
Article:
Ha, Yoo Jung orcid.org/0000-0002-3576-2772 (2020) Attention green aliens? : Activities of multinational enterprises in host countries and eco-innovation diffusion. JOURNAL OF BUSINESS RESEARCH. pp. 32-43. ISSN 0148-2963

https://doi.org/10.1016/j.jbusres.2020.09.038

Attention green aliens?

Activities of multinational enterprises in host countries and eco-innovation diffusion [1]

Yoo Jung Ha
Lecturer in International Business
The York Management School, University of York,
Freboys Lane, Heslington East
York, YO10 5GD, UK
+44 (0)1904 325011
yoojung.ha@york.ac.uk

Abstract

This paper investigates the extent to which eco-innovation activities in multinational enterprises (MNEs) in a host country affects local firms. In the attention-based view, the organizational attention field is significant for innovation. By analyzing the Korean Innovation Survey and patent data, we find that as more foreign MNEs conduct eco-innovation locally, attention to environmental issues increases in local firms. Their attention field particularly benefits from the presence of foreign MNEs whose country-of-origin is close to the host country or who have a long-term presence in the host country. A larger attention field then improves the likelihood of local firms successfully implementing eco-innovation and can accelerate eco-innovation implementation; however, this effect is observed only in large local firms and thus able to redeploy abundant internal resources.

[1] The paper is forthcoming in Journal of Business Research. This work was supported by the British Academy [grant number SG153087].

Keywords

Eco-innovation diffusion; Multinational enterprise (MNE); Attention-based view; Attention field; Psychic distance

1. Introduction

Multinational enterprises (MNEs) have been criticized for relocating harmful activities to countries with lax regulations (Chung, 2014; Kellenberg, 2009). To address the liabilities of foreignness and stakeholder scrutiny, however, more MNEs have been implementing strategies to improve social and environmental performance both at home and in host countries (Aguilera-Caracuel, Fedriani, & Delgado-Márquez, 2014; Cai, Lu, Wu, & Yu, 2016; Poelhekke & van der Ploeg, 2015; Zheng & Shi, 2017). When MNEs proactively use social strategy in a host country, they can demonstrate knowledge and practices obtained elsewhere.

This phenomenon implies a potential role for MNEs in diffusing social and environmental strategies to domestic firms. Recent studies have reported how the presence of foreign MNEs influences the advanced roles of business in social agendas in host countries, such as corruption prevention, human rights protection, and gender equality (Kwok & Solomon, 2006; Siegel, Pyun, & Cheon, 2019; Young & Makhija, 2014). Often, the focus has been on foreign businesses promoting exploitative types of social strategy, reflexively conforming to laws and stakeholder demands and adopting managerial practices and routines that consume existing resources more responsibly (Darnall, Henriques, & Sadorsky, 2010). However, few studies have examined the diffusion of exploratory strategies motivated by self-initiative and involving substantial learning for new product development and

discoveries of new resources (Maletič, Maletič, Dahlgaard, Dahlgaard-Park, & Gomišček, 2014). Unlike exploitative strategies, exploratory strategies imply the diffusion of complementary organizational pillars that intermediate the acquisition of knowledge and practices (Kogut, 1991).

In this context, this research analyzes foreign MNEs' social strategies in a host country and the likelihood of local firms successfully implementing similar strategies. As a specific case of exploratory social strategy, we particularly focus on MNEs' eco-innovation. An environmental strategy addresses a key area in corporate social responsibility (Holtbrügge & Dögl, 2012). Eco-innovation as an environmental strategy attempts to, in the context of global environmental challenges and the need for business to address natural-resource constraints, improve a firm's environmental performance by engaging innovation (Hart, 1995; Murillo-Luna, Garcés-Ayerbe, & Rivera-Torres, 2008; OECD, 2010). Observing how MNEs leverage their capabilities to go beyond local environmental performance standards, some scholars have called for research into the influence of MNE activities on local firms' environmental strategies and outcomes (Aguilera-Caracuel et al., 2014; Christmann, 2004; Golub, Kauffmann, & Yeres, 2011; Marano & Kostova, 2016; Tatoglu, Bayraktar, Sahadev, Demirbag, & Glaister, 2014).

To understand how the MNE impact unfolds, we first investigate the extent to which MNEs influence the attention that a local firm allocates to a range of environmental problems. Attention refers to a cognitive process through which a firm detects, interprets, and focuses time and effort on new changes (Ocasio, 1997). According to the attention-based view, a firm's innovation depends on its effective attention management under the constraints of cognitive resources (Ridge, Johnson, Hill, & Bolton, 2017; Yadav, Prabhu, & Chandy, 2007). Because of the diverse demands from stakeholders (Aguilera, Filatotchev, Gospel, &

Jackson, 2008) and the substantial learning required in eco-innovation (Maletič et al., 2014), developing adequate attention is a vital initial step for a firm to allocate and maintain strategic resources for eco-innovation. The quality of a firm's attention also depends on the size of its attention field, namely, the number of issues it can attend to simultaneously (Dahlander, O'Mahony, & Gann, 2016; Dane, 2013). To develop an appropriate attention field, distant knowledge must be accessed (Piezunka & Dahlander, 2015). Building on this view, we argue that foreign MNEs introduce knowledge from distant sources outside the local context, widening the attention field concerning environmental issues in local firms, and then analyze whether an increased field of attention results in relevant action, namely, eco-innovation, and affects the speed of its implementation.

To benefit from distant knowledge, local firms should avoid filtering it out as "alien knowledge" (Piezunka & Dahlander, 2015). In international business, the filtering mechanism is attributed to the psychic distance between foreign and local firms. Psychic distance affects a firm's awareness of the potential of new knowledge and interactions with the knowledge source (Johanson & Vahlne, 2009). Psychic distance increases with the institutional distance between an MNE's country-of-origin and the host country and decreases with the tenure of foreign MNEs in the host country (Dinner, Kushwaha, & Steenkamp, 2019; Zhang, Li, & Li, 2014). Synthesizing insights in international business and the attention-based view, we thus explore the extent to which foreign MNEs' country-of-origin (whether in the vicinity of the host country or not) and tenure (whether they have been in the host country for a long time or not) can weaken the filtering mechanism and therefore strengthen the positive influence of foreign MNEs.

The dataset is based on the South Korean Innovation Survey of 2010, which covers firms' innovation activities from 2007 to 2009, and records of environmental patenting in the

subsequent years, from 2009 to 2012. As South Korea has introduced stringent environmental regulations, many local firms have already shifted corporate attention to environmental issues, but the breadth of attention to eco-innovation has been slow to develop, revealing limitations in internal attention drivers. Our model estimation uses the ordinary least squares (OLS), probit, and proportional hazard models.

This paper makes the following contributions. First, our findings respond to recent calls for empirical research into the effects of MNE activities on the implementation of exploratory types of social strategy in local firms (Maletič et al., 2014; Tatoglu et al., 2014). Thus, we show that MNEs' social impact can be attributed to the diffusion of exploratory as well as exploitative types of social strategy. Moreover, we address how the impact of foreign MNEs involves cognitive changes such as modified attention fields within local firms. Our finding complements the literature that has demonstrated how local firms learn from knowledge spillovers from foreign-MNE activities (Kwok & Solomon, 2006; Zhang et al., 2014), by additionally proposing attention-field development as an antecedent of actual behavioral change. Finally, we contribute to the literature on the type of knowledge required for the development of attention field. We show that transnational agents such as MNEs can affect how local firms are likely to detect and then use distant knowledge to develop a wider attention field. By observing the interaction between local firms and MNEs rather than among single-country firms, this study extends the understanding of the conditions under which external drivers are salient in attention-based analyses, compared with firm-level internal drivers (Ocasio, 2011; Van Knippenberg, Dahlander, Haas, & George, 2015).

The paper is structured as follows. Section 2 briefly reviews the literature on the impact of foreign MNEs, explains the role of attention in eco-innovation, and then develops the research hypotheses. Section 4 presents the data and methodology and empirical results.

The final section further discusses the findings, their contribution to the literature, and topics for further research.

2. Theory and Hypotheses

2.1. Cross-border knowledge diffusion and attention field

Eco-innovation refers to activities to reduce environmentally harmful impacts and replace existing resource-intensive technological regimes with sustainable regimes (Seebode, Jeanrenaud, & Bessant, 2012). It pre-emptively integrates stakeholder demands in the early design stages of a new product or service, with substantial self-initiative and institutional entrepreneurship (Jennings & Zandbergen, 1995; Wu, Parker, Wu, & Lee, 2018). Eco-innovation differs from exploitative strategies to adopt extant managerial routines and practices in requiring the exploration of new technologies, characterized by "search, variation, risk-taking, experimentation, play, flexibility, discovery, and innovation," not "refinement, choice, production, efficiency, selection, implementation, execution" of exploitative activities (Maletič et al., 2014; March, 1991: 71).

In this study, eco-innovation is a setting in which to observe MNE impacts on local firms. Building on the well-established foreign direct investment (FDI) spillover literature (Perri & Peruffo, 2016), we can consider knowledge spillovers as a mechanism of MNE influence, namely, MNEs and their cross-border activities function as an international channel of knowledge spillover (Crescenzi, Gagliardi, & Iammarino, 2015; Irsova & Havranek, 2013). MNEs have the organizational capability to create, retain, and transfer knowledge through internalized knowledge-management mechanisms across foreign subsidiaries (Argote, McEvily, & Reagans, 2003; Frenz & Ietto-Gillies, 2007; Gupta &

Govindarajan, 2000); their subsidiaries then can provide opportunities for local firms to observe and learn from knowledge spillover (García, Jin, & Salomon, 2013; Herrigel, Wittke, & Voskamp, 2013; Javorcik, 2004; Zhang et al., 2014). Elaborating the mechanism, Zhang, Li & Li (2014) proposed that MNEs may not deliberately instruct local peers but allow "imitation from a distance" in a host economy. Concerning spillovers of social norms, Kwok & Tadesse (2006) suggested the movement of professionals facilitates interfirm knowledge flows between local firms and MNEs.

