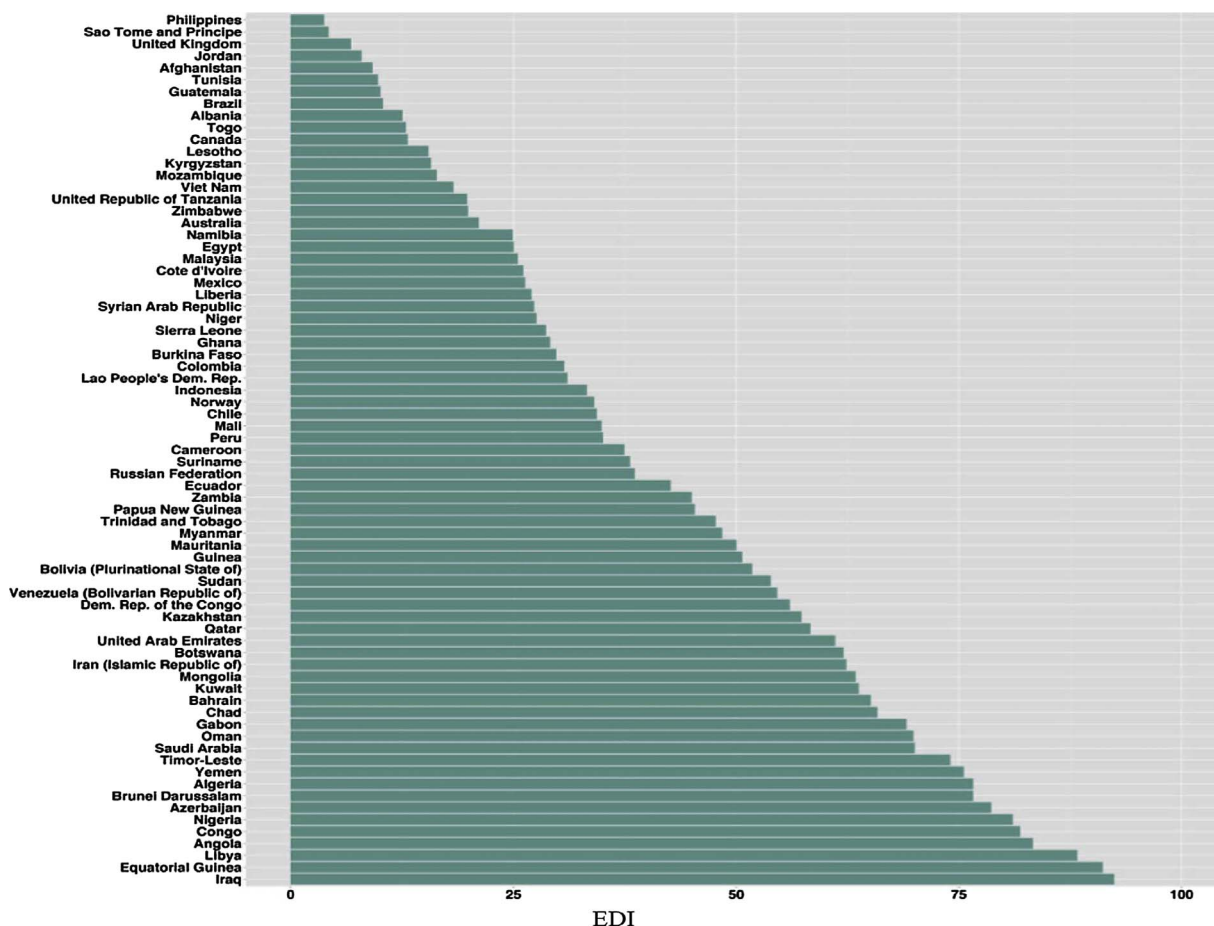


Fig. 1. Extractive Industries Dependence Index (EDI)*.

*The EDI is a composite index made up of three indicators: 1) the share of export earnings from extractives in total export earnings; 2) the share of revenue from extractives in total fiscal revenue; and 3) the extractive industry value added in GDP.

Source: Hailu and Kipgen (2017).

earliest literature on MNEs was often driven by the experience of natural resource-based firms (Rugman & McIlveen, 1985; Vernon, 1971). A search of original research articles published in four leading international business journals over the period 2000–2015 (836 in *Journal of International Business Studies*, 609 in *Journal of World Business*, 320 in *Management International Review* and 739 in *International Business Review*) reveals that less than 1% of articles focused on the extractives and natural resource sectors. A further search of major academic databases⁵ using the terms “extractives”, “multinationals”, “sustainability” and combinations of them produced more than 200 articles. Of these, only 15 were in international business journals, fewer were in top tier management journals, and the vast majority were published in journals outside business and management. Kraemer and van Tulder (2009) suggest that the relative absence of research on extractives stems from the fact that most Western extractive firms internationalized long ago, making them more interesting to economic historians than contemporary management researchers. We argue, however, that the extractive and natural resource sectors raise issues that remain central to international business, which we identify as the theory of FDI and the MNE, and the link between MNEs and sustainable development.

In this introduction to the Special Issue, we proceed as follows. We first more carefully define the extractive sector and the features that define it. We then ask whether or how these specific features can be accommodated within the theory of FDI, which for present purposes we take to be the eclectic paradigm (Dunning, 2000), and the current approaches to sustainability strategies of firms, which for present purposes we summarize through the ESG (environment, social, governance) framework (IFC, 2012). Our conclusions are summarized within a framework that encompasses both the theory of FDI and the ESG elements of sustainability. Our analysis is based on a survey of existing literature, largely from outside of international business and management, and we use that survey to identify gaps in the literature that might guide future research in international business. Finally, we briefly summarize each paper in the SI, and relate it to the summary framework that we develop.

2. What is different about extractives?

There are several factors that differentiate the extractive sectors from the manufacturing and service sectors (Halland et al., 2015; Mikesell & Whitney, 1987; UNCTAD, 2007). First, the extractive industries can occupy an “outside space in the economies of many resource-rich countries” (Halland et al., 2015:1), and this can create unique challenges for firms and governments. For governments, this means that in some cases resource royalty revenues are large and critical, and for MNEs it means that relations with the host government are a critical success factor. Among other things, government policies with respect to royalties or regulation can significantly affect the evolution of the industry in any given country

⁵ The search included Business Source Complete, AIB/Inform, Econlit, Jstor, Sustainable Organization Library and Google Scholar.

(Russell, Shapiro, & Vining, 2010), and the possibility of expropriation is higher than in other industries (Hajzler, 2012; Kobrin, 1984). It also means that successful entry into a market requires a firm to have a sophisticated political strategy (Zhang, Zhao, & Ge, 2016) in particular when entering complex institutional environments.

Indeed, extractive firms often operate across borders and in risky environments. Because global mineral and oil deposits are distributed unevenly across the world, location choices for upstream (exploration and extraction) activities of firms are determined to a large extent by geology: they are literally resource-seeking (Kraemer & van Tulder, 2009). Increasingly, international extractive sector firms have been drawn to developing and transition economies where new mineral deposits have been uncovered (UNCTAD, 2007), raising the question of whether their activities contribute to sustainable economic development in these countries (Narula & Dunning, 2000; Venables, 2016; van der Ploeg, 2011). Moreover, extractive sector activities have important effects on local communities and other stakeholders that can result in conflicts of various kinds (Berman et al., 2017; Collier & Heffler, 2005; Stevens et al., 2013). Thus, extractive industry firms are subject to high levels of political risk, which range from arbitrary changes to regulations, license fees and royalties, to complete expropriation, and they also face high levels of social risk, resulting from conflicts with various local stakeholders.

While the importance of MNE strategies to mitigate political risk through corporate political activity (CPA) has been generally acknowledged (Boddewyn, 1988; Doh, McGuire, & Ozaki, 2015; Hillman, 2003; Vernon, 1971) we submit that it is particularly complicated in the extractive sector. Extractive sector firms confront a ‘complex ecosystem of governmental institutions and functions’ (Halland et al., 2015:3) which requires that they interact with a large number of government agencies at different levels, ranging from natural resources to environment to health and safety to finance, often with conflicting objectives (Lyles & Steensma, 1996). In particular, firms must negotiate initial entry conditions with the host government (Mikesell & Whitney, 1987; Penrose, 1968; Vernon, 1971), but a fully developed extractive-based CPA requires the firm to coordinate its strategy across agencies, which can be complicated when some of them seek to compete over jurisdictional and revenue sharing issues.

In addition to governments, it is also the case that nongovernment stakeholders, including a variety of NGOs and local communities, have demanded a greater voice in the extractive industries (Henisz, Dorobantu, & Nartey, 2014; Gifford, Kestler, & Anand, 2010; Prno & Slocombe, 2012). Extractive activities typically impact communities in various ways, including resettlement (Kemp, 2010; Hilson, Yakovleva, & Banchirigah, 2007); indigenous peoples and rights of “free, prior and informed consent” to use of land (Hanna & Vanclay, 2013; O’Faircheallaigh, 2013; Ward, 2011); human rights (Ruggie, 2007); the natural environment (Jenkins & Yakovleva, 2006); agriculture and food security (Aragón & Rud, 2016; Weng et al., 2013), and are often associated with poverty (Gamu, Le Billon, & Spiegel, 2015; Aragón & Rud, 2013) and damage to other industries associated with the “natural resources curse” (Sachs & Warner, 2001; Venables, 2016; van der Ploeg, 2011; Narula, 2017, this issue). In developing countries, larger mining companies may come into conflict with the artisanal and small-scale mining (ASM) sector, in which mining is informally or illegally practiced by individuals, groups or communities (Hilson & Maconachie, 2017). Given the various possibilities, it is not surprising that the extractive sector is often characterized by costly conflicts with communities (Davis & Franks, 2014), strong criticism from NGOs (SIGWATCH, 2016)⁶ and therefore extractive sector firms have been very active in engaging with stakeholders. Indeed, it is well understood in the extractives sector that firms require a social license to operate (SLO), which in turn requires significant engagement with various stakeholders (Moffat & Zhang, 2014; Owen & Kemp, 2013). In fact, the term SLO originated in the mining sector (Demuijnck & Fasterling, 2016; Prno & Slocombe, 2012) and possibly predated related concepts like CSR.

The extractive sectors are also highly capital intensive, and projects have long gestation periods as they move along a value chain that includes geoscience research through to exploration, extraction, distribution and sales, ending with the depletion of the resource. The capital intensity and the long gestation period are accompanied by significant business risks, which can be compounded by commodity price fluctuations (Halland et al., 2015; van der Ploeg & Poelhekke, 2009) or missing futures markets (Buckley, 2008). There is no guarantee that any exploration will result in a commercially successful outcome, and the complexity of the projects over long periods of time creates project risks at every stage (Lessard, Sakhrani, & Miller, 2014). The combination of high capital intensity and risk means that the extractive sectors are protected by barriers to entry. It is therefore not surprising that they are dominated by large multinational firms, and also not surprising that firms’ strategies involve both product and geographic diversification to minimize these risks (Shapiro, Russell, & Pitt, 2007; UNCTAD, 2007).

The extractive industries comprise around 10% of recorded FDI inflows (UNCTAD, 2007:100). Between 2003 and 2016, the share of the extractive sector (mining, quarrying and petroleum) in the value of both greenfield foreign entry and cross-border M & A sales were also about 10% (UNCTAD, 2017 WIR Tables 13 and 20, author calculations). However, as noted above, these flows are concentrated in resource-rich developing and transitional countries, and there is a positive relationship between resource intensity of a country and resource-based FDI flows (Poelhekke & van der Ploeg, 2010; UNCTAD, 2007:104-106). This suggests that many of the host country location advantages typically associated with foreign entry may be less relevant for the extractive sector.

