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Institutional Distance and MNE-Subsidiary Initiative Collaboration: The Role of Dual Embeddedness

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Institutional Distance and MNE-Subsidiary Initiative Collaboration:

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ABSTRACT

Entrepreneurial initiatives by subsidiaries are greeted as well as contested. We examine the

effect of institutional distance between the host country of a subsidiary and the home country

of its parent multinational enterprise (MNE) on the resource support a subsidiary receives from

the MNE for its entrepreneurial initiatives. Drawing on social exchange theory, and resource

dependence theory, we argue that while informal institutional distance inhibits MNE resource

support for initiatives, and formal institutional distance further exacerbates the subsidiaries'

options, external embeddedness and reverse knowledge transfers may help subsidiaries bypass

the negative effects of institutional distance and encourage MNE involvement in subsidiary

initiatives. Using survey data from 429 foreign subsidiaries in New Zealand, and secondary

data on formal institutional distance from the Worldwide Governance Indicators, the results

from structural equation modelling provide support to our hypotheses. This study extends

institutional distance, embeddedness, and subsidiary initiative research. Importantly, it

contributes by demonstrating how contingencies such as dual embeddedness and (low) formal

institutional distance can counterbalance the negative effects of informal institutional distance

on subsidiary initiatives and MNE-subsidiary initiative collaboration.

Keywords: Institutional Distance, External Embeddedness, Reverse Knowledge Transfers,

Dual Embeddedness, MNE-subsidiary Initiative Collaboration.

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Institutional Distance and MNE-Subsidiary Initiative Collaboration: The Role of Dual Embeddedness

INTRODUCTION

Subsidiary entrepreneurial initiatives play a positive role in the subsidiary role and capability development (Birkinshaw, 2014; Dörrenbächer & Gammelgaard, 2016; O'Brien, Sharkey Scott, Andersson, Ambos, & Fu, 2019; Schmid, Dzedek, & Lehrer, 2014; Strutzenberger & Ambos, 2014). Initiatives are essential for subsidiary survival as subsidiaries guard their market positions through timely responding to the threats and opportunities they interface or foresee in the various markets (e.g. internal, local, and global) they serve (Birkinshaw, 2014). Initiatives are also important for the MNE as they serve as key determinants of subsidiary competence-creation through which MNEs gain a global competitive advantage (Ahsan & Fernhaber, 2019; Ambos, Ambos, & Schlegelmilch, 2006; Artz, Norman, Hatfield, & Cardinal, 2010; Isaac, Borini, Raziq, & Benito, 2019; Mudambi, Piscitello, & Rabbiosi, 2014).

Subsidiaries seek MNE HQ approval and their engagement in subsidiary initiatives. Initiatives are generally non-routine activities, which may not be part of the subsidiary predefined role, hence require approval from the MNE. HQs have formal authority over resources, which the subsidiaries seek access to for doing market research, problem identification, as well as developing solutions for the problems through initiatives. HQs are generally keen on embedding resources to their subsidiaries as they are interested in exploring further product and market opportunities (Andersson, Forsgren, & Holm, 2002; Verbeke & Yuan, 2020). HQ engagement on initiatives is also important to ensure a strategic fit with an initiative. Through their engagement, subsidiaries share some of the initiative responsibility with the MNE, which increases MNE confidence and reduces the burden on the subsidiary per

se. Also, HQ involvement in subsidiaries' innovation processes may enhance subsidiary competence development (Ciabuschi, Dellestrand, & Martín, 2015).

However, since subsidiary initiatives are non-routine, autonomous actions of subsidiaries (Burgelman, 1983), they are not always welcomed by the parent MNE HQ as well as sister subsidiaries (Birkinshaw & Ridderstråle, 1999; Dörrenbächer & Gammelgaard, 2016). One reason alludes to the well-known 'suspicious of the unknown' and 'not invented here' syndromes (Birkinshaw & Ridderstråle, 1999). Another reason could be the initiative itself, such as when several subsidiaries may be taking initiatives at the same time, but HQ might add value (Nell & Ambos, 2013), or the initiative could add value to the MNE, but for only a few of the cases. Moreover, the quality of HQ-subsidiary relationships (Strutzenberger & Ambos, 2014), the knowledge of HQ managers (Ciabuschi, Forsgren, & Martín, 2011), as well as the HQ managers' subjectivity (Kor, Mahoney, & Michael, 2007) may also influence (positively or negatively) MNE HQ engagement in subsidiary initiatives.