Knowledge spillover alone is insufficient to explain the impact of MNEs on the diffusion of proactive eco-innovation among local firms. According to Kogut (1991), cross-border knowledge spillovers are also conditional on the diffusion of intangible organizational pillars. The role of such pillars is prominent in eco-innovation diffusion because a typical challenge in eco-innovation projects arises from complex and conflicting ethical, relational, and instrumental demands by multiple stakeholders (Aguilera, Rupp, Williams, & Ganapathi, 2007; Hoffman, 2001). According to the attention-based view, firms have limited cognitive resources, and their attention to focal issues can be unstable in such a dynamic environment (Daft, Sormunen, & Parks, 1988; Ocasio, 1997). Attention is thus a necessary initial condition for a firm to process information and then commit (or not) physical resources appropriately (Yadav et al., 2007). According to our review of the literature, the salience of attention has not been addressed as a component of the knowledge spillover mechanism.

2.2. Attention field and the effect of eco-innovation by MNEs

In this study, we focus on attention field as a driver of eco-innovation, an exploratory social strategy. Exploration of new ideas and discoveries is vital for sustainable competitiveness, albeit challenging in dynamic and uncertain settings (Abebe, 2012;

Nadkarni & Narayanan, 2007). As such, an organization's exploration performance depends on how well it can consider a range of new issues simultaneously (Dane, 2013). To develop the breadth of attention field, a firm requires a knowledge search that is telescopic and able to absorb information from distant and unfamiliar sources (Piezunka & Dahlander, 2015; Vasudeva & Anand, 2011).

Using this logic, this paper views foreign MNEs as able to influence local firms' eco-innovation by providing them with distant knowledge originating outside the host country and unfamiliar to local firms. MNEs are exposed to multiple national rules and norms on environmental management across countries (Kostova, Roth, & Dacin, 2008; Marano & Kostova, 2016). When they subsequently enter other host countries, having gathered knowledge and know-how on environmental rules in the complex international context, they can transfer the acquired knowledge to both their subsidiaries and local counterparts (Kang, 2013; Maksimov, Wang, & Yan, 2019). An attention field benefits more from distant than familiar knowledge—the potential of knowledge from familiar local sources is often missed because of complacency (Piezunka & Dahlander, 2015).

MNEs not only disseminate but also create a distinct climate of knowledge unfamiliar to other local firms. MNEs are typically peripheral actors because of liabilities of outsidership (Johanson & Vahlne, 2009). Their peripheral status can result in niche ideas and practices divergent from the dominant practices in the network cores (Cattani & Ferriani, 2008; Siegel et al., 2019). Even when they use local isomorphism strategy, the outcome of local adaptation is far from homogenization, because MNEs conform to the dual requirements of both their current host country and their headquarter (Kostova & Roth, 2002). As such, their eco-innovation activities can demonstrate unique knowledge to the host country. The role of external knowledge on eco-innovation has been demonstrated in the literature, but few

studies have differentiated between distinct knowledge emanating from peripherally situated foreign entities, and its impact on the broadening of attention field in the context of eco-innovation (Dahlander et al., 2016; Horbach, Rammer, & Rennings, 2012).

Local firms can detect distant knowledge within MNEs through the following channels. Due to organizations' tendency to avoid cognitive dissonance across subunits (Thøgersen & Ölander, 2003), MNEs pass on global values and norms to local staff, who then spread them to local peers (Kwok & Solomon, 2006; Monteiro, Arvidsson, & Birkinshaw, 2008; Un, 2015). Furthermore, a foreign MNE may be a downstream buyer that hires local suppliers; to integrate its supply chain, it transfers to local suppliers the environmental standards adopted from outside the host country (Husted & David, 2006; Kwok & Solomon, 2006; Zhu, Cordeiro, & Sarkis, 2013). Another channel is competition, a key context of the interaction between foreign MNEs and local firms, and in response to increasing competition, local firms may emulate foreign entrants' knowledge to defend and extend their market share (Danneels, 2002; Hunt & Davis, 2012; Roberts, 1999).

Information gleaned from foreign MNEs then contributes to wider attention fields in local firms. The influence of such distant knowledge on attention in local firms can be understood as a "disembeddedness" process. Dacin et al. (1999) proposed that actors can be disembedded from the prevailing cognition, culture, politics, and social structure when they are exposed to information on contexts outside the local structure. Disembeddedness then removes path dependency, nurturing an attitude and perception in favor of new issues and practices (Oliver, 1992). MNEs that have displayed wide attention fields regarding environmental issues are likely to have accumulated a variety of distant knowledge, and this is easily noticeable by local incumbents and is a vivid, convincing driver of

disembeddedness.[2] As such, distant knowledge from foreign-MNE activities can create room in local firms' consciousness for more environmental issues. Thus, we propose hypothesis1 (H1):

H1.

The presence of foreign MNEs conducting eco-innovation locally and possessing a wide attention field is positively related to the size of a local firm's attention field concerning environmental issues.

2.3. Psychic distance and the effect of MNEs' country-of-origin

Although distant knowledge can extend a firm's attention field, it can also be filtered out. Studies have shown that a firm may fail to attend to distant knowledge because its content is initially less convincing, its potential is uncertain, and conversion into actual ideas is perceived as costly (Piezunka & Dahlander, 2015; Vasudeva & Anand, 2011). Interpersonal and interorganizational channels to access distant sources cannot be formed ordinarily, due to mutual trust issues impeding the knowledge transfer process (Dane, 2013). Such challenges can increase cognitive stress, which may even make a firm give up their quest (Dane, 2013). These results imply that the process of capturing distant knowledge is fragile, although local firms ("knowledge-search firms") may be exposed to learning opportunities from MNEs ("knowledge-source firms") (Zhang et al., 2014).

[2] To what extent MNEs are a vivid, convincing driver of disembeddedness relative to domestic incumbents is a topic worthy of further attention. Thus, this study does not intend to rule out the influence of domestic firms with an equivalent breadth of attention fields. We thank an anonymous reviewer for raising this issue.

International business researchers have shown that bounded attention to distant knowledge can be attributed to the distance between countries. In this view, intercountry difference entails a subjective condition called psychic distance, which causes cognitive blindness to new market opportunities and obstacles in trust-building in networks (Dinner et al., 2019; Johanson & Vahlne, 1977). If the country-of-origin of foreign MNEs is marked by high geographic distance and wide differences in formal and informal institutions from the host country, then local firms' perceived credibility of the content of knowledge demonstrated by foreigners decreases, and relationships with such foreign firms falter. In other words, psychic distance can lead to local firms filtering out foreign knowledge as "alien." Psychic distance will be lower, however, if an MNE's country-of-origin is geographically and institutionally closer to the host country—local firms can recognize the content reliability of their knowledge, and interpersonal and interorganizational interactions can facilitate knowledge flows. In such cases, local firms may attend to—rather than filter out—distant knowledge. Thus, we propose hypothesis 2 (H2):

H2.

The presence of foreign MNEs conducting eco-innovation locally and originating from home countries with low psychic distance from the host country is positively related to the size of a local firm's attention field concerning environmental issues.

2.4. Familiarity and the effect of MNEs' tenure

The geographical and institutional distance between an MNE's country-of-origin and the host country is permanent, but psychic distance can narrow as firm-level conditions change. Studies have found that as entry tenure increases and firm-level experiences

gradually accumulate, a foreign MNE can overcome psychic distance and learn how to address local ways of assessing information, interfirm interactions, and interpersonal interactions (Delios & Henisz, 2003; García-Canal & Guillén, 2008; Salomon & Wu, 2012). Likewise, the tendency for a local firm to filter out alien knowledge can decrease as the foreign MNE's tenure in the host country increases. Reduced psychic distance can breed familiarity and trust with the source of distant knowledge. During long tenure, a foreign MNE can train local workers, and accrue local experience to gain the approval of local stakeholders. It can also increase market share, which can then make its practices conspicuous and observable in the local market. Interpersonal and interorganizational distance between such MNEs and local business networks gradually reduces, developing familiar perceptions, weakening filtering mechanisms in local firms, and increasing the likelihood of local firms attending to distant knowledge. Therefore, we propose hypothesis 3 (H3):

H3.

The presence of foreign MNEs conducting eco-innovation locally and having long tenure in the host country is positively related to the size of a local firm's attention field concerning environmental issues.

2.5. Outcome of the attention field

Studies have demonstrated that the size of an attention field is an essential driver of firms' innovation processes (Dahlander et al., 2016; Yadav et al., 2007). An organization's exploration performance depends on how well it can consider a range of new issues simultaneously (Dane, 2013). A wide attention field facilitates strategic adjustment according to dynamic and uncertain situations (Abebe, 2012; Nadkarni & Narayanan, 2007).

With a large attention field, managers can recognize a range of social and environmental options and thus can retain attentional focus on environmental issues, despite the cognitive distance from pre-existing economic targets (Herrmann, Montaser-Kouhsari, Carrasco, & Heeger, 2010; Ocasio, 2011). A large attention field to a range of external stimuli may compensate for constraints in information-processing capabilities and facilitate organizational processes of sense-making of the focal environmental issue. As a result, the organization can overcome bias toward familiar issues (Cho & Hambrick, 2006; Van Knippenberg et al., 2015).