There are 16 extractive sector firms listed on UNCTAD’s list of the 100 largest MNEs in the world, originating from 10 different countries (UNCTAD, 2017, annex Table 24). Thus extractive sector firms tend to be more multinational than their share of FDI flows would suggest; extractives comprise an even greater share (21) of the 100 largest MNEs from developing and transitional markets (UNCTAD, 2017, annex Table 25), with 3 firms, CNOOC (China), Petronas (Malaysia) and Vale (Brazil) being on both lists. These three companies share the characteristic that each is either fully state-owned, or has a significant degree of state ownership. In total, 12 of the 21 extractive firms from developing countries are state-owned, with China having the greatest number (5). This highlights the general role of state ownership among emerging market MNEs (Cuervo-Cazurra et al., 2014; Musacchio, Lazzarini, & Aguilera, 2015) and the associated potential importance of home country institutions (Li & Ding, 2017), notably home governments that are seeking access to resources (Cui & Jiang, 2012; Li, Newenham-Kahindi, Shapiro, & Chen, 2013; Shapiro, Vecino, & Li, 2017). We suggest that these issues are particularly relevant in the extractive sectors.

It is important to note that this degree of multinationality is achieved in a sector where the product is largely not-differentiated, where technology is for the most part commonly available and standardized, and where prices are to a large degree set in international markets (Levy & Kolk, 2002; Shapiro et al., 2007). As a consequence, it is hard to identify firm-specific advantages rooted in control of intangible assets such as technology or brands, but this may be seen as unimportant in a resource-seeking context where the strategic choices of firms are limited to vertical decisions (Kraemer & van Tulder, 2009; Narula & Dunning, 2000). However, as noted by Shapiro et al. (2007) most extractive sector MNEs adopt corporate strategies that involve both geographical and product diversification, which again raises the question of whether such firms possess firm-specific

⁶ SIGWATCH is a private research company and consultancy that tracks the relationship between NGOs and companies. They publish a list of companies most criticized and praised by NGOs. The 2015 list indicates that of the 20 most criticized companies, 50% are in extractives, while there are no extractives on the list of the 20 most praised companies.

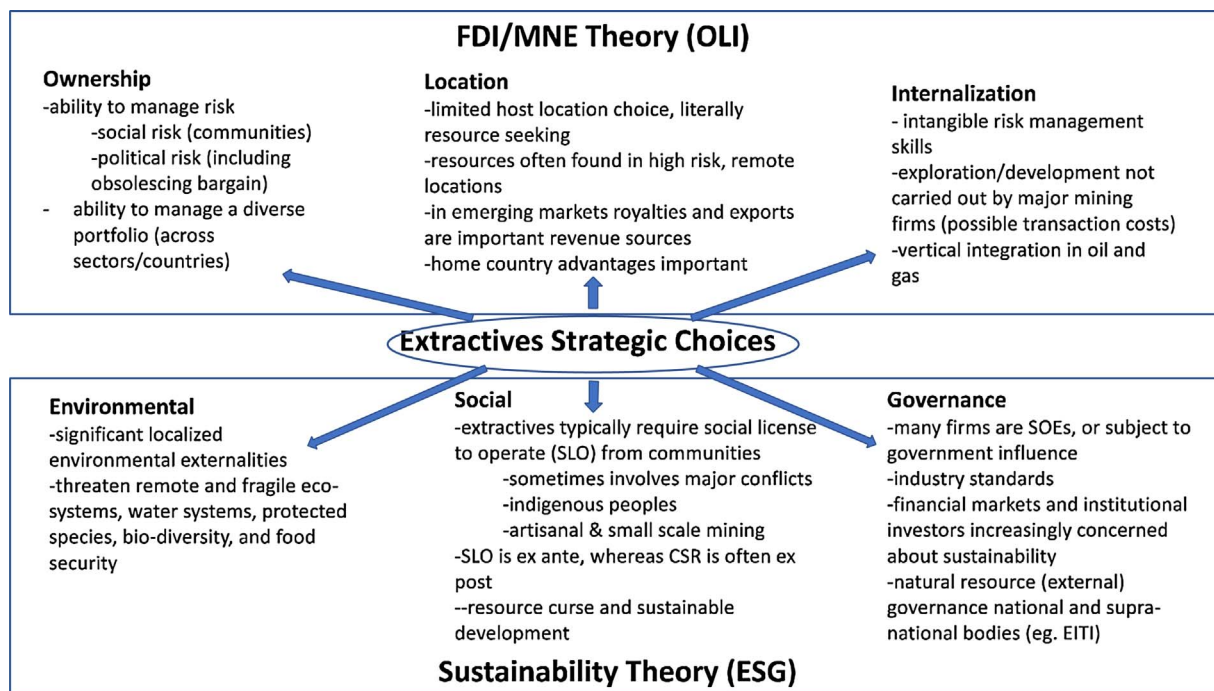


Fig. 2. The Extractive Industries: an FDI/MNE and Sustainability Perspective.

advantages that can be transferred internally across products and countries. In addition, the presence of extractive sector MNEs from emerging markets suggests that the nature of the extractive MNE becomes part of the broader discussion of the nature of emerging market MNEs (Cuervo-Cazurra & Ramamurti, 2014).

We therefore argue that the extractive sectors, if not unique, are certainly characterized by a set of features that make them different. We summarize these by the following stylized “facts”. The extractive sectors are dominated by MNEs (hereafter ExMNEs) and tend to locate in a relatively constrained number of resource-rich countries, often themselves developing and often characterized by low quality institutions. ExMNEs are thus exposed to considerable *political risk* in the form of threats of renegotiation of contracts and royalty terms, and expropriation,⁷ *social risk* in the form of conflicts with communities, particularly indigenous peoples, as well as NGOs and other stakeholders and *business risk* arising from commodity price fluctuations, project complexity and exploration failures. Finally, ExMNEs are increasingly from emerging markets, and are often characterized by heterogeneous ownership structures, particularly various degrees of state ownership.

3. Framework for discussion and analysis

These stylized “facts” surrounding the extractive industries raise important questions for international business scholars. We propose that they can be organized and evaluated through the lens of the theory of FDI and the MNE, and the theory of sustainability. We therefore present a framework for analysis that encompasses both. Fig. 2 summarizes the framework, using the OLI framework from Dunning’s eclectic paradigm (Dunning, 2000) as the organizing device for the theory of FDI/MNE, and the ESG framework as an organizing device for sustainability (Eccles & Viviers, 2011; IFC, 2012; Khan, Serafeim, & Yoon, 2016). We also begin the discussion of each with a meta-question that helps to define the issues, and in particular to determine whether the issues raised by the extractive sector are generalizable across the range of topics considered by international business scholars.

3.1. FDI and the MNE

In terms of FDI and the MNE, the meta-question is whether the extractive sector is sufficiently unique to warrant a “new” theory, or whether it can comfortably be included within the existing theory. This question has in fact been posed by Peter Buckley (Buckley, 2008). In a sense, the question is not dissimilar from that being asked within the emerging MNE (EMNE) literature (Cuervo-Cazurra, 2012; Guillén & García-Canal, 2009; Narula, 2012; Ramamurti, 2012), and is particularly relevant given the number of ExMNE’s from emerging markets.

It is important to recall that much of the earliest thinking around MNEs was rooted in the experience of ExMNEs, mostly oil and mining companies from developed countries that were investing to a large degree in developing countries (Mikesell, 1971; Moran, 1974; Penrose, 1968; Vernon, 1971). It is perhaps not surprising that much of this early literature therefore focused on bargaining issues between MNEs and host governments, and the bargaining power approach to understanding political risk was initially developed and applied in the extractives sector (Makhija, 1993; Moran 1974; Vernon, 1971) before being extended to similar industries characterized by significant fixed assets (Doh & Ramamurti, 2003). As the theory of the MNE emerged (Hymer, 1960, 1976; Buckley & Casson, 1976; Rugman, 1981), the emphasis turned to the sources of firm advantage and how they can be transferred across national boundaries. For the most part, this centred on the ability of a firm to share proprietary knowledge and assets across borders within the firm, rather than trading them in markets, which in turn depended on market failures and transaction costs (Buckley & Casson, 1976; Teece, 1986). This approach was not industry specific, but we would suggest also deflected attention away from

⁷ We define political risk as that related to government actions only and social risk as that arising from nongovernment stakeholders. Together, they comprise nonmarket risk.

extractives where proprietary knowledge was harder to define. Early empirical studies therefore focused on variables such as R & D and advertising expenditures to explain the multinational operations of firms, typically in manufacturing (see [Caves, 1982](#) for a survey).

A few studies used transaction cost tools to examine vertical integration decisions by extractive-sector firms. [Pugel \(1978\)](#) examined manufacturing firms that rely on natural resources located in another country; [Stuckey \(1983\)](#) examined international vertical integration in the aluminum industry; [Teece \(1976\)](#) examined international vertical integration in the petroleum industry; and [Buckley \(2008\)](#), using examples from [Casson \(1986\)](#) looks at vertical integration (or lack thereof) in the copper and tin industries. Viewed through the lens of transaction cost analysis vertical integration in the extractive sectors follows from some combination of asset specificity, information asymmetry, uncertainty, and frequency of transactions ([Teece, 1986](#)), which can certainly describe vertical decisions where a natural resource is sourced for the purposes of subsequent refining as is the case in the petroleum and aluminum industries. However, the mining industry is often not structured this way. The largest mining companies are not always involved in refining or downstream activities ([Shapiro et al., 2007](#)), but are more typically involved in product and geographic diversification. Since they also are not characterized by high levels of R & D or advertising, it is not easy to identify a source of firm-specific advantage that can be costlessly transferred across commonly owned units.

Thus, from the perspective of the theory of the MNE, the extractive industries have arguably been present from the beginning, mostly in terms of MNE-state bargaining issues, and in terms of vertical integration across borders. To this extent, the current theory is not only adequate but in the case of political risk the extractive sector has been instrumental in the development of the theory.

In [Fig. 2](#) we map the features of the extractives industries onto the OLI framework ([Dunning, 1981, 2000](#)) and in so doing suggest that their unique characteristics can indeed be accommodated within that framework. Beginning with location advantages (L), locational choice in the extractive sectors is truncated and dictated by the location of relevant resources that are often found in high-risk locations. Because the resources are often of significant importance to the host country, there is considerable bargaining over royalty rates and the provision of contractual offsets, which are seen as critical to economic growth and development. This means that government is likely to assume an active role “as either a provider or a monitor” ([Henisz, 2003: 177](#)) in order to maximize social benefits. Evidence suggests that state-company conflicts in the extractive sectors are in fact increasing ([Stevens et al., 2013](#)). In addition, the output is often sold to external markets and the sector can therefore comprise a significant percentage of foreign currency earnings. None of this represents a significant challenge to the theory, but it does focus interest on the comparative bargaining strength of the host country government and the ExMNE, and the potential for conflict between them ([Puck & Mullner, 2017, this issue](#)).

One specific location issue that might be relevant to extractives is a variation of the “pollution haven” hypothesis. The hypothesis suggests a race to the bottom such that firms, especially firms that are likely to pollute, will choose host locations with a less stringent regulatory environment (often developed countries) to minimize costs ([Aragón-Correa, Marcus, & Hurtado-Torres, 2016](#); [Rivera & Oh, 2013](#)). However, the context of the extractive sectors is such that locational choice is primarily dictated by the availability of resources and the discussion above suggests external pressures that might mitigate the desire to seek regulatory havens. Thus, the flows of extractive sector FDI may not respond to environmental regulation. [Tole and Koop \(2010\)](#) examine the location decisions of multinational gold mining firms, and find no evidence to support the pollution haven hypothesis but do find evidence that gold mining firms more generally choose stable host countries.