What determines the approvals/rejections of subsidiary initiatives is, hence, a question that remains to be explored. HQ managers ultimately decide whether a subsidiary initiative is approved, scaled-up or winded-up – however, their responses towards the initiative proposals, and the role they may have in the management of subsidiary initiatives are less clear (Ciabuschi et al., 2011; Verbeke & Yuan, 2020). Furthermore, while numerous studies have discussed how headquarters attend to subsidiary initiatives, evidence on how subsidiaries are able to gain initiative acceptance from the MNE HQ remains limited (Gorgijevski, Lind, & Lagerström, 2019) and anecdotal (Delany, 2000). Existing studies mainly draw on drivers of initiative approvals such as the subsidiary manager's issue-selling tactics (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997), subsidiary power (Dörrenbächer & Gammelgaard, 2016), and attractive presentation of the initiative proposal (Gorgijevski et al., 2019; Keupp, 2008). The

studies, however, rarely examine MNE-subsidiary initiative collaboration, which is critical for initiative success.

MNE-subsidiary initiative collaboration may be deterred due to internal factors as well as external factors. A possible external factor is the institutional distance, which refers to differences between the subsidiary home and host countries in terms of their institutional environments (Dellestrand & Kappen, 2011; Ferraris, 2014; Xu & Shenkar, 2002)... Institutional distance is recognized as central in international business and management research (Zaheer, Schomaker, & Nachum, 2012), but its disposition and possible impacts remain unclear (Verbeke, Tulder, & Puck, 2017). This leaves large gaps in the literature, particularly with regard to the effect of institutional distance on the development and implementation of MNE international strategies involving knowledge transfer and innovation as well as on HQ-subsidiary relationships (Xu, Hitt, Brock, Pisano, & Huang, 2021). Furthermore, little is known regarding how MNEs can overcome institutional distance (Fortwengel, 2017).

Institutional distance between the subsidiary home and host contexts can be formal or informal (Hitt, 2016), with the former involving differences on explicit rules and standards (Hitt, 2016), and the latter on aspects such as culture, administration, geography, and economy (Antunes, Barandas, & Martins, 2019; Benito & Gripsrud, 1992; Berry, Guillén, & Zhou, 2010; Ghemawat, 2007). While both aspects impact subsidiaries differently (Aguilera-Caracuel, Hurtado-Torres, Aragón-Correa, & Rugman, 2013), and at times in opposite directions (Yi, Xu, Chen, & Wu, 2020), research on institutional distance mainly looks at formal institutional distance and informal institutional distance, either alone, together in isolation, or as a combined construct (Wu, 2013; Yeh & Hsiao, 2020). This leads to low generalizability (Tihanyi, Griffith, & Russell, 2005) and inconsistency of findings (Xu et al., 2021).

Addressing such calls, we explore the determinants of MNE engagement in subsidiary initiatives, particularly with regard to providing resource support for subsidiary initiatives. We examine the roles of institutional distance and dual embeddedness in MNE-subsidiary initiative collaboration and propose some underlying mechanisms linking institutional distance, dual embeddedness and MNE-subsidiary initiative collaboration. We examine relationships and show how subsidiaries may bypass the effects of institutional distance between the subsidiary home and host country and receive MNE resource support for initiatives.

We begin by examining the role of informal institutional distance for subsidiary initiatives as well as the MNE resource support a subsidiary receives for its initiatives. We then propose and test several moderators; formal institutional distance, external embeddedness, and reverse knowledge transfers. Drawing on social exchange theory (Emerson, 1976) and resource dependence theory (Pfeffer & Salancik, 1978), we argue that: (a) the negative influence of informal institutional distance over subsidiary initiatives will be weaker where the subsidiary is externally embedded; and (b) the likelihood of an MNE to provide resource support for subsidiary initiatives will be higher where the subsidiary is engaged in reverse knowledge transfers. We also propose that the negative relationship between informal institutional distance and MNE resource support for subsidiary initiatives will be stronger where the subsidiary home and host countries are distant in terms of formal environment.

We draw on survey data from 429 foreign-owned subsidiaries in New Zealand. New Zealand is a small and geographically isolated developed economy, having a significant number of foreign MNEs. Despite being distant, New Zealand has rarely been used as an empirical context for examining the influences of institutional distance on subsidiary initiatives, and of MNE-subsidiary collaboration on initiatives. Analyzing the data through structural equation modelling, results provide support for our hypotheses suggesting a positive role of dual embeddedness in encouraging MNE engagement in subsidiary initiatives.