A wide attention field also helps managers select an optimal solution. In environmental strategy, there are no standard formulae for replacing a resource-intensive technological regime with a more environmentally friendly regime. Once a wide attention field is attained, managers can more easily make sense of a complex context and prioritize problems (Baer, Dirks, & Nickerson, 2013; Reitzig & Sorenson, 2013). In designing new routines for eco-innovation, a wide perspective can inform firms of what behaviors fit and replace inferior options with superior alternatives. The ability to shift focus flexibly between a range of options helps avoid the underutilization or waste of resources on an ineffective strategy (Eriksen & St. James, 1986). Notably, failure to orient attention to optimal options over competing sub-optimal options can lead to poor performance, causing a waste of resources, inefficient decision-making, and even reduced productivity (Haas, Criscuolo, & George, 2015; Piezunka & Dahlander, 2015).

In the context of our study, we expect an increased attention field to have a favorable impact on the implementation of eco-innovation projects by improving the firm's awareness of new environmental problems and solutions, supporting its motivation to act on them. Furthermore, we expect that an increased attention field will speed up a firm's response to

new problems and solutions by facilitating the deployment of relevant resources and capabilities for the action (Yadav et al., 2007). Thus, we propose hypotheses 4a (H4a) and 4b (H4b):

H4a.

The size of an attention field that is increased in the presence of foreign MNEs conducting eco-innovation locally is positively related to the likelihood of eco-innovation implementation in a local firm.

H4b.

The size of an attention field that is increased in the presence of foreign MNEs conducting eco-innovation locally is positively related to the speed of eco-innovation implementation in a local firm.

2.6. Moderating effect of size in local firms

Although this paper focuses on the organizational impact of foreign MNEs via attention fields, we do not overlook resource issues. Studies have explored the effect of size on eco-innovation. A large firm is more likely than a small firm to have abundant information and resources available for stakeholder relationship management, whether passive or proactive (Darnall et al., 2010).

Such abundance, however, has high costs. A large firm may be distracted by internal issues, such as competition between members over organizational attention between those supporting proactive measures such as eco-innovation and those preferring passive measures (Wickert, Scherer, & Spence, 2016). Large size may also confer greater organizational inertia, due to existing core competencies or structural rigidity from strong path dependency within existing routines (Leonard-Barton, 1992; March, 1991).

By contrast, this study argues that the effect of attention field on the success rate of eco-innovation will be more salient in large than in small organizations. A wide attention field for environmental issues can cancel out the internal inhibitions in a large firm. After developing sufficient attention across a range of environmental issues, a large firm may be able to redeploy existing internal resources for eco-innovation projects quickly. Smaller organizations with the same level of attention field, however, may be slow to deploy or even fail to secure the necessary resources. Thus, we propose that the effect of attention field, which is triggered after the detection of foreign MNEs' distant knowledge, can be greater in larger than smaller local firms, in hypotheses 5a (H5a) and 5b (H5b):

H5a.

The positive relationship between attention field and the likelihood of eco-innovation implementation will be stronger in a large local firm.

H5b.

The positive relationship between attention field and the speed of eco-innovation implementation will be stronger in a large local firm.

3. Data and Methodology

3.1. Data

Our main data is the Korean Innovation Survey (KIS) of 2010, a national survey administered by the Science and Technology Policy Institute. Its questionnaire follows the Organisation for Economic Co-operation and Development's (OECD's) Oslo Manual Version 3 and covers quantitative and qualitative aspects of firms' innovation activities in the manufacturing sector from 2007 to 2009. For 2010, the KIS included an additional section on

eco-innovation, using the same format as the Community Innovation Surveys (CIS) of the European Commission. The KIS was conducted by visit, as well as mail, fax, and telephone. The response rate was 51.03%.

The KIS survey respondents included both foreign and local firms in the manufacturing sector. Using a categorical question on firm type, we could identify local firms as opposed to subsidiaries of foreign MNEs. Based on another survey question on the organizational team involved in the R&D, we further narrow the focus to local firms with separate R&D units, to focus on firms with the initial relevant resources and capabilities for eco-innovation. Finally, we extract a final sample of 1,552.

We further supplemented the KIS data with other official statistics, including the Korean Intellectual Property Office database for 2009–2012 and statistics on environmental taxes from the Ministry of Environment and from Statistics Korea.

3.2. Measures

3.2.1. Eco-innovation implementation

For the dependent variable, we focus on two measures of eco-innovation implementation. The first dependent variable is the likelihood of successful implementation of eco-innovation. We measure it using patents as a proxy of innovation projects implemented by a firm (García et al., 2013). We use the code 1 if a firm had submitted environmental patent applications in the period, and 0 otherwise. Environmental patents are identified by the technological classification of the patent application, as suggested by the OECD (2014). Referring to other studies such as Haskel et al. (2007), we observe a two-year lagged effect of foreign-MNE activities that were reported in 2007–2009 on the success rate of the eco-innovation two years later.

We also measure the speed of eco-innovation implementation and the extent to which it is fast or slow in response to the external distant knowledge. Referring to Yadav et al. (2007), we measure this using the year in which a local firm filed its first environmental patent application in any year from 2009 to 2012. If the year of first application is 2009, the firm responded faster than firms filing in later years.

3.2.2. Attention field

Our mediator variable is the extent to which attention field covers multiple environmental issues. To measure attention field, Crilly et al. (2012) counted the number of stakeholder types that organizations recognized as salient. Likewise, we obtain the number of eco-innovation types that a firm had been committed to from 2007 to 2009, based on self-reported data in the KIS survey. We posit that such commitments constitute evidence of the organizational attention paid to the issue (Haas et al., 2015; Piezunka & Dahlander, 2015).

In the survey, respondents were asked whether they had introduced innovation with environmental benefits within the firm in nine areas: environmental process innovations for (1) improving resource efficiency; (2) improving energy efficiency; (3) reducing CO_2 emissions; (4) reducing hazardous waste; (5) reducing pollution; (6) promoting the recycling and use of renewable energy; (7) environmental product innovations for developing energy-saving products; (8) pollution-cutting products; and (9) recyclable products. Firms with the largest possible attention field scored 9, and firms with the smallest, 0.

The KIS survey questions on eco-innovation are identical to those in the European Union's (EU's) CIS/OECD survey and are validated by detailed cognitive tests (Arundel & Kemp, 2008). Nevertheless, some respondents may still regard certain areas as equivalent and put those together. To check for this, we conduct a discriminant function analysis of the canonical correlations between the nine responses. We also conduct a principal component

analysis to check that the factor loading scores were evenly high when the nine items are loaded to a single component. Both results confirm that the survey represents distinct areas in eco-innovation.

3.2.3. Foreign

Our study examines the effect of foreign MNEs conducting eco-innovation locally. We posit that foreign MNEs act as an exogenous driver of a large attention field. Following Javorcik (2004) and Lu (2002), we calculate the presence of foreign MNEs as a ratio of foreign-MNE subsidiaries in the total R&D expenditures of each industry. Our study focuses on the within-industry effect, based on two-digit classification in the Korean Standard Industrial Classification. Using the KIS survey's related questions, we identify if a foreign-MNE subsidiary conducted eco-innovation in 2007–2009 in South Korea.

Our first three hypotheses consider three types of MNEs conducting eco-innovation locally in the host country: those whose attention field covers a wide range of environmental issues (*Foreign_green*), those whose country-of-origin has low psychic distance from the host country (*Foreign_proximate*), and whose tenure in the host country is long (*Foreign_old*). To measure *Foreign_green*, we identify foreign-MNE subsidiaries with attention fields greater than the local industry average. We use attention field relative to the industry average as a benchmark of the group's overall visibility within the rest of the sector (Haunschild & Miner, 1997), to capture the foreign firms visible to other local firms.

To measure *Foreign_proximate,* we identify Japanese MNEs. Japan and South Korea have close informal institutions based on religious, linguistic, cultural, and historical links, as well as geographically proximate locations, that were consistently identified as constituents of a similar cultural cluster (Ronen & Shenkar, 2013). Informal institutions such as culture can shape and sometimes supplement a country's formal institutions (Holmes, Miller, Hitt, &

Salmador, 2013), and significant gaps in intercountry informal institutions are an enduring source of psychic distance. Thus, South Korea's counterparts will experience less psychic distance from Japan than from other major countries of origin of inward FDI in South Korea, such as the United States and EU countries.

To measure *Foreign_old,* we identify foreign-MNE subsidiaries with more years of operation than the local industry average and thus in abundant possession of local experience to address psychic distance and have marketing capabilities equivalent to average local incumbents (Dinner et al., 2019), despite potentially high initial cross-country differences.

3.2.4. *Control variables*

We control for other industry and firm-level factors that could influence a domestic firm's eco-innovation. The size of a local firm is measured by workforce, which is included as a response in the KIS, and this variable is related to a firm's overall visibility in the public arena (Darnall et al., 2010). Competition is measured by the Herfindahl index in the industry and is a proxy for market structure. R&D Intensity is total R&D expenditures divided by the number of employees. Intrafirm cooperation is a dummy variable based on a KIS survey question asking whether a firm had engaged in R&D cooperation with affiliates in the same business group, to control for intraorganizational transfer of knowledge (De Marchi, 2012). The presence of other foreign MNEs (Other Foreign MNE) not conducting a proactive social strategy locally is included to control for foreign competition.

To represent domestic institutions influencing a firm's exploratory social strategy, we adopt Policy and Linkages. To control for the effects of policy instruments other than green tax, Policy is based on a KIS questionnaire asking whether a domestic firm had received government R&D subsidies from 2007 to 2009, and is a dummy variable encoded 1 if the fiscal support a firm received was greater than 0. Green Tax is the growth rate of the

environment-related taxes levied by the Korean government in 2007–2009 on all firms in the region where the local firm is based. The data were obtained from the database of Statistics Korea. Finally, Linkages is measured by the ratio of transactions with industrial downstream customers in a firm's total sales, and obtained from KIS data.