We might also add that the (L) advantage discussed above refers to the host market. However, extractives provide one example of the importance of the home market. For example, most of the largest diversified firms in the mining sector originate in resource-rich, Anglo Saxon law countries (Canada, Australia, US, and South Africa). This suggests that home country location advantages (CSAs) are important in the extractive sector, and lead to competitive advantage when combined with firm-specific ownership advantages (FSAs) ([Rugman & Verbeke, 2003](#); [Rugman, 1981](#)). Indeed, [Rugman \(1981\)](#) specifically refers to extractives as being an example of the potential importance of CSAs. However, what exactly is the source and nature of the CSA, and the historical process by which CSAs were translated into FSAs over time in developed countries remains, in our view, an outstanding question. That very same question arises in the context of EMNEs ([Ramamurti, 2008, Chap. 13, 2012](#); [Cuervo-Cazurra & Ramamurti, 2014](#)), and so carries contemporary relevance for ExMNEs from emerging markets.

As we have noted, little attention has been paid to the nature and sources of firm-specific ownership advantages in the literature on extractives (see [Narula, 2017, this issue](#), for a discussion). However, it is now broadly accepted in the more recent IB literature that the ability to manage political and social risk through nonmarket strategies can be a source of competitive advantage, particularly when investing abroad ([Doh et al., 2015](#)). This is obvious true of the extractive industries, and in principle should be readily incorporated into the existing theory, albeit with a carefully articulated time dimension that specifies the dynamic path by which these capabilities are acquired. Similarly, the ability to manage such risks across a portfolio of countries and products is likely to be a firm-specific advantage that can extend the understanding of ExMNEs beyond vertical investments. We also note that the increasing prevalence of state-owned ExMNEs from emerging markets might complicate the analysis, as we discuss below.

Finally, given that we can potentially identify (O) advantages, it seems likely that the intangible skills required to develop and manage nonmarket strategies and to manage a risky and diversified portfolio across countries is certainly an intangible asset that is difficult to transfer using market mechanisms. This conclusion is entirely consistent with that of [Henisz \(2003\)](#) who identifies “the ability to manage institutional idiosyncrasies as a firm-level capability akin to research or advertising that can drive internalization across national borders” ([Henisz, 2003: 173](#)). Thus, we explain the horizontal part of the FDI equation. Of course, the existing transaction costs explanation for vertical FDI continues to be relevant.

We therefore conclude that the existing theory is capable of incorporating the special features that define the extractive sector. In that sense we agree with [Buckley \(2008\)](#) who arrives at more or less the same conclusion. Extractives may be a special case because of the distribution of resources across countries, and because of the unique political and social risks associated with extractives, but none of this represents a need for a new theory. Indeed, some of the features most unique to the extractive sector, notably nonmarket risk, can be used to extend existing theory. Our conclusion in this regard is also similar to that drawn by [Cuervo-Cazurra \(2012\)](#) and [Narula \(2012\)](#), who argues that the phenomenon of emerging market MNEs does not require a new theory, but rather offers an opportunity to extend existing theory.

3.2. ESG and sustainability

Sustainability, environmental and CSR issues have perhaps not always been seen in the IB literature as core problems, but recent literature surveys suggest that this is changing ([Kolk, Kourula, & Pisani, 2017](#); [Pisani, Kourula, Kolk, & Meijer, 2017](#); [Aragón-Correa et al., 2016](#); [Egri & Ralston, 2008](#); [Kolk & van Tulder, 2010](#); [Kolk, 2016](#)). Unlike the case of FDI/MNE there is no equivalent to the eclectic paradigm and no consensus on what sustainability and social responsibility entail ([Kolk, 2016: 24](#)). We therefore follow [Kolk](#) in taking a generic approach, based on the issues relevant to

the activities of MNEs. Thus, we organize our discussion of sustainability around the ideas of environmental, social and governance (ESG) characteristics of the extractive industries, as summarized in Fig. 2.⁸

Despite the increased interest in ESG issues in the IB literature, few articles have been based on the extractive sector. We therefore pose our meta-question which is whether the sustainability issues raised by the extractive sector create unique strategic choices for ExMNEs, or alternatively whether the sustainability issues raised by the extractive sectors can inform the development of more general approaches to sustainability. We address this question by examining in turn each of the ESG factors. Our intention is not to re-review the business literature, but rather to examine primarily the non-business literature that might help in establishing the context in which extractives operate.

There is little doubt that the extractive sectors have an impact on the environment (E), either directly through their operations, or indirectly as inputs to products which themselves have an environmental impact. In terms of direct operations, mining and oil and gas activities can result in land and forest degradation, soil erosion, and pollution of groundwater, all of which can impact the health of the population, the productivity of the agricultural sector, biodiversity, and human settlement (Aragón & Rud, 2016; Aragón, Chuhan-Pole, & Land, 2015).⁹ Moreover, to a large extent the projects are often located in remote and environmentally sensitive areas where the environmental risks are significant, and locational alternatives are limited (Gifford et al., 2010). As noted by Slack (2012: 180):

“It is simply not possible to construct massive open-pit mining operations or build thousands of miles of pipeline without causing disturbances. These can be controlled but never eliminated entirely. Moreover, oil and mining companies often state that they do not have a choice where they operate, but have to go where the oil or minerals are. This means sometimes operating in socially and environmentally sensitive areas.”

These operations therefore typically occur in more remote regions and the impacts are often localized. The localized context for environmental impact suggests that one must approach with some caution the notion of “host country” institutional environment as a determinant of ExMNE strategy (Rugman & Verbeke, 1998) because each ExMNE may be imbedded in multiple and quite different *local* contexts. The localized (subnational) context also links the environmental impact of extractives to the social (S) factors relevant to the extractive sector, because the largest impacts are often in local communities.

There is a relatively well-established literature that focuses on the natural resources curse, with the purpose of exploring the question of whether and how natural resource rich countries develop, and in particular why some countries have translated resource wealth into a sustainable development path (e.g. Botswana and Chile) and others (Congo, Nigeria) have not (van der Ploeg, 2011). More recently, attention has been focused on the localized or subnational effects of the extractive sectors, and the possibility of a “local” natural resources curse (Aragón et al., 2015; Loayza, Mier y Teran, & Rigolini, 2013). These local effects are at the heart of issues relating to sustainable development, and include investigations of whether extractive sector activity is associated with local poverty reduction, conflicts of various kinds, often with indigenous peoples, and violations of human rights (Collins & Fleischman, 2013). The example of land use and mining is provided in Hilson (2002). Open-pit mines may require access to land and/or water that was previously used for agriculture. Changes in land use can create conflict with local populations that may include increases in poverty or income inequality as local food production is disrupted and may also result in the displacement of peoples, all possibly leading to civil unrest and violence.

Nevertheless, recent studies (Aragón and Rud, 2013; Chuhan-Pole, Dabalén, Kotsadam et al., 2015; Chuhan-Pole, Dabalén, Land et al., 2015; Loayza et al., 2013; Ticci & Escobal, 2015) suggest that mining sector activities have a positive effect on average incomes at the community level. However, their contribution to poverty reduction may be muted by increases in income inequality because workers directly employed in the extractive sectors benefit, while those in other sectors (such as agriculture) may be made worse off. This in turn suggests that spillover benefits may be limited, and in fact Loayza et al. (2013) find that in Peru, any local benefits dissipate rapidly with distance from the mine. A more recent study based on African night light data (Addison, Boly, & Mveyange, 2017) suggests that mining activity on average increases income inequality within mining districts, but the effect depends on the exact mineral being mined. For example, gold mining was associated with higher levels of inequality and iron ore mining with lower levels. Chuhan-Pole, Dabalén, Kotsadam et al. (2015) and Chuhan-Pole, Dabalén, Land et al. (2015) find that in Ghana gold mining activity is related to higher incomes and lower infant mortality at the local level, but these benefits do not spillover to other districts, which may explain results suggesting that extractives reduce average health outcomes at the national level (Edwards, 2016). At the same time Gamu et al. (2015) in a survey of the literature on extractives and poverty, suggest that on balance the extractive sector exacerbates poverty impacts, but the exact effect may depend on governance institutions.

The localized nature of extractive sector impacts is further complicated by the fact that estimates suggest that over 50% of extractive sector projects occur or will occur on or near indigenous peoples’ traditional lands (Burger, 2014). These activities can be associated with human rights abuses associated with displacement from traditional lands and environmental impacts that threaten livelihoods. The rights of indigenous peoples are recognized in international law through the 1989 International Labour Organization (ILO) Convention 169 and the 2007 UN Declaration on the Rights of Indigenous Peoples (UNDRIP). These rights are summarized in the phrase “free, prior and informed consent” (UNDRIP article 32), by which self-determination on traditional lands is respected, and all large projects must be given prior approval by the community. These same rights have been recognized by the UN Global Compact in its Declaration on the Rights of Indigenous Peoples, 2013. While these conventions apply to all activities, the vast majority of reported violations are related to the extractive sectors (Burger, 2014: 9). It is well beyond the scope of this paper to examine the legal and implementation implications of these issues; our point is rather that the human rights dimensions of business activity in the extractive sectors are made more complex by their unique relation to the rights of indigenous peoples (O’Faircheallaigh, 2013).

A similar complexity arises with respect to Artisanal and Small-Scale Mining (ASM). Most ASM activity is informal, located in areas where formal large, scale extractive activity is present, and is often “outside mainstream legal economies” (Siegel & Viega, 2009). According to the World Bank¹⁰ Artisanal and Small-Scale Mining occurs in 80 countries worldwide, may engage as many as 100 million people (versus 7 million in the formal sector), most in developing countries, and can account for a significant percentage of global production of certain minerals such as gold (20%). ASM activities therefore an important source of income for many people, and may contribute to poverty alleviation (Gamu et al., 2015). However, the activity is controversial for several reasons, including the fact that the use of unmechanized technologies not only results in low productivity, but

⁸ An alternative organizing framework based on the UN Sustainable Development Goals (SDGs) is found in the survey by Kolk et al. (2017). Many of the topics covered in that survey are similar to those covered here, but from an IB perspective. We note that Kolk et al. (2017) succeeded in identifying only 61 articles in the IB literature that cover topics like poverty, inequality, conflict and the environment. A somewhat broader search for topics related to CSR in Pisani et al. (2017) resulted in 494 articles being identified in 31 journals over 31 years.

⁹ Agricultural activities may also have some of the same effects (Santangelo, 2017, this issue).

¹⁰ <http://www.worldbank.org/en/topic/extractiveindustries/brief/artisanal-and-small-scale-mining>, Accessed July 16, 2017.

threatens both the environment and human health. Because it is informal, much of the work is performed under poor working conditions where accidents are common. In addition, the extra-legality of the activity can create major security and property rights issues for existing firms (Siegel & Viega, 2009), which can lead to conflicts with local communities. It is widely agreed that ASM activities should be formalized, but it is not clear how this can be done most effectively, and for the current purposes it raises the important question of what role the formal sector and particularly ExMNEs should play in solving the problem (Yakovleva & Vasquez, 2017, this issue). Once again, this provides a relatively unique contextual framework for the CSR strategies of ExMNEs.

Given this discussion, it is not surprising that conflicts of various degrees of severity are common in the extractive sectors. Berman et al. (2017) use the ACLED¹¹ database to show that mining activity is associated with higher levels of conflict at the local level, and that this violence then spreads across the country. There is a considerable non-business literature that focused on the relationship between extractive sector activity and violent civil conflicts (civil war), an association that most studies find to be positive (Collier & Hoeffler, 2005), but moderated by institutional quality (Berman et al., 2017; Elbadawi & Soto, 2015). These studies are relevant because they establish a country-level risk context for the operation of ExMNEs and their CSR strategies (Kolk & Lenfant, 2013), but they also reveal a different dimension to CSR choices. For example, Berman et al. (2017) find that mineral extraction can finance rebel groups in civil war contexts, because they may seize production capacity or force incumbent producers to pay them not to. Thus, extractive companies face the strategic choice of either increasing mine security (or cooperating with government authorities who can provide such security) or bribing rebel groups. Their research finds evidence that armed groups are more likely to be financed by extortion and bribery, and the practice is more prevalent among foreign-owned firms.