We contribute by addressing a number of research calls. First, through offering useful insights, we advance the much-ignored research on MNE-subsidiary initiative collaboration. Second, by linking three distinct streams of research – i.e. institutional distance, dual embeddedness and MNE-subsidiary initiative collaboration, we address questions on how institutional distance influences MNE strategy development and implementation (Xu et al., 2021) and how distance can be overcome (Fortwengel, 2017). Third, by examining the effects of informal (direct effect) and formal (moderating effect) institutional distance on subsidiary initiatives resource support, we respond to calls for studying the moderating role of institutional distance (Yeh & Hsiao, 2020). Finally, the linkage between external embeddedness and corporate entrepreneurship has received little attention (O'Brien et al., 2019). Here, we step forward by examining the moderating roles of external embeddedness and reverse knowledge transfers, thereby offering some implications for dual embeddedness vis-à-vis subsidiary initiatives (Figueiredo, 2011).

THEORETICAL BACKGROUND AND CONCEPTUAL DEVELOPMENT

Institutional Distance, External Embeddedness and Subsidiary Initiatives

It is widely acknowledged that institutional distance matters in international business (Ambos & Håkanson, 2014; Piaskowska, 2017; Verbeke et al., 2017). Institutional distance refers to differences between countries' institutions, which can be formal or informal (Hitt, 2016). In an international business context the focus is on the difference between the host (subsidiary) and home (HQ) country institutional environments (Kostova et al., 2020). Generally, the institutional environment of a country stands on three pillars: normative (informal), cognitive (values and beliefs), and regulatory (formal) (Scott, 1995). The normative and cognitive categories can be grouped broadly into the normative (informal) category due to overlap of the

aspects involving values and beliefs (DiMaggio & Powell, 1983). The informal distance (Estrin, Baghdasaryan, & Meyer, 2009), also referred to as the psychic distance (Johanson & Vahlne, 1977, 2009), reflects differences on aspects such as culture, administration, geography, and economy (Antunes, Barandas, & Martins, 2019; Benito & Gripsrud, 1992; Berry, Guillén, & Zhou, 2010; Ghemawat, 2007). Formal institutions involve explicit rules and standards (Hitt, 2016), and hence the distance reflects differences on aspects such as laws, rules, and regulations (Abdi & Aulakh, 2012; Konara & Shirodkar, 2018; Shirodkar & Konara, 2017), licensing requirements to operate, corruption, labor laws, as well as corporate social responsibility (Beach & Miles, 2006; Estrin et al., 2009). Both types of distances affect MNE and subsidiary performance differently, exerting different types of pressures on the MNE and the subsidiaries (Aguilera-Caracuel et al., 2013).

Institutional distance negatively influences the subsidiary's competence creating abilities (Asmussen, Pedersen, & Dhanaraj, 2009; Williams & Nones, 2009), product and process innovation (Rodrigues, Borini, Raziq, & Bernardes, 2020) as well as autonomy (Jong, Dut, Jindra, & Marek, 2015). Competences and autonomy should enable subsidiaries to take entrepreneurial initiatives (Birkinshaw, 2014; Birkinshaw, Hood, & Jonsson, 1998; Crookell, 1986), because to be able to effectively respond to a threat or opportunity, the subsidiary must possess a set of relevant, rare and valuable competencies as well as some discretion that would enable them to take an action to outperform their local/international competitors. An initiative is an independent entrepreneurial action taken by a subsidiary, and requires a high level of subsidiary autonomy (Birkinshaw, 2014).

Initiative involves, inter alia, developing new products/services, enhancements in the products and processes, and MNE internal bids for investments (Verbeke & Yuan, 2013). An initiative generally has two purposes. It is either strategic renewal or corporate venturing (Verbeke, Chrisman, & Yuan, 2007). Examples of a strategic renewal include new product

development or enhancements to existing products/services, or new product/market development such as developing new product, but for a foreign market. It could be part of the MNE strategy, for example, transfer of production processes to another subsidiary unit or expanding subsidiary R&D activities. These strategies may be driven internally or through the subsidiary external environment. Corporate venturing involves subsidiaries creating new businesses locally and internationally, such as through joint venturing or diversification. As these decisions are strategic in nature, they require MNE approval and often subsidiaries seeking initiatives get increased MNE monitoring (Ambos, Andersson, & Birkinshaw, 2010), and as discussed earlier, MNE resistance in return.

A subsidiary initiative is typically the consequence of either of three situations: (1) subsidiaries face threats and opportunities in the markets they interface; (2) subsidiaries aspire to assume or be assigned a leading role or position in the MNE; and (3) subsidiary managers have an entrepreneurial disposition and seek to undertake activities beyond the role assigned to them by the parent MNE (Dörrenbächer & Gammelgaard, 2011). The network conceptualization of the MNE suggests that subsidiaries in and through their networks interface with three distinct markets: local, internal and global. An initiative, therefore, may relate to local (i.e. opportunities identified in subsidiary's host country), global (i.e. opportunities identified within the MNE)¹ opportunities (Birkinshaw, 1997, 2014).