3.3. Estimation strategy

We estimate the three sets of regression models: an OLS regression of the relationship between foreign MNEs' presence and local firms' attention field, a probit regression of the relationships between attention field and the probability of successful completion of eco-innovation within local firms (indicated as 1), and a proportional hazard model with covariates to test the effect of attention field on the speed of eco-innovation implementation. The OLS and probit models are specified as follows, where $Foreign_i$ is one of the three foreign-presence indicators affecting the i^{th} local firm—Foreign_green, Foreign_old, and Foreign_proximate; error terms are e_i and μ_i:

$$\text{Attention Field}_i = \beta_0 + \beta_1 \text{Foreign}_i + \sum \beta_k \cdot \text{Controls}_{ik} + e_i \quad (1)$$

$$\Pr(\text{Eco-innovation Implementation}_i = 1) = \pi_0 + \pi_1 \text{Attention Field}_i + \pi_2 \text{Foreign}_i + \sum \pi_k \cdot \text{Controls}_i + \mu_i \quad (2)$$

Concerning the proportional hazard model, the dependent variable is expressed as h_i (t) or the likelihood (or hazard rate) that a local firm "i" implements eco-innovation projects and then files patent applications based on the outcome at time "t." The coefficients are positive if eco-innovation is implemented immediately after the local firm is exposed to the

distant knowledge in foreign MNEs within its sector. Referring to Yadav et al. (2007), we use the Cox hazard function as follows:

$$h_i(t) = h_0(t) \exp(\gamma_1 \text{Attention Field}_i + \gamma_2 \text{Foreign}_i + \sum \gamma_k . \text{Controls}_i) \quad (3)$$

We observe various biases in causality due to cross-section observations in our data. The first-stage OLS regression needs to address endogeneity bias. Attention fields in foreign MNEs and local firms could be correlated through the same unobserved factor even without mutual causal links if the foreign MNEs accidentally selected sectors where local firms were independently adjusting their attention fields to environmental issues. Furthermore, identifying the effect of foreign-MNE presence by using incomplete datasets rather than the full population data can cause selection biases (Eapen, 2013). To address such potential biases, the three variables of the presence of foreign MNEs are instrumentalized. We formulate the equation in Eq. (4), which assumes that foreign MNEs' entry is in response to comparative advantages in the local industry context, not to the potential salience of environmental issues. We ran Eq. (4) three times, using Foreign_green, Foreign_age, and Foreign_proximate, respectively, as the dependent variables. Each time we obtained the predicted variable of the respective foreign-presence variable and then used it as the instrumentalized measure of the corresponding foreign-presence variable in our main models.

$$\text{Foreign}_i = \sigma_0 + \sigma_1 \text{RCA}_i + \sigma_2 \text{Competition}_i + \text{Industry dummy} + \varepsilon_i \quad (4)$$

As an instrumental variable, we obtain the relative comparative advantage (RCA) for 22 two-digit industries for 2007 from the Korea Institute for International Economic Policy

and the Korea Institute for Industrial Economics and Trade. The host country's trade orientation had been used as an instrumental variable in the FDI spillover research of Crescenzi et al (2015). We then assign a value of 1 if the RCA score is greater than 1 (meaning the industry has comparative advantages in international trade), and 0 otherwise. We then include two control variables: industry competition measured by Herfindhal, and industry dummies.

In the probit regression, there could be a reverse effect from dependent to key independent variables. Thus, we examine the two-year lagged effect. The presence of Foreign MNEs and local firms' attention field were observed in 2007–2009, and eco-innovation as the outcome of the factors was observed in 2011.

4. Empirical Results

Table 1 shows the correlations and descriptive statistics of variables. As discussed earlier, our models contain the instrumental variable method. Based on Crescenzi et al. (2015) and Baum et al. (2007) and using STATA, our next step was to test the quality of the instrument variable. Table 2 reports the result: the instrument variable is relevant to the variable to be instrumentalized and is only indirectly related to the outcome variable (Semadeni, Withers, & Trevis Certo, 2014).

Insert Tables 1 and 2 about here

Tables 3 and 4 contain three models, each comprising a first-stage regression testing of the direct effect of Foreign on Attention Field, a second-stage regression testing the relationship between Attention Field and Eco-innovation, and another second-stage

regression on the effect of Attention Field on the hazard rate of eco-innovation implementation in each year. The F-statistics or chi-square statistics of all the regression models were statistically significant.

Insert Tables 3 and 4 about here

4.1. Effect of MNEs' eco-innovation

Hypothesis 1 concerns the positive effect of foreign MNEs that locally conduct eco-innovation and have a wide attention field on local firms' attention fields regarding environmental issues. Model 1 shows that foreign MNEs positively influence the size of attention field in local firms (β=3.036, p<0.01). Hypothesis 1 is supported.

4.2. Effect of MNEs' country-of-origin

Hypothesis 2 addresses the effect of MNEs from the vicinity of the host country and thus is marked by low psychic distance. Model 2 shows that the presence of foreign MNEs that conduct eco-innovation locally and are from countries with geographically and institutionally proximate locations from the host country has a positive influence on local firms' attention field (β=5.964, p<0.05).

4.3. Effect of MNEs' tenure

Hypothesis 3 is on the effect of MNEs with long tenure in the host country that generate perceived familiarity regardless of the high initial psychic distance from local firms. Model 3 shows that the presence of foreign MNEs conducting eco-innovation locally and having long tenure has a positive influence on local firms' attention field (β =4.741, p<0.01).

4.4. Outcome of attention field

Hypothesis 4a is on the effect of attention field, which is increased by foreign-MNE presence, on eco-innovation implementation. Models 4–6 show that attention field consistently has coefficients with positive signs under the control of *Foreign MNE*, *Foreign_proximate*, and *Foreign_old*. Hypothesis 4a is supported (β=0.0484, 0.0466, 0.0468, p<0.01). Thus, all three types of foreign MNEs first increase a local firm's attention field, and subsequently, the enlarged attention field has a positive effect on the successful implementation of eco-innovation by that firm.

We also conduct further tests. Local firms may not develop attention to environmental issues and conduct no eco-innovation anyway, with or without MNEs. Thus, we calculate this selection bias as the inverse Mills ratio and enter it in Models 7–9, regressing the dependent variable of eco-innovation implementation. The results are consistent with those of Models 4–6 in terms of the coefficients' signs.

Hypothesis 4b is on the speed of eco-innovation implementation. Table 4 reports the result of the proportional hazard model, where the coefficients indicate the covariates' effect on the hazard rate. In Models 10–12, the coefficients of Attention Field are nonsignificant. In other words, there is no evidence that a large attention field developed after observing that foreign MNEs' distant knowledge can speed up the implementation of eco-innovation projects rather than delaying it. Thus, Hypothesis 4b cannot be supported.

4.5. Moderating effect of size

Hypotheses 5a and 5b explore the positive moderating effect of local firm size. In Models 13–15, regarding the implementation of eco-innovation, the interaction term (Attention Field x Size (Log)) is positive and significant (β=0.0345, 0.0356 and 0.0355,

p<0.01). Thus, attention field increases the likelihood of eco-innovation implementation, and this effect is stronger in larger than smaller local firms. Hypothesis 5a is supported.

In Models 16–18 on the speed of eco-innovation implementation, the interaction term (Attention Field x Size (Log)) is also positive and significant (β=0.0362, 0.0361, and 0.0354, p<0.10). This finding means the effect of attention field on the hazard rate of speedy implementation is supported in large local firms, although such an effect is not confirmed in a test without the moderating effect of size. Thus, Hypothesis 5b is supported.

4.6. Further analysis

For each aforementioned regression, we could calculate the marginal effects of a one-unit increase in foreign presence identified under different criteria. We demonstrate that the marginal effect of MNEs conducting eco-innovation based on a wide attention field is 3.059. In other words, a one-unit increase in such foreign MNEs may motivate a local firm to pay attention to approximately three new types of eco-innovation. Thus, if there is a local firm that has attended to two eco-innovation activities (the average level of attention field in our sample), it can then attend to up to five environmental issues, after the entry of foreign MNEs with a wide attention field.

The marginal effect increases as psychic distance decreases, and firms' tenure increases. The marginal effect from a one-unit increase in foreign MNEs from the vicinity is 5.964, and this is greater than the influence of foreign MNEs' eco-innovation activity regardless of their countries of origin. The marginal effect of foreign MNEs with long tenure in the host country is 4.741, which is greater than that of foreign MNEs' eco-innovation activity without considering their tenure. This analysis is consistent with international business researchers' predictions of the effect of psychic distance.

Our main models have shown that size is a positive moderator of the effect of attention field on eco-innovation outcomes in a local firm. Thus, we also calculate the marginal effect of attention field on eco-innovation outcome by firm size. The marginal effect analysis is consistent with the finding: assuming the attention field is stimulated by foreign MNEs with wide attention field, the one-unit increase in attention field implies a 0.401% increase in the likelihood that an average-sized firm completes eco-innovation successfully; for larger firms (top 25% by size), the marginal effect increases to 4.432%.

5. Discussion and Conclusions

5.1. Discussion

This study explores whether eco-innovation by MNEs influences similar eco-innovation in local firms. We have examined the extent to which foreign MNEs influence the successful, speedy implementation of eco-innovation by stimulating internal cognitive changes, namely, widening the field of attention to environmental issues, in a local firm.

Motivated by studies that have highlighted the role of attention in firms' behavior, our study proposes that attention field mediates the effects of foreign MNEs on local firms' eco-innovation in a host country. When foreign MNEs conduct eco-innovation locally, they introduce knowledge gained from sources distant from the host country. The distant knowledge is then detected and processed, shaping a wider attention field in local firms to a variety of eco-innovation activities. Thus, the effect of foreign MNEs is understood as an exogenous trigger of attention in local firms on environmental issues. This role of foreign MNEs would not be easily replaced by local peers because familiarity can cause

complacency, making new knowledge from a familiar origin unobservable. This finding is in line with studies on the role of distant knowledge in attention-field development and studies implicating the interorganizational diffusion of cognition (Cantù, 2017; Dane, 2013).