Another body of literature focuses more on the local context of conflict, which can involve violent or non-violent protest, but falls short of civil war (Haslam & Tanimoune, 2016). Nevertheless, these conflicts can impose significant costs on both communities and companies (Davis & Franks, 2014). A recent survey of the literature (Andrews et al., 2017) suggests that the incidence of conflicts in the mining sector increased rapidly between 2006 and 2013, with 843 large-scale protests reported over the period in 87 countries (Andrews et al., 2017:17). Most of these conflicts were associated with land and environmental issues that in turn arise more frequently as global exploration activity increasingly occurred in remote and vulnerable communities, and most of the conflicts are recorded in Latin America and Africa. The causes and consequences of these conflicts involve a large number of stakeholders, including national and local governments, NGOs, extractive sector companies, and international financial agencies, and point to the complexity of establishing effective CSR policies for ExMNEs. Despite the mounting evidence of the impact of conflict on companies, some evidence suggests that most extractive companies do not fully measure the costs of conflict, which impedes their ability to determine the appropriate nature of level of CSR activity (Davis & Franks, 2014) and response to conflicts (Oetzel & Getz, 2012).

All the Environment (E) and Social (S) issues discussed above point to the probability that CSR policies in the extractive sectors are complex, largely because of the significant impact, and range of impacts, the sector can have on entire nations, and in particular on local communities. Thus, ExMNEs are likely to interact with multiple stakeholders which can differ by local context, to deal with social and environmental issues that are not easily resolved. It is therefore perhaps not surprising the some have expressed a degree of skepticism regarding the ability of ExMNEs to mount effective CSR strategies (Kemp & Owen, 2013; Slack, 2012), and what little empirical evidence there is provides a mixed view of whether CSR activities have been successful (Berman et al., 2017; Gamu et al., 2015).

However, we do know that the extractive sector, and mainly the mining sector, has over time developed its own approach to these issues: SLO, the social license to operate (Owen & Kemp, 2013; Prno & Slocombe, 2012; Zyglidopoulos, Symeou, & Williamson, 2017, this issue). The term generally refers to the need for companies to ensure community acceptance of their presence, and its widespread use in the industry suggests that firms acknowledge its importance. What is not clear is the degree to which this concept differs from CSR practices, and whether it has diffused outside of the extractive sector. A recent article by Buhmann (2016) suggests that the SLO principles have indeed diffused, at least with respect to human rights, because they are reflected in the UN Guiding Principles (UNGP) on Business and Human Rights (Ruggie, 2007; UN, 2011), and the UN *Protect, Respect and Remedy* Framework (UN, 2008). In addition, she argues that the recognition of these rights in “soft” (non-binding) international law spurred the adoption of subsequent, and broader, CSR guidelines by the EU, the OECD and the UN Global Compact. Both the UN Framework and the UNGP reflect the idea that the “adverse impact of business activity on human rights reduces the organization’s SLO” (Buhmann, 2016: 706).

This discussion of CSR governance leads to our final ESG category, governance (G). Our argument is that the extractive sectors offer a complex web of inter-related governance institutions that ranges from the firm to international organizations, and which in totality provide a system of what we will call the international system of natural resource governance.¹² We begin with the firm itself.

As we have discussed above, there is a considerable degree of ownership heterogeneity across the extractives sector and this raises important questions regarding natural resources governance. The ownership structures of major ExMNEs runs from complete private ownership, common among firms from Australia, Canada and the US; to complete state ownership, common among firms from China, but also found in Mexico (Pemex), Malaysia (Petronas) and Saudi Arabia (Saudi Aramco); and various combinations in between such as Petrobras and Vale in Brazil (McKinsey Global Institute, 2013; Rodrigues & Dieleman, 2017, this issue). In addition, the majority of global FDI by SOEs has gone into the extractive sectors (Stevens et al., 2013). Of course, there are many issues surrounding the relative performance of SOEs and state capitalism (Cuervo-Cazurra, Inkpen, Musacchio, & Ramaswamy, 2014; Musacchio et al., 2015), but the question to be raised here is whether ownership and governance affects in any way the ability of firms to acquire non-market strategic capabilities, notably those related to the CSR issues discussed above. We have very little evidence on this matter, one exception being Lin, Li, and Bu (2015) who found that effective corporate governance led to improved community relations for mining companies in Australia. However, this study did not focus on ownership.

One reason that it is difficult to analyze the role of firm governance is that it is embedded in an entire system of natural resource governance that might impact firm performance. Even ownership is not endogenous to this system, as state ownership may reflect home country policies with respect to natural resources and their governance (McKinsey Global Institute, 2013). In addition to ownership policies, there may be home country regulatory issues that affect firm behaviour, one example being the Dodd-Frank Act in the US that includes requirements for extractives companies listed on US stock exchanges to report annually on their payments to all foreign governments.

The issue of transparency and reporting requirements also indicates the complexity of the resource governance environment. In addition to any national government requirements, there is an international effort to improve extractive sector transparency, the Extractive Industries Transparency Initiative (EITI). EITI (<https://eiti.org/>) is a multi-stakeholder initiative that involves companies, host countries, civil society groups and

¹¹ ACLED is the Armed Conflict Location and Event Data Project. It distinguishes nine types of conflicts based on the level of violence. <http://www.acleddata.com/methodology/>.

¹² A more general discussion of the interaction of multiple organizations at different levels to establish CSR standards is found in Kolk (2016: 28–29).

international agencies to improve revenue transparency and resource governance. As of 2017, there were 52 implementing countries. Evidence on the effectiveness of the EITI is limited. [Berman et al. \(2017\)](#) report that EITI membership reduces conflict, [Corrigan \(2014\)](#) suggests that EITI membership may have minimized the natural resource curse in its early years, but [Sovacool, Gotz, Van de Graaf, and Andrews \(2016\)](#) cast doubt on whether EITI membership is associated with national governance improvements.

In addition, natural resource governance guidelines and standards are issued by national and international industry associations ([Buchanan & Marques, 2017](#), this issue). For example, the Mining Association of Canada (MAC) issues guidelines for its members called Towards Sustainable Mining (TSM).¹³ The TSM is a set of tools and targets for member firms in the areas of community engagement, environmental practices, and health and safety, and a report is issued each year to gauge company performance. At the same time, the International Council on Mining and Metals (ICMM), an international body comprised of 23 of the largest mining companies and 32 industry associations (including MAC) also issues guidelines and principles that support sustainable development.¹⁴ Similar associations exist in the oil and gas industries, and the combined extractive sector firms have at times collaborated, one example being the Voluntary Principles on Security and Human Rights, 2010, a collaboration among governments, firms and NGOs.¹⁵

Host country institutions also matter. At the aggregate level, studies of the resource curse show that it is less pronounced when host country institutions are strong ([van der Ploeg, 2011](#)). Thus, both home and host country institutions can affect the resource governance environment. At the host country level, this is reflected in a variety of policies ranging from revenue royalties to environmental regulations. The specificity of the extractive sector is perhaps most clearly illustrated by the fact that the Natural Resource Governance Institute (NRGI) publishes a Resource Governance Index that ranks 89 countries according to their governance of the oil, gas and mining sectors.¹⁶ The elements of the Index include measures of how extraction rights are allocated and revenues generated; how revenues are allocated among subnational units and invested for future growth; and how generally enabling is the country's institutional environment. For example, Norway (Turkmenistan) ranks first (last) with respect to oil and gas, while Chile (Eritrea) ranks first (last) with respect to mining. The RGI index does not focus on many of the health, safety, environmental and human rights issues that have been discussed above.

Finally, natural resource governance includes a very active group of international NGOs many of which have specific units addressing extractives or have specific partnerships with extractive sector firms (more usually mining than oil and gas), while others merely monitor performance. These include WWF, UNICEF, CARE, FFI, Oxfam and Global Witness. The general importance of NGOs in the analysis of CSR strategies is now new (eg. [Boddewyn & Doh, 2011](#); [Rugman & Verbeke, 1998](#)), nor is their importance in extractives ([Kraemer & van Tulder, 2009](#)). However, the negative perceptions by NGOs of extractive firms reported in [SIGWATCH \(2016\)](#) suggests that the relevant issues remain very much alive.

We conclude our ESG discussion by suggesting that the sustainability issues raised by the extractive sectors are not necessarily unique to that sector. Indeed, our discussion closely parallels that of [Kolk et al. \(2017\)](#) who organize their survey of the literature on MNEs and the UN Sustainable Development Goals (SDGs) around the four Ps of People, Planet, Prosperity, and Peace. What makes the extractive sector unique is a combination of its potential to contribute to sustainable development in natural resource rich developing economies, its localized impact on communities, and the range of ESG issues that surround it. This has important implications for both future research and practice.

4. Future directions

4.1. Emerging market multinationals

Our analysis suggests that a critical ownership advantage for ExMNEs is the ability to mount and execute nonmarket strategies, which we identify as both political and social. We also find that a significant percentage of EMNEs are in the extractive sectors. This raises the question of how EMNEs develop the relevant nonmarket ownership advantages. The relationship between nonmarket strategies and the internationalization of emerging market firms is not new ([Cuervo-Cazurra & Genc, 2008](#)) and recent literature has recognized that nonmarket social and political strategies can be an important determinant of internationalization capabilities ([Gammeltoft, Filatotchev, & Hobdari, 2012](#); [Attig, Boubakri, El Ghouli, & Guedhami, 2016](#); [Jamali & Karam, 2016](#); [Marano, Tashman, & Kostova, 2017](#)). Our ESG analysis confirms that extractive firms require strong capabilities to manage relations with government and nongovernment stakeholders, and future research should further explore the way in which EMNEs acquire these capabilities.

One area to explore is the relationship between home country advantages (or disadvantages) and the ability of EMNEs to succeed abroad ([Hobdari, Gammeltoft, Li, & Meyer, 2017](#); [Cuervo-Cazurra, 2011a, 2011b](#); [Narula, 2012](#); [Peng, Wang, & Jiang, 2008](#)). A traditional view of developed country ExMNEs is that they were able to leverage home country-specific resource wealth into firm-specific global advantages ([Rugman, 1981](#)). Many EMNEs in the extractive sectors, notably those from China, come from countries where resource wealth is limited, but others do not ([Ramamurti, 2008, Chap. 13](#)). This raises the question of whether Chinese ExMNEs are different, and in particular what is the role of the Chinese government in promoting OFDI in the extractive sector ([Li et al., 2013](#); [Shapiro et al., 2017](#)). More generally, the question of what is different about EMNEs and in particular the process, if any, that links CSAs and FSAs in emerging markets remains under-studied ([Ramamurti, 2008, Chap. 13, 2012](#)).

4.2. Natural resources governance

Our analysis indicates the natural resources governance system is comprised of firms, industries, nations and super-national organizations. We suggest that the nature of the system, and how firms chose to locate themselves in it are not well understood. The evidence we have surveyed suggests not only that these arrangements are complex, but they may depend on the specific context in which the firm operates, thus suggesting that governance arrangements and strategies chosen by firms may be heavily path dependent. In this respect, what is required is an understanding of “governance entry” that is similar to our understanding of “entry modes” ([Meyer, Estrin, Bhaumik, & Peng, 2009](#)). Specifically, what governance modes, such as alliances, partnerships, contracting or assistance, are the optimal avenues for the provision of collective goods necessary for ExMNEs’

¹³ <http://mining.ca/towards-sustainable-mining>, Accessed July 18, 2017.

¹⁴ <https://www.icmm.com/en-gb/about-us/member-commitments/icmm-10-principles>, Accessed July 18, 2017.

¹⁵ <http://www.voluntaryprinciples.org/>, Accessed July 19, 2017.

¹⁶ <http://resourcegovernanceindex.org/>, Accessed July 18, 2017.

operations (Boddeyn & Doh, 2011)? What is the role of NGO's and other stakeholders in this process (Gifford et al., 2010; Kolk & Lenfant, 2013)?

In addition, we need to better understand the roles of the separate actors in the governance system, and how firms of different types respond to them. For example, it is not clear what is the impact of various supra-national institutions such as EITI or the Global Compact. Similarly, it is not clear whether the recent emergence of state-owned or influenced ExMNEs reveals different choices regarding how the firm chooses its among various governance modes and strategies. For example, Levy and Kolk (2002) note how oil companies took different positions on global warming, and in general that firms may differ in their approaches to global issues. We suggest that the same issues arise with respect to SOEs in the extractive sectors, and future research could benefit from an examination of how they participate in the governance system.

The role of the state is of course central to any governance system. International business researchers have identified numerous positive state functions, such as property rights protection, third-party contract enforcement, policy stability, and the provision of a general rule of law, that reduce the institutional hazards of private investment and organization (Hermelo & Vassolo, 2010; Meyer et al., 2009; Slangen & Beugelsdijk, 2010). The focus has been on the capacities of the state to provide market-supporting institutions that influence the types of risks and opportunities that private actors face across national settings. ExMNEs often operate in fragile states, which raises the question of their role in reducing state fragility and contributing to the development of new, effective institutional forms that contribute to sustainable development (Kraemer & van Tulder, 2009; Ville & Wicken, 2012).

4.3. SLO, CSR and sustainable development

Our analysis suggests that the extractive sectors have considerable impact on the sustainable development of certain countries, and within them, of certain communities. In recognition, they have developed the idea of “social license to operate” (SLO). It is not clear what the relationship of SLO is to more traditional CSR activities, or to FSAs, and this is a possible area for future research.

More generally, our analysis of the impacts of the extractive sectors reinforces the need to examine the role and impact of MNEs on sustainable economic development (Ayentimi, Burgess, & Brown, 2016; Ghauri & Yamin, 2009; Kolk & van Tulder, 2010; Kolk et al., 2017) and inclusive growth (Gerrard, McGahan, & Prabhu, 2012). We have suggested that the positive spillovers from extractive sector operations can be limited, and the question arises as to whether and how ExMNEs can create positive spillovers through their SLO/CSR actions, and in particular through their collaboration with other governance actors to promote sustainable development (Oetzel & Doh, 2009; Santangelo, 2017, this issue). In order to do so, however, it is important to come to some agreement about how to measure the impact of extractives on sustainable development, and in particular the impact on local communities (Prieto-Carrón, Lund-Thomsen, Chan, Muro, & Bhushan, 2006). While recent research has made some progress in this direction (Addison et al., 2017; Aragón and Rud, 2013; Chuhan-Pole, Dabalén, Kotsadam et al., 2015; Chuhan-Pole, Dabalén, Land et al., 2015; Loayza et al., 2013; Ticci & Escobal, 2015) we cannot say for certain whether ExMNEs contribute to poverty reduction and inclusive growth, and, if so, in what ways. It is also important to recognize that MNEs active involvement in poverty reduction differs markedly across sectors (Kolk & van Tulder, 2005), and calibrating the impact of ExMNEs against MNEs from other sectors in terms of social impact would be useful.

A more general question is the degree to which ExMNEs, and indeed all MNEs, can or should explicitly align their actions with the new UN Sustainable Development Goals (Kolk et al., 2017). This literature is in its infancy, with important topics that remain to be explored more fully, including the issues of human rights, environmental concerns and poverty reduction. In addition, researchers who examine the role of business in alleviating global poverty often portray business as an effective substitute for the state. Yet, depicting business solely as a replacement for the state risks overlooking the complementary nature of the state in economic development, and calls for future investigation of the role of ExMNE-state collaborations (Scherer & Palazzo, 2011).

4.4. Non-market strategies

We have identified the importance of non-market strategies as critical to the understanding of the extractive sectors. Indeed, these strategies are so integral to the operation of ExMNEs that understanding them, and their relation to the general strategy of the firm is critical (Devinney, 2013; Doh & Luca, 2013; Henisz, 2016; Kolk & van Tulder, 2005). For the present purposes, we separate non-market strategies as political and social.

We have suggested that the extractive industries have been instrumental in developing early theories of political risk and political strategy (Vernon, 1971; Eden, Lenway, & Schuler, 2005). It is argued that the early, power-based theories of political risk and strategy originating in Vernon are not sufficient to understand the complex nature of modern political risk. Stevens, Xie, and Peng, 2016 propose a legitimacy-based framework that explicitly takes into account the complex relationship between multinationals, and home and host governments and stakeholders, which is consistent with our discussion of ExMNEs. This seems a useful way to further develop the notion of political strategies, and to better understand how these strategies can be translated into effective “corporate diplomacy” (Henisz, 2016).

We know that ExMNEs firms have had a significant impact on their communities in areas ranging from environmental impact, human rights and labor practices, to community development, which constitute the arena for social strategies or CSR. There is still much to be learned from the extractive sector regarding effective community relations, working with indigenous peoples, and social performance measurement, among other things (Kapelus, 2002; Kolk & van Tulder, 2010; Selmier, Newenham-Kahindi, & Oh, 2015). At the same time, there is still much to be understood about how ExMNEs achieve local legitimacy (Gifford et al., 2010; Kolk & Lenfant, 2013) and how they manage home country institutional pressures and challenges to their legitimacy (Kolk & Fortanier, 2013; Meyer & Thein, 2014).

Finally, recent studies suggest that corporate political and social activities are often complementary and should therefore be aligned (den Hond, Rehbein, de Bakker, & Kooijmans-van Lankveld, 2014; Mellahi, Frynas, Sun, & Siegel, 2016), or at least are related (Scherer, Palazzo, & Matten, 2014). Given the complexity of these activities in the extractive sector, research that explores the issues of how (or whether) an optimal balance is achieved and the extent to which sub-optimal choices reduce legitimacy. However, in countries where governments are not considered reliable or trustworthy by nongovernmental actors, complementarity may not exist because good relationships with host governments may negatively affect ExMNEs legitimacy among nongovernmental stakeholders and require additional investments in CSR.

4.5. Reporting and outcomes measurement

Transparency and reporting standards have been identified as important issues in the extractive sector. We have already suggested that the link between transparency and positive outcomes in the case of EITI has yet to be established. More generally, Aragón-Correa et al. (2016) find that for

the largest MNEs, better records of environmental disclosure are not associated with better environmental performance. The sample was not limited to extractives, but the general issue of whether what is disclosed is always what is relevant remains important for future research.

There is increasingly strong general evidence of a positive relationship between CSR and financial performance. A recent meta-analytic study (Wang, Dou, & Jia, 2016) finds not only that the relationship is positive and significant, but that the causality likely runs from CSR to performance. However, the relationship is weaker for firms from developing countries, reinforcing the argument that more research on this aspect of EMNEs is warranted. This study was not confined to extractives, but Henisz et al. (2014) find that gold mining firms that reduce conflict with stakeholders enhance firm value, thus pointing to the same instrumental explanation as the general studies. Similarly, Dorobantu and Odziemkowska (2017) find that better stakeholder governance is associated with increased firm value for a sample of mining firms.

The evidence with respect to environmental performance is less compelling, suggesting more research is required. The general evidence regarding corporate environmental performance (CEP) suggests highly contingent results. For example, a meta-analytic study of the relationship between CEP and firm financial performance (Dixon-Fowler, Slater, Johnson, Ellstrand, & Romi, 2013) indicates that the nature of the relationship depends on firm size, home country, and how performance is measured. The sample was not confined to extractive sector firms.

We would add that the potential environmental impacts of extractive projects can be “black swan” events such as major oil spills or tailing pond collapses, which are often referred to as “disasters”. These are discrete events that are difficult to forecast. In addition, some of the environmental impacts, such as the effects on biodiversity and food security, may take considerable time to reveal themselves. The result is that measuring, reporting, and evaluating environmental performance for the extractive sectors may be difficult, and this in turn makes it difficult to evaluate their environmental strategies. Indeed, environmental outcome measures are typically *continuous* measures such as greenhouse gas emissions and discharges to water sources (Aragón-Correa et al., 2016), and thus do not account for either *potential or future* environmental risks. Event studies can address discrete events, and a recent meta-analytic study of environmental event studies (Endrikat, 2016) finds evidence that financial markets respond to actual environmental events, and most strongly when the event is negative. While this suggests that financial markets in general (the sample was not confined to extractive sector firms) provide incentives for firms to take voluntary actions to avoid negative events, it is still the case that the events analyzed have actually occurred. One study that did try to account for pollution potential (Tatoglu, Bayraktar, Sahadev, Demirbag, & Glaister, 2014) did so by means of a survey that was designed primarily for manufacturing firms and service firms. Extractive firms were not included in their sample. Thus, although there is some evidence to suggest that financial markets provide incentives to extractive firms to adopt stronger and voluntary environmental policies, to our knowledge no study has tested this directly on a sample of extractive sector firms.

In short, there is considerable scope for future extractive sector research on the nature and effects of transparency and disclosure, the performance effects of environmental and social policies, and the measurement of relevant outcomes and risks.

5. Papers in this special issue

The six papers ultimately accepted for publication in this Special Issue address many of the issues discussed above. In addition to these papers, we invited general commentary on issues of economic development from an eminent scholar in the field. All the papers are empirical, and they employ a range of empirical methods including the use of large-scale econometric modeling as well as single longitudinal case studies. Papers also focus on different resources, from mining to oil to agriculture and also reflect broad geographical scope and institutional diversity, including developed countries (Canada), emerging markets (Brazil), developing countries (Venezuela and Ghana), and multi-country settings. In Table 1 we list each paper and summarize its major theme. Each paper is also classified by topic using the OLI/ESG framework in Fig. 2. For example, an article denoted

Table 1
Summary of papers in this Special Issue.^a

Authors	Title	Major Theme
Puck and Mullner (2017)	Towards a Holistic Framework of MNE-State Bargaining: A Formal Model and Case-based Analysis	An investigation of MNE-State bargaining addressing the limitations of the obsolescing bargaining and sovereignty at bay arguments, and posing a new model, applied to the case of Venezuela. [O, L host, G]
Zyglidopoulos et al. (2017)	Internationalization as a Driver of the Corporate Social Performance of Extractive Industry Firms	The central argument is that internationalization is an important driver of corporate social and environmental performance for extractive firms, with the impact moderated by home country development. [O, E, S, L home]
Rodrigues and Dieleman (2017)	The Internationalization Paradox: Untangling dependence in Multinational State Hybrids	An investigation of the internationalization of state-owned and state-linked firms, and the dynamics of the firm-state relationship, using the case of the mining MNE, Vale. [L home, G]
Yakovleva and Vazquez-Brust (2017)	Mining multinational enterprises and artisanal small-scale miners: from confrontation to cooperation	An analysis of nonmarket MNE strategies to deal with informal (illegal) use of resources by artisanal and small scale (ASM) miners, suggesting that the traditional strategy of enforcing property rights is less effective than cooperation strategies. [O, S, E]
Buchanan and Marques (2017)	How Home Country Industry Associations Influence MNE International CSR Practices: Evidence from the Canadian Mining Industry	An analysis of the importance of home country institutional pressures on the evolution of MNEs' CSR practices outside the home country (Canada), with specific focus on the role of industry associations. [L home, G, S]
Santangelo (2017)	The impact of FDI in land in agriculture in developing countries on host country food security	An exploration and test of the hypothesis that while FDI in land from developed-country investors has a positive impact on food security in host developing countries, FDI in land from developing-country investors has a negative effect. [L host, E, S]
Narula (2017)	Multinational firms and the extractive sectors in the 21st century: can they drive development?	A commentary on the role of the extractive sector in promoting economic development considered from the viewpoint of the development literature over time.