Furthermore, this study shows under what conditions the effect of MNEs' activities on local firms' attention field with regard to environmental issues may become more salient. We demonstrate that the positive effect of foreign MNEs may increase further if they are from countries in the vicinity of the host country or if the foreign MNEs have operated in the host country for a long time. We infer that this occurs because the two attributes in foreign MNEs reduce the possible filtering out of distant knowledge as alien knowledge. The literature has revealed that interactions between foreign and local firms are affected by psychic distance, which is attributed to the institutional gap between MNEs' country-of-origin and the host country (Dinner et al., 2019; Johanson & Vahlne, 2009). Our findings are in line with the increasing application of the psychic distance concept, which has become prominent amid the growing incidence of international marketing challenges and liabilities of foreignness. More specifically, we propose the use of international business research on the subjective development of psychic distance between local firms and foreign MNEs to identify components of attention-field development.

Finally, this study shows that a broader attention field subsequently results in the successful implementation of eco-innovation projects in local firms. A wide attention field incorporating distant knowledge helps local firms recognize, apprehend, and prioritize which environmental issues to address. Local firms may even use a large attention field to instantaneously speed up eco-innovation implementation, although this effect is found only in large local firms. In other words, the conversion of attention to instant action depends on the availability of pre-existing internal resources that are immediately re-deployable for eco-

innovation. The literature has predicted the impact of foreign MNEs in host countries through human exchange, market competition, and demonstration effects (Zhang et al., 2014). Our findings affirm the extant proposition and suggest that the three channels of the impact of foreign-MNE activities will be preceded by relevant cognitive changes. This implies that the attention-based view can elaborate analysis of the impact of FDI (Daft & Weick, 1984; Ocasio, 2011).

5.2. Contributions and managerial implications

This paper makes the following research contributions. First, this paper provides empirical evidence regarding the role of foreign MNEs in eco-innovation diffusion among local firms, both in terms of the likelihood of implementation and its speed. Thus, our study responds to the call for research into the social impact of MNEs' activities in host countries. We also report the boundary conditions of foreign MNEs' role in diffusing eco-innovation, namely, their country-of-origin and tenure in the host country.

Another contribution is our investigation of the extent to which a cognitive perspective is relevant to the effects of foreign MNEs as a mediator. In other studies, the knowledge-based and institution-based views have assumed that local firms are automatically motivated to convert information from foreign MNEs into action. In the knowledge-based view, drivers of eco-innovation are technological capabilities (De Marchi, 2012; Delmas & Montes-Sancho, 2010); in the institution-based view, the stronger the institutional pressures from coercive or non-coercive sources, the more likely firms will respond by adopting social and environmental practices (DiMaggio & Powell, 1983). Adding to the existing insights, our attention-based explanation argues that foreign MNEs may stimulate the field of attention to cover a range of environmental issues in local firms before actual action occurs. This finding

indicates that contrary to pre-existing assumptions, the diffusion of action can be fragile unless it is accompanied by appropriate cognitive foundations in local firms.

Moreover, our study shows how attention field in an organization is affected by an exogenous factor such as distant knowledge. Attention field is stimulated by social cognition that is externally constructed and adopted from the outside, as well as by internal members' physiological cognition, information processing, and conscious sense-making (Fiske & Taylor, 2013). Thus far, studies have focused on the detailed specification of endogenous factors, such as enterprise logic, organizational history, and characteristics of managers, to explain how a firm's attention field is shaped (Crilly & Sloan, 2012; Dane, 2013; Piezunka & Dahlander, 2015). However, different types of exogenous factors, such as distant external knowledge, have been overlooked. Advancing one step further, this study shows how the influence of distant knowledge may vary according to the type of agent that carries and demonstrates it. In our study, MNEs are identified as unique boundary-crossing agents that have gathered knowledge spanning multiple national institutional fields. Adopting insights from international business research, we have elaborated how local knowledge-searchers' psychological distance and experiential factors may filter out distant knowledge within MNEs, despite the value of the knowledge's content. Thus, our research extends the theory on the role of exogenous triggers of attention and boundary conditions, by exploring the case of the transnational diffusion of a new exploratory social strategy.

This research also has implications for policy-making. FDI policies have focused on the economic benefits of FDI. However, local firms may not benefit from the entry of foreign MNEs if local firms fail to remain focused on opportunities to learn new technologies and management practices. Thus, FDI policies should consider broader social effects and examine

the multiple mediation mechanisms involved, from technological, institutional, and cognitive perspectives.

Another implication is the selection of transnational benchmarks for attention management in eco-innovation projects. We show that there are endogenous and exogenous mechanisms of organizational attention control. Our research shows that a company can use exogenous mechanisms by paying attention to benchmarkable peers. We suggest that transnational peers may be effective benchmarks for the management of organizational attention. Selection of transnational benchmarks can complement endogenous mechanisms, which tend to develop slowly based on internal enterprise logics, historical memory in the organization, or the insights of the top management team. Any subsequent actions by local firms may not necessarily replicate those of foreign MNEs but can be customized for the firm's context. Thus, the social impact of foreign MNEs may not the be convergence of action but the emergence of more diverse firm-level approaches to eco-innovation.

5.3. Limitations and topics for further research

The limitations of this study can be topics for further research. Although this study focuses on the activities of foreign MNEs as stimuli of attention, further research could explore how foreign MNEs develop their attention field, based on the home country or international stimuli. There is also room for improvement in the construct validity of our Attention Field measurement. Although this study measured attention field size within a firm, further research might assess attention existing at multiple levels within the firm. Further research would benefit from applying qualitative analysis, which may reveal methods of interorganizational transmission of attention, their impact on local firms' strategy formulation

process, and the conditions under which local firms' sensitivity to external stimuli translate into behavioral change.

Tables and Figures

Table 1
Correlation matrix and descriptive statistics

		1	2	3	4	5	6	7	8	9	10	11
1	Eco-innovation	1.000										
2	Foreign_green	0.076***	1.000									
3	Foreign_proximate	-0.020	0.107***	1.000								
4	Foreign_old	-0.020	0.282***	0.266***	1.000							
5	Green	0.133***	0.092***	0.084***	0.111***	1.000						
6	Size	0.195***	0.092***	-0.036	-0.018	0.267***	1.000					
7	Competition	-0.017	0.060	0.514***	0.073***	0.082***	0.011	1.000				
8	Interfirm Cooperation	0.116***	-0.013	0.016	-0.014	0.160***	0.127***	0.050*	1.000			
9	Intrafirm Cooperation	0.115***	0.016	0.012	0.007	0.214***	0.301***	0.023	0.310***	1.000		
10	R&D Intensity	-0.010	-0.009	-0.019	-0.002	-0.017	-0.051**	-0.006	-0.001	0.009	1.000	
11	Linkages	0.002	0.052**	-0.020	-0.039	0.1026***	0.1323***	0.007	0.057**	0.0810***	-0.034	1.000
12	Other Foreign MNEs	-0.008	-0.1296***	0.1318***	0.3360***	0.0865***	0.015	0.031	0.011	0.014	-0.007	0.051**
13	Green Tax	-0.053**	-0.1038***	0.047*	-0.036	-0.014	0.031	0.025	-0.0051	0.0339	-0.0254	0.1116***
14	Subsidy	0.1252***	0.0987***	0.019	0.023	0.1539***	0.1914***	0.054**	0.2285***	0.1064***	-0.0145	0.0630**
15	Clockspeed	-0.055**	0.0984***	-0.062**	0.0710***	-0.022	-0.038	-0.023	-0.0379	-0.0574**	0.0175	0.0210
	Observations	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552
	Mean	0.060	0.081	0.016	0.026	2.612	4.292	0.333	0.253	0.035	35408.170	0.357
	Standard Deviation	0.237	0.131	0.046	0.060	3.059	1.388	0.247	0.435	0.183	569116.100	0.441

(Continued)

		12	13	14	15
12	Other Foreign MNEs	1.000			
13	Green Tax	0.0281	1.0000		
14	Subsidy	0.0037	0.0122	1.0000	
15	Clockspeed	-0.0389	-0.0855 ***	-0.0879 ***	1.000
	Observations	1,552	1,552	1,552	1,552
	Mean	0.029	-0.348	0.595	2.716
	Standard Deviation	0.043	0.468	0.491	0.777

Note: *** p<0.01, ** p<0.05, * p<0.1

Table 2

Quality of the instrumental variable

First-stage models				Relevance of the instrumental variable						Exogeneity of the instrumental variable	
Model number	Variable to instrument	Instrumental variable	Dependent variable	F-statistics of the excluded instrumental variable	*p* value	Under-identification test (Anderson Canon. Corr. LM Chi square statistic)	*p* value	Weak identification test (Cragg-Donald Wald F statistic)	*p* value	Endogeneity test (Durbin-Wu-Hausman statistic)	*p* value
(1)	Foreign_green	RCA	Attention Field	13.92	0.000	14.06	0.000	13.92	0.000	0.116	0.733
(2)	Foreign_green	RCA	Eco-innovation	13.87	0.000	14.02	0.000	13.87	0.000	0.231	0.631
(3)	Foreign_old	RCA	Attention Field	17.39	0.000	17.37	0.000	17.39	0.000	0.219	0.640
(4)	Foreign_old	RCA	Eco-innovation	17.36	0.000	17.36	0.000	17.36	0.000	0.237	0.626
(5)	Foreign_proximate	RCA	Attention Field	42.56	0.000	43	0.000	42.56	0.000	0.191	0.662
(6)	Foreign_proximate	RCA	Eco-innovation	42.51	0.000	41.82	0.000	42.51	0.000	0.232	0.630

Note: RCA = revealed comparative advantage

Table 3

Empirical results (1)

	1	2	3	4	5	6	7	8	9
Dependent variables	Attention field	Attention field	Attention field	Eco-innovation	Eco-innovation	Eco-innovation	Eco-innovation	Eco-innovation	Eco-innovation
Method	OLS	OLS	OLS	Probit	Probit	Probit	Probit, with selection bias	Probit, with selection bias	Probit, with selection bias
<Key variables>									
Foreign_green	3.036***			-0.821*			-0.817*		
	(1.142)			(0.479)			(0.468)		
Foreign_proximate		5.964**			-0.195			-0.185	
		(2.258)			(1.199)			(1.181)	
Foreign_old			4.741***			-0.487			-0.486
			(1.461)			(1.561)			(1.560)
Attention Field				0.0484***	0.0466***	0.0468***	0.0516*	0.0504*	0.0507*
				(0.0185)	(0.0178)	(0.0180)	(0.0302)	(0.0299)	(0.0301)
<Controls>									
Size (Log)	0.415***	0.444***	0.440***	0.205***	0.195***	0.195***	0.203***	0.193***	0.193***
	(0.0692)	(0.0707)	(0.0707)	(0.0443)	(0.0447)	(0.0447)	(0.0438)	(0.0448)	(0.0447)
Competition	0.887**	0.421	0.797*	-0.542**	-0.541**	-0.539**	-0.543**	-0.542**	-0.541**
	(0.427)	(0.525)	(0.417)	(0.235)	(0.232)	(0.224)	(0.237)	(0.234)	(0.227)
Interfirm Network	0.557***	0.536***	0.543***	0.284**	0.290**	0.289**	0.282**	0.288**	0.287**
	(0.197)	(0.196)	(0.196)	(0.129)	(0.129)	(0.129)	(0.125)	(0.125)	(0.124)
Intragroup Network	1.901***	1.907***	1.923***	-0.0150	-0.0162	-0.0146	-0.0201	-0.0222	-0.0207
	(0.554)	(0.554)	(0.553)	(0.220)	(0.217)	(0.216)	(0.226)	(0.223)	(0.222)
R&D Intensity	-2.15e-08	-1.57e-08	-2.21e-08	-3.17e-07	-3.04e-07	-3.02e-07	-3.16e-07	-3.03e-07	-3.01e-07
	(3.72e-08)	(3.50e-08)	(3.66e-08)	(3.26e-07)	(3.21e-07)	(3.20e-07)	(3.26e-07)	(3.20e-07)	(3.20e-07)
Linkages	0.417**	0.459**	0.428**	-0.250*	-0.253*	-0.254*	-0.250*	-0.252*	-0.254*
	(0.186)	(0.185)	(0.188)	(0.150)	(0.150)	(0.149)	(0.150)	(0.150)	(0.149)
Other MNEs	6.386**	9.029***	4.037	-0.695	-1.310	-0.810	-0.725	-1.343	-0.844

	(2.664)	(2.392)	(2.920)	(1.208)	(1.105)	(1.740)	(1.250)	(1.172)	(1.725)
Green Tax	-0.201	-0.188	-0.193	-0.309**	-0.301**	-0.302**	-0.309**	-0.301**	-0.302**
	(0.146)	(0.147)	(0.147)	(0.135)	(0.133)	(0.134)	(0.135)	(0.133)	(0.133)
Policy Support	0.466***	0.460***	0.455***	0.324**	0.329**	0.329**	0.322**	0.326**	0.326**
	(0.130)	(0.131)	(0.131)	(0.146)	(0.145)	(0.146)	(0.151)	(0.150)	(0.150)
Clockspeed	-0.0529	-0.0207	-0.0327	-0.0671	-0.0838	-0.0831	-0.0671	-0.0838	-0.0831
	(0.0850)	(0.0870)	(0.0873)	(0.0737)	(0.0769)	(0.0769)	(0.0738)	(0.0770)	(0.0770)
Selection Effect							0.00998	0.0117	0.0118
							(0.0636)	(0.0633)	(0.0636)
Industry effect	Included	Included	Included	Included	Included	Included	Included	Included	Included
Constant	-0.687	-0.684	-0.797*	-3.411***	-3.351***	-3.336***	-3.407***	-3.346***	-3.332***
	(0.442)	(0.470)	(0.467)	(0.390)	(0.406)	(0.411)	(0.387)	(0.403)	(0.409)
R2 or Pseudo R2	0.130	0.129	0.130	0.181	0.179	0.179	0.181	0.179	0.179
Observations	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552	1,552

Note: Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4

Empirical results (2)

Dependent variables	10 Implementation speed	11 Implementation speed	12 Implementation speed	13 Eco-innovation	14 Eco-innovation	15 Eco-innovation	16 Implementation speed	17 Implementation speed	18 Implementation speed
Method	Proportional hazard	Proportional hazard	Proportional hazard	Probit	Probit	Probit	Proportional hazard	Proportional hazard	Proportional hazard
<Key variables>									
Foreign_green	0.00742			-0.606			0.0945		
	(1.019)			(0.637)			(1.022)		
Foreign_proximate		-0.206			0.118			-0.00726	
		(2.855)			(1.654)			(2.837)	
Foreign_old			-1.817			-0.142			-1.586
			(2.488)			(1.442)			(2.457)
Attention Field	0.0528	0.0529	0.0537	-0.130*	-0.137*	-0.136*	-0.137	-0.136	-0.132
	(0.0410)	(0.0410)	(0.0410)	(0.0771)	(0.0782)	(0.0782)	(0.110)	(0.110)	(0.110)
Attention Field x Size (Log)				0.0345***	0.0356***	0.0355***	0.0362*	0.0361*	0.0354*
				(0.0128)	(0.0130)	(0.0130)	(0.0191)	(0.0190)	(0.0190)
<Controls>									
Size (Log)	0.279***	0.278***	0.276***	0.0746	0.0642	0.0641	0.153	0.155	0.155
	(0.0708)	(0.0699)	(0.0700)	(0.0654)	(0.0667)	(0.0667)	(0.0970)	(0.0958)	(0.0958)
Competition	-1.594***	-1.575***	-1.519***	-0.611**	-0.640**	-0.623**	-1.630***	-1.624***	-1.561***
	(0.500)	(0.558)	(0.504)	(0.241)	(0.281)	(0.254)	(0.502)	(0.559)	(0.505)
Interfirm Network	0.383**	0.383**	0.380**	0.301**	0.306**	0.305**	0.393**	0.392**	0.389**
	(0.189)	(0.189)	(0.189)	(0.130)	(0.130)	(0.130)	(0.189)	(0.189)	(0.189)
Intragroup Network	-0.850*	-0.850*	-0.846*	-0.195	-0.202	-0.200	-1.048**	-1.047**	-1.037**
	(0.491)	(0.491)	(0.491)	(0.258)	(0.258)	(0.258)	(0.507)	(0.507)	(0.506)
R&D Intensity	-9.85e-08	-9.89e-08	-9.66e-08	-2.93e-07	-2.81e-07	-2.81e-07	-1.03e-07	-1.05e-07	-1.03e-07
	(3.53e-07)	(3.53e-07)	(3.49e-07)	(2.89e-07)	(2.85e-07)	(2.86e-07)	(3.40e-07)	(3.41e-07)	(3.38e-07)
Linkages	-0.197	-0.197	-0.204	-0.257**	-0.260**	-0.260**	-0.194	-0.193	-0.198

	(0.205)	(0.205)	(0.206)	(0.130)	(0.130)	(0.130)	(0.206)	(0.205)	(0.206)
Other MNEs	0.204	0.235	2.111	-1.047	-1.518	-1.361	0.486	0.566	2.206
	(3.034)	(2.932)	(3.927)	(1.881)	(1.718)	(2.315)	(3.045)	(2.939)	(3.901)
Green Tax	-0.407*	-0.408*	-0.414*	0.355***	0.359***	0.359***	-0.426**	-0.426**	-0.431**
	(0.211)	(0.212)	(0.211)	(0.138)	(0.138)	(0.138)	(0.211)	(0.211)	(0.211)
Policy Support	0.876***	0.876***	0.877***	-0.0617	-0.0737	-0.0737	0.895***	0.894***	0.896***
	(0.235)	(0.235)	(0.235)	(0.0838)	(0.0836)	(0.0837)	(0.235)	(0.235)	(0.235)
Clockspeed	-0.0720	-0.0718	-0.0696	-0.325**	-0.319**	-0.319**	-0.0642	-0.0623	-0.0608
	(0.127)	(0.125)	(0.125)	(0.138)	(0.138)	(0.138)	(0.127)	(0.125)	(0.126)
Selection Effect	0.0479	0.0478	0.0476	-0.0185	-0.0180	-0.0181	0.0216	0.0213	0.0213
	(0.0840)	(0.0839)	(0.0839)	(0.0600)	(0.0598)	(0.0598)	(0.0855)	(0.0854)	(0.0854)
Industry Effect	Included	Included	Included	Included	Included	Included	Included	Included	Included
Constant				-2.838***	-2.772***	-2.772***			
				(0.486)	(0.492)	(0.498)			
Pseudo R2				0.194	0.193	0.193			
Observations	1,505	1,505	1,505	1,552	1,552	1,552	1,505	1,505	1,505

Note: Standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

References

Abebe, M. A. (2012). Executive attention patterns, environmental dynamism and corporate turnaround performance. *Leadership & Organization Development Journal, 33*(7), 684-701. https://doi.org/10.1108/01437731211265250.