^a Note: Each paper is classified according to the issues it addresses using the framework in Fig. 2 (OLI/ESG).

by [L (home), G] addresses governance issues and their relation to the home country. The summaries clearly suggest a focus on nonmarket strategies and their relation to both home and host institutions, the importance of state ownership and firm-state interactions, and the relationship of MNEs to sustainable development.

In their paper “Towards a Holistic Framework of MNE-State Bargaining: A Formal Model and Case-based Analysis” [Puck and Mullner \(2017\)](#) focus on MNE-State bargaining. Using power-dependence theory, they formulate a multi-party framework of MNE-State bargaining that accounts for multiple stakeholders and captures the inter-temporal dynamics of the bargaining process. The ultimate distribution of bargaining power is a function of several parameters: who invests, what types of assets and in which host country. Specifically, the dependence of one party on the other is positively related to the sunk cost of the investment in the relationship and negatively related to the ability to access alternative investments outside the relationship. A sustainable bargaining position is achieved when all components are balanced, but changes to any of the model components will create power imbalances, inducing the parties to employ strategies to restore a sustainable power balance. The framework is then applied to a longitudinal case study of the Venezuelan oil industry to explore how MNEs identify micro-strategies in their attempts to establish a sustainable power balance. The authors identify and describe 12 such micro-strategies. The paper offers new insights regarding strategies that MNEs and states can employ to shift the power balance in their favor.

[Zyglidopoulos et al. \(2017\)](#) in “Internationalization as a Driver of the Corporate Social Performance of Extractive Industry Firms” analyze theoretically and empirically the determinants of corporate social and environmental performance of extractive industry firms. The central hypothesis is that internationalization is an important driver of corporate social and environmental performance for extractive firms. Extractives use corporate social strategies extensively to deal with the negative externalities of their operations, share with local communities the benefits from their operations, or make up for public service and regulatory deficiencies in the areas in which they operate, particularly developing countries. The positive impact of internationalization on corporate social performance arises for several reasons, including MNEs’ aversion to negative responses from some of their more diverse stakeholders, increased focus towards stakeholder and social issues and economies of scope advantages. The presence and importance of SLO for extractive firms strengthens the impact of internationalization on corporate social performance. While they suggest that internationalization also contributes to corporate environmental performance, they argue (and find) that the impact is reduced.

[Rodrigues and Dieleman \(2017\)](#) in “The Internationalization Paradox: Untangling dependence in Multinational State Hybrids” investigate the internationalization of state-owned and state-linked firms, and the dynamics of the firm-state relationship, with specific reference to extractives. By accumulating global resources these firms gain independence from their state sponsor, but this independence makes them likely targets of increased government interference. Through the lens of resource dependence theory, the authors suggest a novel theoretical framework to understanding the relationship between internationalizing state hybrids and home governments. The framework is then used in a longitudinal case study of Vale to investigate the conditions that enable government control over multinational state hybrids. They identify two sets of conditions, market trends (extractive industry) and nonmarket trends (home country policies), that impact internationalization and firm-state relationships. They suggest that Vale’s internationalization path was driven by industry isomorphism and resource constraints at home. This led to increased autonomy with the power balance shifting to Vale, but this proved to be temporary, as the government came to increasingly rely on Vale for funds and support for its domestic policies.

Stakeholder relationship strategies is the focus of [Yakovleva and Vazquez-Brust \(2017\)](#) in “Mining multinational enterprises and artisanal small-scale miners: from confrontation to cooperation”. Mining MNEs, in addition to dealing with host country governments and other salient stakeholders, often must contend with the negative effects of their activities on communities that historically relied on artisanal and small-scale mining (ASM). The authors focus on nonmarket MNE strategies to deal with informal (illegal) use of resources by ASM miners. They argue that the traditional strategy of enforcing property rights might not be effective as it fails to consider the implications for sustainable development. Combining the Institutional Analysis and Design (IAD) framework with the stakeholder salience perspective, the authors analyze MNE strategies towards informal rivals in the gold mining industry in Ghana and conclude that cooperation strategies are a sustainable alternative to political strategies of confrontation and reliance on the state to protect tenure.

[Buchanan and Marques \(2017\)](#) in “How Home Country Industry Associations Influence MNE International CSR Practices: Evidence from the Canadian Mining Industry” explore the importance of home country institutional pressures on the evolution of MNEs’ CSR practices outside the home country (Canada), with specific focus on the role of industry associations. These associations are identified as key players in the development, implementation and diffusion of standards and codes of conduct across borders. Using qualitative interviews with industry stakeholders, the authors identify regulatory, normative and legitimacy strategies used by the Mining Association of Canada (MAC) to influence member CSR practices in Canada and abroad. The longitudinal data highlights the unique dynamics of how home country industry associations can impact CSR practices abroad.

In “The impact of FDI in land in agriculture in developing countries on host country food security”, [Santangelo \(2017\)](#) considers the differential impact of FDI in agricultural land from developed-country and developing-country investors on developing country food security. The hypothesis is that while FDI in land from developed-country investors has a positive impact on food security in host developing countries, FDI in land from developing-country investors has a negative effect. These differences arise due to differing objectives of developed-country and developing-country investors, and differing institutional pressures at home. The empirical analysis is conducted using a sample of 65 host developing countries between 2000 and 2011, and overall, the results support the hypotheses. The paper contributes to deeper understanding of the impact of MNEs on host country development, which is not restricted to spillovers and linkages with local actors, but also occurs through their active and deliberate role in increasing host country wellbeing.

Finally, [Narula \(2017\)](#) in his commentary, examines the role of ExMNEs from the perspective of their capacity to promote *economic* development. He argues that historically ExMNEs have been seen as an obstacle to sustained economic development, because they operated in enclaves with limited local engagement. This led to host country import-substitution policies that aimed to increase the local benefits of these resources. Since liberalisation, ExMNEs have re-engaged with developing countries through looser governance structures and decentralized value chains, with greater potential for linkages. Despite the potential, he argues that few host countries have seen meaningful MNE-led development because of weak domestic firms and poor location advantages and that new MNEs from emerging economies have not shown a greater propensity to local linkages, suggesting that they will not contribute to economic development.

6. Conclusions

Our broad conclusion is that while the extractive sectors have unique characteristics, they do not require new theories of the MNE and do not necessarily raise sustainability issues that have not already been discussed in the literature. We have argued that what makes the extractive sector

unique is the *extent* of its importance in many economies, and the capacity of ExMNEs to support or retard sustainable development in natural resource rich developing countries. In addition, the localized impact on communities, and the range of ESG issues that surround it, make the extractive sector fertile grounds for studying a wide range of important matters that we have identified and that have been addressed in the papers in this SI. We therefore believe that there are significant opportunities for improving our understanding of the extractive and natural resource industries, in ways that also advance theories of the multinational enterprise and their impact on the sustainable development of all countries, but particularly developing countries.