Aguilera-Caracuel, J., Fedriani, E. M., & Delgado-Márquez, B. L. (2014). Institutional distance among country influences and environmental performance standardization in multinational enterprises. *Journal of Business Research, 67*(11), 2385-2392. https://doi.org/10.1016/j.jbusres.2014.02.005.

Aguilera, R. V., Filatotchev, I., Gospel, H., & Jackson, G. (2008). An Organizational Approach to Comparative Corporate Governance: Costs, Contingencies, and Complementarities. *Organization Science, 19*(3), 475-492. https://doi.org/10.1287/orsc.1070.0322.

Aguilera, R. V., Rupp, D. E., Williams, C. A., & Ganapathi, J. (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *The Academy of Management Review, 32*(3), 836-863. https://doi.org/10.2307/20159338.

Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management science, 49*(4), 571-582. https://doi.org/10.1287/mnsc.49.4.571.14424.

Arundel, A., & Kemp, R. (2008). *Measuring eco-innovation*. (UNU-MERIT Working Paper Series 2009-017). United Nations University (UNU) - Maastricht Economic and Social Research and Training Centre on Innovation and Technology (MERIT) Retrieved from https://www.persistent-identifier.nl/urn:nbn:nl:ui:27-fbc16790-9c36-4f89-a014-402ea69fd3f0

Baer, M., Dirks, K. T., & Nickerson, J. A. (2013). Microfoundations of strategic problem formulation. *Strategic Management Journal, 34*(2), 197-214. https://doi.org/10.1002/smj.2004.

Baum, C. F., Schaffer, M. E., & Stillman, S. (2007). Enhanced routines for instrumental variables/generalized method of moments estimation and testing. *The Stata Journal, 7*(4), 465-506. https://doi.org/10.1177/1536867X0800700402.

Cai, X., Lu, Y., Wu, M., & Yu, L. (2016). Does environmental regulation drive away inbound foreign direct investment? Evidence from a quasi-natural experiment in China. *Journal of Development Economics, 123*, 73-85. https://doi.org/10.1016/j.jdeveco.2016.08.003.

Cantù, C. (2017). Entrepreneurial knowledge spillovers: Discovering opportunities through understanding mediated spatial relationships. *Industrial Marketing Management, 61*(Supplement C), 30-42. https://doi.org/10.1016/j.indmarman.2016.07.002.

Cattani, G., & Ferriani, S. (2008). A Core/Periphery Perspective on Individual Creative Performance: Social Networks and Cinematic Achievements in the Hollywood Film Industry. *Organization Science, 19*(6), 824-844. https://doi.org/10.1287/orsc.1070.0350.

Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization Science, 17*(4), 453-469. https://doi.org/10.1287/orsc.1060.0192.

Christmann, P. (2004). Multinational companies and the natural environment: Determinants of global environmental policy. *Academy of Management Journal, 47*(5), 747-760. https://doi.org/10.5465/20159616.

Chung, S. (2014). Environmental regulation and foreign direct investment: Evidence from South Korea. *Journal of Development Economics, 108*, 222-236. https://doi.org/10.1016/j.jdeveco.2014.01.003.
Crescenzi, R., Gagliardi, L., & Iammarino, S. (2015). Foreign multinationals and domestic innovation: Intra-industry effects and firm heterogeneity. *Research Policy, 44*(3), 596-609. http://dx.doi.org/10.1016/j.respol.2014.12.009.
Crilly, D., & Sloan, P. (2012). Enterprise logic: Explaining corporate attention to stakeholders from the 'inside-out'. *Strategic Management Journal, 33*(10), 1174-1193. https://doi.org/10.1002/smj.1964.
Dacin, M. T., Beal, B. D., & Ventresca, M. J. (1999). The embeddedness of organizations: dialogue & directions. *Journal of Management, 25*(3), 317-356. https://doi.org/10.1016/S0149-2063(99)00005-7.
Daft, R. L., Sormunen, J., & Parks, D. (1988). Chief executive scanning, environmental characteristics, and company performance: An empirical study. *Strategic Management Journal, 9*(2), 123-139. https://doi.org/10.1002/smj.4250090204.
Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review, 9*(2), 284-295. https://doi.org/10.5465/amr.1984.4277657.
Dahlander, L., O'Mahony, S., & Gann, D. M. (2016). One foot in, one foot out: how does individuals' external search breadth affect innovation outcomes? *Strategic Management Journal, 37*(2), 280-302. https://doi.org/10.1002/smj.2342.
Dane, E. (2013). Things Seen and Unseen: Investigating Experience-Based Qualities of Attention in a Dynamic Work Setting. *Organization Studies, 34*(1), 45-78. https://doi.org/10.1177/0170840612464752.
Darnall, N., Henriques, I., & Sadorsky, P. (2010). Adopting proactive environmental strategy: The influence of stakeholders and firm size. *Journal of Management Studies, 47*(6), 1072-1094. https://doi.org/10.1111/j.1467-6486.2009.00873.x.
De Marchi, V. (2012). Environmental innovation and R&D cooperation: Empirical evidence from Spanish manufacturing firms. *Research Policy, 41*(3), 614-623. http://dx.doi.org/10.1016/j.respol.2011.10.002.
Delios, A., & Henisz, W. (2003). Political hazards, experience, and sequential entry strategies:The international expansion of Japanese firms, 1980–1998. *Strategic Management Journal, 24*(11), 1153-1164. https://doi.org/10.1002/smj.355.
Delmas, M. A., & Montes-Sancho, M. J. (2010). Voluntary agreements to improve environmental quality: Symbolic and substantive cooperation. *Strategic Management Journal, 31*(6), 575-601. https://doi.org/10.1002/smj.826.
DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147-160. https://doi.org/10.2307/2095101.
Dinner, I. M., Kushwaha, T., & Steenkamp, J.-B. E. M. (2019). Psychic distance and performance of MNCs during marketing crises. *Journal of International Business Studies, 50*(3), 339-364. https://doi.org/10.1057/s41267-018-0187-z.
Eapen, A. (2013). FDI spillover effects in incomplete datasets. *Journal of International Business Studies, 44*(7), 719-744. https://doi.org/10.1057/jibs.2013.32.
Eriksen, C. W., & St. James, J. D. (1986). Visual attention within and around the field of focal attention: A zoom lens model. *Perception & Psychophysics, 40*(4), 225-240. https://doi.org/10.3758/bf03211502.
Fiske, S. T., & Taylor, S. E. (2013). *Social Cognition: From Brains to Culture*. London, UK: Sage.

Frenz, M., & Ietto-Gillies, G. (2007). Does multinationality affect the propensity to innovate?: An analysis of the third UK Community Innovation Survey. *International Review of Applied Economics, 21*(1), 99-117. https://doi.org/10.1080/02692170601035033.
García-Canal, E., & Guillén, M. F. (2008). Risk and the strategy of foreign location choice in regulated industries. *Strategic Management Journal, 29*(10), 1097-1115. https://doi.org/10.1002/smj.692.
García, F., Jin, B., & Salomon, R. (2013). Does inward foreign direct investment improve the innovative performance of local firms? *Research Policy, 42*(1), 231-244. http://dx.doi.org/10.1016/j.respol.2012.06.005.
Golub, S. S., Kauffmann, C., & Yeres, P. (2011). *Defining and measuring green FDI: An exploratory review of existing work and evidence*. (No. 2011/2). OECD Working Papers on International Investment Retrieved from https://www.oecd-ilibrary.org/finance-and-investment/defining-and-measuring-green-fdi_5kg58j1cvcvk-en
Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal, 21*(4), 473-496. https://doi.org/10.1002/(SICI)1097-0266(200004)21:4<473::AID-SMJ84>3.0.CO;2-I.
Haas, M. R., Criscuolo, P., & George, G. (2015). Which problems to solve?: Online knowledge sharing and attention allocation in organizations. *Academy of Management Journal, 58*(3), 680-711. https://doi.org/10.5465/amj.2013.0263.
Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review, 20*(4), 986-1014. https://doi.org/10.5465/amr.1995.9512280033.
Haskel, J. E., Pereira, S. C., & Slaughter, M. J. (2007). Does inward Foreign Direct Investment the productivity of domestic firms? *The Review of Economics and Statistics, 89*(3), 482-496. https://doi.org/10.1162/rest.89.3.482.
Haunschild, P. R., & Miner, A. S. (1997). Modes of interorganizational imitation: The effects of outcome salience and uncertainty. *Administrative Science Quarterly, 42*(3), 472-500. https://doi.org/10.2307/2393735.
Herrigel, G., Wittke, V., & Voskamp, U. (2013). The process of Chinese manufacturing upgrading: Transitioning from unilateral to recursive mutual learning relations. *Global Strategy Journal, 3*(1), 109-125. https://doi.org/10.1111/j.2042-5805.2012.01046.x.
Herrmann, K., Montaser-Kouhsari, L., Carrasco, M., & Heeger, D. J. (2010). When size matters: Attention affects performance by contrast or response gain. *Nature neuroscience, 13*(12), 1554-1559. https://doi.org/10.1038/nn.2669.
Hoffman, A. J. (2001). Linking organizational and field-level analyses the diffusion of corporate environmental practice. *Organization & Environment, 14*(2), 133-156. https://doi.org/10.1177/1086026601142001.
Holmes, R. M., Miller, T., Hitt, M. A., & Salmador, M. P. (2013). The interrelationships among informal institutions, formal institutions, and inward foreign direct investment. *Journal of Management, 39*(2), 531-566. https://doi.org/10.1177/0149206310393503.
Holtbrügge, D., & Dögl, C. (2012). How international is corporate environmental responsibility?: A literature review. *Journal of International Management, 18*(2), 180-195. https://doi.org/10.1016/j.intman.2012.02.001.
Horbach, J., Rammer, C., & Rennings, K. (2012). Determinants of eco-innovations by type of environmental impact: The role of regulatory push/pull, technology push and market pull. *Ecological Economics, 78*, 112-122. http://dx.doi.org/10.1016/j.ecolecon.2012.04.005.
Husted, B. W., & David, B. A. (2006). Corporate social responsibility in the multinational enterprise: Strategic and institutional approaches. *Journal of International Business Studies, 37*(6), 838-849. https://doi.org/10.1057/palgrave.jibs.8400227.