References

- Addison, T., Boly, A., & Mvevange, A. (2017). *The impact of mining on spatial inequality: Recent evidence from Africa*, WIDER Working Paper, No.2017/13.
- 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 (CIRDI).
- Aragón, F. M., & Rud, J. P. (2013). Natural resources and local communities: Evidence from a Peruvian gold mine. *American Economic Journal: Economic Policy*, 5(2), 1–25.
- Aragón, F., & Rud, J. P. (2016). Polluting industries and agricultural productivity: Evidence from mining in Ghana. *Economic Journal*, 126(527), 1980–2011.
- Aragón, F. M., Chuhan-Pole, P., & Land, B. C. (2015). *“The local economic impacts of resource abundance: What have we learned?” policy research working paper 7263*. Washington, DC: World Bank.
- Aragón-Correa, J. A., Marcus, A., & Hurtado-Torres, N. (2016). The natural environmental strategies of international firms: Old controversies and new evidence on performance and disclosure. *Academy of Management Perspectives*, 30(1), 24–39.
- Asiedu, E., & Lien, D. (2011). Democracy, foreign direct investment and natural resources. *Journal of International Economics*, 84, 99–111.
- Attig, N., Boubakri, N., El Ghoul, S., & Guedhami, O. (2016). Firm internationalization and corporate social responsibility. *Journal of Business Ethics*, 134, 171–197.
- Ayentimi, D. T., Burgess, J., & Brown, K. (2016). Developing effective local content regulations in sub-Saharan Africa: The need for more effective policy alignment. *Multinational Business Review*, 24(4), 354–374.
- Banks, G. (2008). Understanding “Resource” conflicts in Papua New Guinea. *Asia-Pacific Viewpoint*, 49(1), 23–34.
- Barney, K. (2009). Laos and the making of a “Relational” resource frontier. *The Geographical Journal*, 175(2), 146–159.
- Berman, N., Couttenier, M., Rohner, D., & Thoenig, M. (2017). This mine is mine! How minerals fuel conflicts in Africa. *American Economic Review*, 107(6), 1564–1610.
- Boddedwyn, J., & Doh, J. (2011). Global strategy and collaboration of MNEs, NGOs and governments for the provisioning of collective goods in emerging markets. *Global Strategy Journal*, 1, 345–361.
- Boddedwyn, J. (1988). Political aspects of MNE theory. *Journal of International Business Studies*, 19(1), 341–363.
- Buchanan, S., & Marques, J. C. (2017). How home country industry associations influence MNE international CSR practices: Evidence from the Canadian mining industry. *Journal of World Business* [this issue].
- Buckley, P. J., & Casson, M. (1976). *The future of the multinational enterprise, Vol. 1*. London: Macmillan.
- Buckley, P. J. (2008). Do we need a special theory of foreign direct investment for extractive industries? *Journal of Chinese Economic and Foreign Trade Studies*, 1(2), 93–104.
- Buhmann, K. (2016). Public regulators and CSR: The ‘Social Licence to Operate’ in recent United Nations instruments on business and human rights and the juridification of CSR. *Journal of Business Ethics*, 136(4), 699–714.
- Burger, J. (2014). *Indigenous peoples, extractive industries, and human rights* Brussels: European Parliament Report.
- Casson, M. (Ed.). (1986). *Multinationals and world trade*. London: George Allen and Unwin.
- Caves, R. E. (1982). *Multinational enterprise and economic analysis*. Cambridge, MA: Cambridge University Press.
- Chuhan-Pole, P., Dabalén, K. A., & Kotsadam, A. (2015). *The local socioeconomic effects of gold mining: Evidence from Ghana. policy research working paper 7250*. Washington, DC: World Bank.
- Chuhan-Pole, P., Dabalén, A. L., Land, B. C., Sanoh, A., Smith, G., Tolonen, A. K., et al. (2015). *Socioeconomic impact of mining on local communities in Africa*. Washington, DC: World Bank.
- Collier, P., & Hoeffler, A. (2005). Resource rents, governance, and conflict. *Journal of Conflict Resolution*, 49(4), 625–633.
- Collins, B., & Fleischman, L. (2013). *Human rights and social conflict in the oil, gas, and mining industries: Policy recommendations for national human rights institutions. Oxfam America research background series*.
- Corrigan, C. (2014). Breaking the resource curse: Transparency in the natural resource sector and the extractive industries transparency initiative. *Resources Policy*, 40, 17–30.
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: Developing country MNEs in the least developed countries. *Journal of International Business Studies*, 39, 957–979.
- Cuervo-Cazurra, A., & Ramamurti, R. (2014). *Understanding multinationals from emerging markets*. Cambridge: Cambridge University Press.
- Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., & Ramaswamy, K. (2014). Governments as owners: State-owned multinational companies. *Journal of International Business Studies*, 45(8), 919–942.
- Cuervo-Cazurra, A. (2011a). Selecting the country in which to start internationalization: The nonsequential internationalization model. *Journal of World Business*, 46, 426–437.
- Cuervo-Cazurra, A. (2011b). Global strategy and global business environment: The direct and indirect influences of the home country on a firm’s global strategy. *Global Strategy Journal*, 1, 382–386.
- Cuervo-Cazurra, A. (2012). Extending theory by analyzing developing country multinational companies: Solving the Goldilocks debate. *Global Strategy Journal*, 2, 153–167.
- Cui, L., & Jiang, F. (2012). State ownership effect on firms’ FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies*, 43, 264–284.
- Davis, R., & Franks, D. (2014). *Costs of company-Community conflict in the extractive sector. corporate social responsibility initiative report No. 66* Cambridge, MA: Harvard Kennedy School.
- Demuijnck, G., & Fasterling, B. (2016). The social license to operate. *Journal of Business Ethics*, 136(4), 675–685.
- den Hond, F., Rehbein, K. A., de Bakker, F. G. A., & Kooijmans-van Lankveld, H. (2014). Playing on two chessboards: Reputation effects between corporate social responsibility (CSR) and corporate political activity (CPA). *Journal of Management Studies*, 51(5), 790–813.
- Devinney, T. M. (2013). Taking the ‘non’ out of ‘nonmarket’ strategy. *Global Strategy Journal*, 3, 198–203.
- Dixon-Fowler, H. R., Slater, D. J., Johnson, J. L., Ellstrand, A. E., & Romi, A. M. (2013). Beyond “Does it pay to be green?” A meta-analysis of moderators of the CEP–CFP relationship. *Journal of Business Ethics*, 112(2), 353–366.
- Doh, J. P., & Lucea, R. (2013). So close yet so far: Integrating global strategy and nonmarket research. *Global Strategy Journal*, 3(2), 171–194.
- Doh, J. P., & Ramamurti, R. (2003). Reassessing risk in developing country infrastructure. *Long Range Planning*, 36, 337–353.
- Doh, J., McGuire, S., & Ozaki, T. (2015). The Journal of World Business Special Issue: Global governance and international nonmarket strategies: Introduction to the special issue. *Journal of World Business*, 50(2), 256–261.
- Dorobantu, S., & Odziemkowska, K. (2017). Valuing stakeholder governance: Property rights, community mobilization, and firm value. *Strategic Management Journal*. <http://dx.doi.org/10.1002/smj.2675>.
- Dunning, J. H. (1981). *International production and the multinational enterprise*. London: Allen and Unwin.
- Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9(2), 163–190.
- Eccles, N. S., & Viviers, S. (2011). The origins and meanings of names describing investment practices that integrate a consideration of ESG issues in the academic literature. *Journal of Business Ethics*, 104(3), 389–402.
- Eden, L., Lenway, S., & Schuler, D. (2005). From the obsolescing bargain to the political bargaining model. In R. Grosse (Ed.), *International business-government relations in the 21st century*. New York: Cambridge University Press.
- Edwards, R. B. (2016). Mining away the Preston curve. *World Development*, 78, 22–36.
- Egri, C. P., & Ralston, D. (2008). Corporate responsibility: A review of international management research from 1998 to 2007. *Journal of International Management*, 14, 319–339.
- Elbadawi, I., & Soto, R. (2015). Resource rents, institutions, and violent civil conflicts. *Defence and Peace Economics*, 26(1), 89–113.
- Endrikat, J. (2016). Market reactions to corporate environmental performance related events: A meta-analytic consolidation of the empirical evidence. *Journal of Business Ethics*, 138(3), 535–548.
- Gammeltoft, P., Filatotchev, I., & Hobdari, B. (2012). Emerging multinational companies and strategic fit: A contingency framework and future research agenda. *European Management Journal*, 30, 175–188.
- Gamu, J., Le Billon, P., & Spiegel, S. (2015). Extractive industries and poverty: A review of recent findings and linkage mechanisms. *The Extractive Industries and Society*, 2(1), 162–176.
- Gerrard, G., McGahan, A. M., & Prabhu, J. (2012). Innovation for inclusive growth: Towards a theoretical framework and research agenda. *Journal of Management Studies*, 49(4), 661–683.

- Ghuri, P., & Yamin, M. (2009). Revisiting the impact of multinational enterprises on economic development? *Journal of World Business*, 44(2), 105–107.
- 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), 304–311.
- Guillén, M. F., & García-Canal, E. (2009). The American model of the multinational firm and the “new” multinationals from emerging economies. *The Academy of Management Perspectives*, 23(2), 23–35.
- Hailu, D., & Kipgen, C. (2017). The extractives dependence index. *Resources Policy*, 51, 251–264.
- Hajzler, C. (2012). Expropriation of foreign direct investments: Sectoral patterns from 1993 to 2006. *Review of World Economics/Weltwirtschaftliches Archiv*, 148(1), 119–149.
- Halland, H., Lokanc, M., Nair, S., & Kannan, S. R. (2015). *The extractive industries sector: Essentials for economists, public finance professionals, and policy makers*. World Bank study. Washington, DC: World Bank.
- Hanna, P., & Vanclay, F. (2013). Human rights, indigenous peoples and the concept of free, prior and informed consent. *Impact Assessment & Project Appraisal*, 31(2), 146–157.
- Haslam, P. A., & Tanimoune, N. A. (2016). The determinants of social conflict in the Latin American mining sector: New evidence with quantitative data. *World Development*, 78, 401–419.
- Henisz, W. J., Dorobantu, S., & Nartey, L. J. (2014). Spinning gold: The financial returns to stakeholder engagement. *Strategic Management Journal*, 35(12), 1727–1748.
- Henisz, W. J. (2003). The power of the Buckley and Casson thesis: The ability to manage institutional idiosyncrasies. *Journal of International Business Studies*, 34(2), 173–184.
- Henisz, W. J. (2016). The dynamic capability of corporate diplomacy. *Global Strategy Journal*, 6(3), 183–196.
- Hermelo, F. D., & Vassolo, R. (2010). Institutional development and hypercompetition in emerging economies. *Strategic Management Journal*, 31(13), 1457–1473.
- Hillman, A. (2003). Determinants of political strategies in US multinationals. *Business and Society*, 42(4), 455–484.
- Hilson, G., & Maconachie, R. (2017). Formalising artisanal and small-scale mining: Insights, contestations and clarifications. *Area*. <http://dx.doi.org/10.1111/area.12328>.
- Hilson, G., Yakovleva, N., & Banchirigah, S. M. (2007). ‘To move or not to move’: Reflections on the resettlement of artisanal miners in the Western Region of Ghana. *African Affairs*, 106(424), 413–436.
- Hilson, G. (2002). An overview of land use conflicts in mining communities. *Land Use Policy*, 19(1), 65–73.
- Hobdari, B., Gammeltoft, P., Li, J., & Meyer, K. (2017). The home country of the MNE: The case of emerging economy firms. *Asia Pacific Journal of Management*, 34, 1–17.
- Horowitz, L. (2011). Interpreting industry’s impacts: Micropolitical ecologies of divergent community responses. *Development and Change*, 42(6), 1379–1391.
- Hymers, S. (1960,1976). *The International Operations of National Firms: A Study of Direct Foreign Investment*, Cambridge, MIT Press.
- ICMM (2014). *The Role of Mining in National Economies*. London (second edition).
- International Finance Corporation (IFC) (2012). *The business case for sustainability*. Washington, D.C. IFC.
- Jamali, D., & Karam, C. (2016). Corporate social responsibility in developing countries as an emerging field of study. *International Journal of Management Reviews*. <http://dx.doi.org/10.1111/ijmr.12112>.
- Jenkins, H., & Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production*, 14(3), 271–284.
- Kapelus, P. (2002). Mining, corporate social responsibility and the ‘community’: The case of Rio Tinto, Richards Bay Minerals and the Mbonambi. *Journal of Business Ethics*, 39(3), 275–296.
- Kemp, D., & Owen, J. R. (2013). Community relations and mining: Core to business but not core business. *Resources Policy*, 38(4), 523–531.
- Kemp, D. (2010). Mining and community development: Problems and possibilities of local-level practice. *Community Development Journal*, 45(2), 198–218.
- Khan, M., Serafeim, G., & Yoon, A. (2016). Corporate sustainability: First evidence on materiality. *The Accounting Review*, 91(6), 1697–1724.
- Kobrin, S. J. (1984). Expropriation as an attempt to control foreign firms in LDCs: Trends from 1960 to 1979. *International Studies Quarterly*, 28(3), 329–348.
- Kolk, A., & Fortanier, F. (2013). Internationalization and environmental disclosure: The role of home and host institutions. *Multinational Business Review*, 21(1), 87–114.
- Kolk, A., & Lenfant, F. (2013). Multinationals, CSR and partnerships in Central African conflict countries. *Corporate Social Responsibility and Environmental Management*, 20(1), 43–54.
- Kolk, A., & van Tulder, R. (2005). Poverty alleviation as business strategy? Evaluating commitments of frontrunner multinational companies. *World Development*, 34(5), 789–801.
- Kolk, A., & van Tulder, R. (2010). International business, corporate social responsibility and sustainable development. *International Business Review*, 19(2), 119–125.
- Kolk, A., Kourula, A., & Pisani, N. (2017). Multinational Enterprises and the Sustainable Development Goals: What do we know and how to proceed? *Transnational Corporations* [this issue].
- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. *Journal of World Business*, 51, 23–34.
- Kraemer, R., & van Tulder, R. (2009). Internationalization of TNCs from the extractive industries: A literature review. *Transnational Corporations*, 18(1), 137–156.
- Lessard, D., Sakhrani, V., & Miller, R. (2014). House of project complexity- understanding complexity in large engineering projects. *Engineering Project Organization Journal*, 4(4), 170–192.
- Levy, D. L., & Kolk, A. (2002). Strategic responses to global climate change: Conflicting pressures on multinationals in the oil industry. *Business & Politics*, 4(3), 275–300.
- Li, F., & Ding, D. (2017). The dual effects of home country institutions on the internationalization of private firms in emerging markets: Evidence from China. *Multinational Business Review*, 25(2), 128–149.
- Li, J., Newenham-Kahindi, A., Shapiro, D., & Chen, V. Z. (2013). The two-tier bargaining model revisited: Theory and evidence from China’s natural resource investments in Africa. *Global Strategy Journal*, 3, 300–321.
- Lin, P. T., Li, B., & Bu, D. (2015). The relationship between corporate governance and community engagement: Evidence from the Australian mining companies. *Resources Policy*, 43, 28–39.
- Loayza, N., Mier y Teran, A., & Rigolini, J. (2013). *Poverty, inequality, and the local natural resource curse*. Policy Research working paper no. WPS 6366. Washington, DC: World Bank.
- Lyles, M. A., & Steensma, H. K. (1996). Competition for large-scale infrastructure projects in the emerging Asian markets: Factors of success. *Columbia Journal of World Business*, 64–75.
- Makhija, M. (1993). Government intervention in the Venezuelan petroleum industry: An empirical investigation of political risk. *Journal of International Business Studies*, 24(3), 531–555.
- 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, 386–408.
- McKinsey Global Institute (2013). *Reverse the curse: Maximizing the potential of resource-driven economies*. [December].
- Mellahi, K., Frynas, J. G., Sun, P., & Siegel, D. (2016). A review of the nonmarket strategy literature: Toward a multi-theoretical integration. *Journal of Management*, 42(1), 143–173.
- Meyer, K. E., & Thein, H. H. (2014). Business under adverse home country institutions: The case of international sanctions against Myanmar. *Journal of World Business*, 49(1), 156–171.
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal*, 30(1), 61–80.
- Mikesell, R. F., & Whitney, J. W. (1987). *The world mining industry: Investment strategy and public policy*. Boston: Allen & Unwin.
- Mikesell, R. (1971). *Foreign investment in the petroleum and mineral industries: Case studies in investor-host country relations*. Baltimore, MD: Johns Hopkins University.
- Moffat, K., & Zhang, A. R. (2014). The paths to social licence to operate: An integrative model explaining community acceptance of mining. *Resources Policy*, 39, 61–70.
- Moran, T. (1974). *Multinational corporations and the politics of dependence: Copper in Chile*. Princeton, NJ: Princeton University Press.
- Musacchio, A., Lazzarini, S. G., & Aguilera, R. (2015). New varieties of state capitalism: Strategic and governance implications. *The Academy of Management Perspectives*, 28(1), 115–131.
- Narula, R., & Dunning, J. H. (2000). Industrial development, globalization and multinational enterprises: New realities for developing countries. *Oxford Development Studies*, 28(2), 141–167.
- Narula, R. (2012). Do we need different frameworks to explain infant MNEs from developing countries? *Global Strategy Journal*, 2, 188–204.
- Narula, R. (2017). Multinational firms and the extractive sectors in the 21st century: Can they drive development? *Journal of World Business* [this issue].
- O’Faircheallaigh, C. (2013). Extractive industries and Indigenous peoples: A changing dynamic? *Journal of Rural Studies*, 30, 20–30.
- Oetzel, J., & Doh, J. P. (2009). MNEs and development: A review and conceptualization. *Journal of World Business*, 44(1), 108–120.
- Oetzel, J., & Getz, K. (2012). When and how might firms respond to violent conflict? *Journal of International Business Studies*, 43, 166–186.
- Owen, J. R., & Kemp, D. (2013). Social licence and mining: A critical perspective. *Resources Policy*, 38(1), 29–35.
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institutional-based view of international strategy: A focus on emerging economies. *Journal of International Business Studies*, 39, 920–936.
- Penrose, E. (1968). *The large international firm in developing countries: The international petroleum industry*. London: George Allen and Unwin Ltd.
- Pisani, N., Kourula, A., Kolk, A., & Meijer, R. (2017). How global is international CSR research? Insights and recommendations from a systematic review. *Journal of World Business*. <http://dx.doi.org/10.1016/j.jwb.2017.05.003>.
- Poelhekke, S., & van der Ploeg, R. (2010). *Do natural resources attract FDI? Evidence from non-stationary sector level data*. *De nederlandse bank working paper No. 266*. [Available at SSRN: <https://ssrn.com/abstract=1950092> or <http://dx.doi.org/10.2139/ssrn.1950092>].
- Prieto-Carrón, M., Lund-Thomsen, P., Chan, A., Muro, A., & Bhushan, C. (2006). Critical perspectives on CSR and development: What we know, what we don’t know, and what we need to know. *International Affairs*, 82(5), 977–987.
- Prno, J., & Slocumbe, 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), 346–357.
- Puck, J., & Mullner, J. (2017). Towards a holistic framework of MNE-State bargaining: A formal model and case-based analysis. *Journal of World Business* [this issue].
- Pugel, T. A. (1978). *International market linkages and U.S. manufacturing: Prices, profits, and patterns*. Cambridge, MA: Ballinger.
- Ramamurti, R. (2008). What have we learned about emerging-market MNEs? In R. Ramamurti, & J. Singh (Eds.). *Emerging multinationals from emerging markets*. Cambridge UK: Cambridge

University Press.

- Ramamurti, R. (2012). What is really different about emerging market multinationals? *Global Strategy Journal*, 2(1), 41–47.
- Rivera, J., & Oh, C. H. (2013). Environmental regulations and multinational corporations' foreign market entry investments. *Policy Studies Journal*, 41(2), 243–272.
- Robinson, J., Torvik, R., & Verdier, T. (2006). Political foundations of the resource curse. *Journal of Development Economics*, 79, 447–468.
- Rodrigues, S. B., & Dieleman, M. (2017). The internationalization paradox: Untangling dependence in multinational state hybrids. *Journal of World Business* [this issue].
- Ruggie, J. (2007). Business and human rights: The evolving international agenda. *The American Journal of International Law*, 101(4), 819–840.
- Rugman, A. M., & McIlveen, J. (1985). *Mega-firms: Strategies for Canada's multinationals*. New York: Methuen Publications.
- Rugman, A., & Verbeke, A. (1998). Strategy and international environmental policy. *Journal of International Business Studies*, 29(4), 819–833.
- Rugman, A. M., & Verbeke, A. (2003). Extending the theory of the multinational enterprise: Internalization and strategic management perspectives. *Journal of International Business Studies*, 34, 125–137.
- Rugman, A. M. (1981). *Inside the multinationals: The economics of internal markets*. London: Croom Helm.
- Russell, B. L., Shapiro, D., & Vining, A. R. (2010). The evolution of the Canadian mining industry: The role of regulatory punctuation. *Resources Policy*, 35(2), 90–97.
- SIGWATCH (2016). *Corporations that NGOs loved and hated in 2015*. [http://www.sigwatch.com/fileadmin/Free_downloads/SIGWATCH_-_Corporations_NGOs_loved_and_hated_in_2015_FREE.pdf].
- Sachs, J., & Warner, M. (2001). The curse of natural resources. *European Economic Review*, 45(4–6), 827–838.
- Santangelo, G. (2017). The impact of FDI in land in agriculture in developing countries on host country food security. *Journal of World Business* [this issue].
- Scherer, A. G., & Palazzo, G. (2011). The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance and democracy. *Journal of Management Studies*, 48(4), 899–931.
- Scherer, A. G., Palazzo, G., & Matten, D. (2014). The business firm as a political actor: A new theory of the firm for a globalized world. *Business & Society*, 53(2), 143–156.
- Selmier, W. T., Newenham-Kahindi, A., & Oh, C. H. (2015). "Understanding the words of relationships": Language as an essential tool to manage CSR in communities of place. *Journal of International Business Studies*, 46, 153–179.
- Shapiro, D., Russell, B. L., & Pitt, L. F. (2007). Strategic heterogeneity in the global mining industry. *Transnational Corporations*, 16(3), 1–34.
- Shapiro, D., Vecino, C., & Li, J. (2017). Exploring China's state-led FDI model: Evidence from the extractive sectors in Latin America. *Asia Pacific Journal of Management*. <http://dx.doi.org/10.1007/s10240-017-9526-z> [published online July 2017].
- Slack, K. (2012). Mission impossible?: Adopting a CSR-based business model for extractive industries in developing countries. *Resources Policy*, 37, 179–184.
- Slangen, A. H. L., & Beugelsdijk, S. (2010). The impact of institutional hazards on multinational activity: A contingency perspective. *Journal of International Business Studies*, 41(6), 980–995.
- Sovacool, B., Gotz, W., Van de Graaf, T., & Andrews, N. (2016). Energy governance, transnational rules, and the resource curse: Exploring the effectiveness of the extractive industries transparency initiative (EITI). *World Development*, 83, 179–192.
- Stevens, P., Kooroshy, J., Lahn, G., & Lee, B. (2013). *Conflict and coexistence in the extractive industries*. Chatham, NJ: Chatham House.
- Stevens, C. E., Xie, E., & Peng, M. W. (2016). Toward a legitimacy-based view of political risk: The case of Google and Yahoo in China. *Strategic Management Journal*, 37(5), 945–963.
- Stuckey, J. (1983). *Vertical integration and joint ventures in the aluminum industry*. Cambridge, MA: Harvard University Press.
- Tatoglu, E., Bayraktar, E., Sahadev, S., Demirbag, M., & Glaister, K. W. (2014). Determinants of voluntary environmental management practices by MNE subsidiaries. *Journal of World Business*, 49(4), 536–548.
- Teece, D. J. (1976). *Vertical integration and vertical divestiture in the U.S. petroleum industry*. Stanford, CA: Institute for Energy Studies.
- Teece, D. J. (1986). Transaction cost economics and the multinational enterprise: An assessment. *Journal of Economic Behavior and Organization*, 7, 21–45.
- Ticci, E., & Escobal, J. (2015). Extractive industries and local development in the Peruvian Highlands. *Environment and Development Economics*, 20(1), 101–126.
- Tole, L., & Koop, G. (2010). Do environmental regulations affect the location decisions of multinational gold mining firms? *Journal of Economic Geography*, 11(1), 151–177.
- UN (2008). *Protect, respect and remedy: A framework for business and human rights*. UN Doc. A/HRC/8/5 (2008), 7 April 2008. Geneva: United Nations.
- UN (2011). *Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect, Remedy' Framework*, UN Doc. A/HRC/17/31, 21 March 2011. Geneva: United Nations.
- United Nations Conference on Trade and Development (UNCTAD) (2007). *Transnational corporations, extractive industries and development (World investment report 2007)* New York/Geneva: United Nations.
- United Nations Conference on Trade and Development (UNCTAD) (2017). *Investment and the digital economy (World investment report 2017)* New York/Geneva: United Nations.
- van der Ploeg, F. (2011). Natural resources: Curse or blessing? *Journal of Economic Literature*, 49(2), 366–420.
- van der Ploeg, F., & Poelhekke, S. (2009). Volatility and the natural resource curse. *Oxford Economic Papers*, 61(4), 727–760.
- Venables, A. J. (2016). Using natural resources for development: Why has it proven so difficult? *Journal of Economic Perspectives*, 30(1), 161–184.
- Vernon, R. (1971). *Sovereignty at Bay*. London: Routledge.
- Ville, S., & Wicken, O. (2012). The dynamics of resource-based development: Evidence from Australia and Norway. *Industrial and Corporate Change*, 22(5), 1341–1371.
- Wang, Q., Dou, J., & Jia, S. (2016). A meta-analytic review of corporate social responsibility and corporate social performance. *Business & Society*, 55(8), 1083–1121.
- Ward, T. (2011). The right to free, prior, and informed consent: Indigenous peoples' participation rights within international law. *Northwestern Journal of International Human Rights*, 10(2), 54–84.
- Weng, L., Boedihartono, A., Dirks, P., Dixon, J., Lubis, M., & Sayer, J. (2013). Mineral industries, growth corridors and agricultural development in Africa. *Global Food Security*, 2(3), 195–202.
- Yakovleva, N., & Vazquez-Brust, D. A. (2017). Mining multinational enterprises and artisanal small-scale miners: From confrontation to cooperation. *Journal of World Business* [this issue].
- Zhang, Y., Zhao, W., & Ge, J. (2016). Institutional duality and political strategies of foreign-invested firms in an emerging economy. *Journal of World Business*, 51, 451–462.
- Zyglidopoulos, S., Symeou, P., & Williamson, P. (2017). Internationalization as a driver of the corporate social performance of extractive industry firms. *Journal of World Business* [this issue].

Daniel Shapiro

Beedie School of Business, Simon Fraser University, 8888 University Drive, V5A 1S6, Burnaby, British Columbia, Canada

E-mail address: dshapiro@sfu.ca

Bersant Hobdari*

Department of International Economics and Management, Copenhagen Business School, Porcelanshaven 24, 2000, Frederiksberg, Denmark

E-mail address: bh.int@cbs.dk

Chang Hoon Oh

Beedie School of Business, Simon Fraser University, 8888 University Drive, V5A 1S6, Burnaby, British Columbia, Canada

E-mail address: coh@sfu.ca

* Corresponding author.