Irsova, Z., & Havranek, T. (2013). Determinants of horizontal spillovers from FDI: Evidence from a large meta-Analysis. *World Development, 42*(0), 1-15. http://dx.doi.org/10.1016/j.worlddev.2012.07.001.
Javorcik, B. S. (2004). Does foreign direct investment increase the production of domestic firms? In search of spillovers through backward linkages. *American Economic Review, 94*(3), 605-627. https://doi.org/10.1257/0002828041464605.
Jennings, P. D., & Zandbergen, P. A. (1995). Ecologically sustainable organizations: An institutional approach. *Academy of Management Review, 20*(4), 1015-1052. https://doi.org/10.5465/amr.1995.9512280034.
Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23-32. https://doi.org/10.2307/254397.
Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies, 40*(9), 1411-1431. http://dx.doi.org/10.1057/jibs.2009.24.
Kang, J. (2013). The relationship between corporate diversification and corporate social performance. *Strategic Management Journal, 34*(1), 94-109. https://doi.org/10.1002/smj.2005.
Kellenberg, D. K. (2009). An empirical investigation of the pollution haven effect with strategic environment and trade policy. *Journal of International Economics, 78*(2), 242-255. https://doi.org/10.1016/j.jinteco.2009.04.004.
Kogut, B. (1991). Country capabilities and the permeability of borders. *Strategic Management Journal, 12*(S1), 33-47. https://doi.org/10.1002/smj.4250120905.
Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *The Academy of Management Journal, 45*(1), 215-233. https://doi.org/10.2307/3069293.
Kostova, T., Roth, K., & Dacin, M. T. (2008). Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review, 33*(4), 994-1006. https://doi.org/10.5465/amr.2008.34422026.
Kwok, C. C. Y., & Solomon, T. (2006). The MNC as an agent of change for host-country institutions: FDI and corruption. *Journal of International Business Studies, 37*(6), 767-785. https://doi.org/10.2307/4540383.
Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic Management Journal, 13*(S1), 111-125. https://doi.org/10.1002/smj.4250131009.
Lu, J. W. (2002). Intra- and inter-organizational imitative behavior: Institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies, 33*(1), 19-37. Retrieved from http://dx.doi.org/10.1057/palgrave.jibs.8491003.
Maksimov, V., Wang, S. L., & Yan, S. (2019). Global connectedness and dynamic green capabilities in MNEs. *Journal of International Business Studies*, 1-18. https://doi.org/10.1057/s41267-019-00275-z.
Maletič, M., Maletič, D., Dahlgaard, J. J., Dahlgaard-Park, S. M., & Gomišček, B. (2014). Sustainability exploration and sustainability exploitation: From a literature review towards a conceptual framework. *Journal of Cleaner Production, 79*(2), 182-194. http://dx.doi.org/10.1016/j.jclepro.2014.05.045.
Marano, V., & Kostova, T. (2016). Unpacking the institutional complexity in adoption of CSR practices in multinational enterprises. *Journal of Management Studies, 53*(1), 28-54.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science, 2*(1), 71-87. https://doi.org/10.1287/orsc.2.1.71.
Monteiro, L. F., Arvidsson, N., & Birkinshaw, J. (2008). Knowledge flows within multinational corporations: Explaining subsidiary isolation and its performance implications. *Organization Science, 19*(1), 90-107. https://doi.org/10.1287/orsc.1070.0264.
Murillo-Luna, J. L., Garcés-Ayerbe, C., & Rivera-Torres, P. (2008). Why do patterns of environmental response differ?: A stakeholders' pressure approach. *Strategic Management Journal, 29*(11), 1225-1240. https://doi.org/10.1002/smj.711.
Nadkarni, S., & Narayanan, V. K. (2007). Strategic schemas, strategic flexibility, and firm performance: The moderating role of industry clockspeed. *Strategic Management Journal, 28*(3), 243-270. https://doi.org/10.1002/smj.576.
Ocasio, W. (1997). Towards an attention-based view of the firm. *Strategic Management Journal, 18*(S1), 187-206. https://doi.org/10.1002/(SICI)1097-0266(199707)18:1+<187::AID-SMJ936>3.0.CO;2-K.
Ocasio, W. (2011). Attention to attention. *Organization Science, 22*(5), 1286-1296. https://doi.org/10.1287/orsc.1100.0602.
OECD. (2010). *Eco-Innovation in Industry*. Paris: OECD.
OECD. (2014). *The OECD Environmental Outlooks*. Paris: OECD.
Oliver, C. (1992). The antecedents of deinstitutionalization. *Organization Studies, 13*(4), 563-588. https://doi.org/10.1177/017084069201300403.
Perri, A., & Peruffo, E. (2016). Knowledge spillovers from FDI: A critical review from the international business perspective. *International Journal of Management Reviews, 18*(1), 3-27. https://doi.org/10.1111/ijmr.12054.
Piezunka, H., & Dahlander, L. (2015). Distant search, narrow attention: How crowding alters organizations' filtering of suggestions in crowdsourcing. *Academy of Management Journal, 58*(3), 856-880. https://doi.org/10.5465/amj.2012.0458.
Poelhekke, S., & van der Ploeg, F. (2015). Green havens and pollution havens. *The World Economy, 38*(7), 1159-1178. https://doi.org/10.1111/twec.12219.
Reitzig, M., & Sorenson, O. (2013). Biases in the selection stage of bottom-up strategy formulation. *Strategic Management Journal, 34*(7), 782-799. https://doi.org/10.1002/smj.2047.
Ridge, J. W., Johnson, S., Hill, A. D., & Bolton, J. (2017). The role of top management team attention in new product introductions. *Journal of Business Research, 70*, 17-24. https://doi.org/10.1016/j.jbusres.2016.09.002.
Ronen, S., & Shenkar, O. (2013). Mapping world cultures: Cluster formation, sources and implications. *Journal of International Business Studies, 44*(9), 867-897. https://doi.org/10.1057/jibs.2013.42.
Salomon, R., & Wu, Z. (2012). Institutional distance and local isomorphism strategy. *Journal of International Business Studies, 43*(4), 343-367. https://doi.org/10.1057/jibs.2012.3.
Seebode, D., Jeanrenaud, S., & Bessant, J. (2012). Managing innovation for sustainability. *R&D Management, 42*(3), 195-206. https://doi.org/10.1111/j.1467-9310.2012.00678.x.
Semadeni, M., Withers, M. C., & Trevis Certo, S. (2014). The perils of endogeneity and instrumental variables in strategy research: Understanding through simulations. *Strategic Management Journal, 35*(7), 1070-1079. https://doi.org/10.1002/smj.2136.
Siegel, J., Pyun, L., & Cheon, B. Y. (2019). Multinational firms, labor market discrimination, and the capture of outsider's advantage by exploiting the social divide. *Administrative Science Quarterly, 64*(2), 370–397. https://doi.org/10.1177/0001839218769634.

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. http://dx.doi.org/10.1016/j.jwb.2013.12.007.

Thøgersen, J., & Ölander, F. (2003). Spillover of environment-friendly consumer behaviour. *Journal of Environmental Psychology, 23*(3), 225-236. https://doi.org/10.1016/S0272-4944(03)00018-5.

Un, C. A. (2015). The liability of localness in innovation. *Journal of International Business Studies, 47*(1), 44-67. https://doi.org/10.1057/jibs.2015.24.

Van Knippenberg, D., Dahlander, L., Haas, M. R., & George, G. (2015). Information, attention, and decision making. *Academy of Management Journal, 58*(3), 649-657. https://doi.org/10.5465/amj.2015.4003.

Vasudeva, G., & Anand, J. (2011). Unpacking absorptive capacity: A study of knowledge utilization from alliance portfolios. *The Academy of Management Journal, 54*(3), 611-623. https://doi.org/10.5465/amj.2011.61968108.

Wickert, C., Scherer, A. G., & Spence, L. J. (2016). Walking and talking corporate social responsibility: Implications of firm size and organizational cost. *Journal of Management Studies, 53*(7), 1169-1196. https://doi.org/10.1111/joms.12209.

Wu, C.-H., Parker, S. K., Wu, L.-Z., & Lee, C. (2018). When and why people engage in different forms of proactive behavior: Interactive effects of self-construals and work characteristics. *Academy of Management Journal, 61*(1), 293-323. https://doi.org/10.5465/amj.2013.1064.

Yadav, M. S., Prabhu, J. C., & Chandy, R. K. (2007). Managing the future: CEO attention and innovation outcomes. *Journal of Marketing, 71*(4), 84-101. https://doi.org/10.1509/jmkg.71.4.084.

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

Zhang, Y. A., Li, Y., & Li, H. (2014). FDI spillovers over time in an emerging market: The roles of entry tenure and barriers to imitation. *Academy of Management Journal, 57*(3), 698-722. https://doi.org/10.5465/amj.2011.0351.

Zheng, D., & Shi, M. (2017). Multiple environmental policies and pollution haven hypothesis: Evidence from China's polluting industries. *Journal of Cleaner Production, 141*(10), 295-304. https://doi.org/10.1016/j.jclepro.2016.09.091.

Zhu, Q., Cordeiro, J., & Sarkis, J. (2013). Institutional pressures, dynamic capabilities and environmental management systems: Investigating the ISO 9000 – Environmental management system implementation linkage. *Journal of Environmental Management, 114*(15), 232-242. http://dx.doi.org/10.1016/j.jenvman.2012.10.006.