Institutional distance makes the focal institutional environments complex (Kostova et al., 2020), requiring a prior understanding by the MNE before entry (Benito & Gripsrud, 1992). In the informal environment, for example, cultural differences (Ishihara & Zolkiewski, 2017;

¹ Internal initiative can have two purposes: (*i*) reconfiguring subsidiary initiatives, which is referred to as 'the internal initiative'; and, (*ii*) extending the subsidiary operations, which is referred to as the 'internal-global hybrid initiative' (Birkinshaw, 2014).

Moreira & Ogasavara, 2018) affect subsidiary performance (Colakoglu & Caligiuri, 2008), knowledge transfers (Kostova, 1999), the applicability of the local knowledge created by the subsidiary to the MNE (Vlajčić, Caputo, Marzi, & Dabić, 2019) as well as the overall subsidiary development (Ferraris, 2014) and subsidiary strategy (Antunes et al., 2019). Cultural distance leads to management complexities for the MNE (Hutzschenreuter, Voll, & Verbeke, 2011). The larger the distance from the MNE network, the harder it is for subsidiaries to develop capabilities (Achcaoucaou, Miravitlles, & León-Darder, 2014; Ciabuschi, Holm, & Martín, 2014; Narula, 2014) and pursue innovations (Bresciani & Ferraris, 2016). Empirical evidence suggests that geographic and knowledge distance can over time even lead to subsidiary loss in terms of their capabilities, roles and mandates (Harzing & Noorderhaven, 2006; Monteiro, Arvidsson, & Birkinshaw, 2008), and sometimes even existence. Geographic distance affects subsidiary innovative performance (Capaldo & Petruzzelli, 2014) as well as roles (Harzing & Noorderhaven, 2006).

From resource dependence (Pfeffer & Salancik, 1978) and social exchange (Emerson, 1976; Stafford, 2008) perspectives, which suggest that subsidiaries engage and share resources from their external environment, the implications can be negative; different institutional environments make resource and social exchanges less probable. The implications for subsidiary entrepreneurship are also negative, as key preconditions for initiative is the subsidiary's specialized resource-base and its autonomy, which are both less likely to be developed in unfamiliar environments. Subsidiaries need access to a broader resource-base, be autonomous to timely respond to the threats and opportunities, as well as have good relations with the MNE. We therefore hypothesize as follows:

H1a: Informal institutional distance and subsidiary initiative are negatively associated.

Institutional distance may affect a subsidiary's external relational embeddedness possibilities (Leppäaho & Pajunen, 2018), and to avoid such effects, a subsidiary needs for local adaptation and embeddedness are greatly increased (Kostova & Zaheer, 1999). Embeddedness in the external environment helps subsidiaries develop competencies (Asmussen et al., 2009), which in turn enable them to take initiatives (Birkinshaw, Hood, & Young, 2005). External embeddedness refers to subsidiary adaptation of resources, procedures, and processes of the collaborating organizations in the subsidiary external network (Gammelgaard, McDonald, Tüselmann, Dörrenbächer, & Stephan, 2011). An externally embedded subsidiary is assigned a certain level of autonomy by the parent MNE, and this coupled with the various competencies a subsidiary develops through its external network (Andersson, Björkman, & Forsgren, 2005; Andersson, Dellestrand, & Pedersen, 2014; Andersson, Forsgren, & Holm, 2001; Andersson et al., 2002) enables the subsidiary to take entrepreneurial initiatives in the various markets it serves.

Empirical evidence suggests that embedded subsidiaries show enhanced innovative performance compared to less embedded subsidiaries (Figueiredo, 2011). Collaborating on R&D with local firms enhances subsidiary innovativeness (Un & Rodríguez, 2018). Trust developed through relationships in external networks leads to enhanced innovativeness (Parra-Requena, Ruiz-Ortega, García-Villaverde, & Rodrigo-Alarcón, 2015). An embedded subsidiary collaborates with local firms, through which the subsidiary knowledge base improves. This collaboration enables subsidiaries to come up with unique ideas and innovations (Chang, Cheng, & Wu, 2012; Oehmichen & Puck, 2016; Walter & Ritter, 2003), leading them toward better business performance (Hallin, Holm, & Sharma, 2011), and exploiting their advantages in the internal and external markets through initiatives. The subsidiary knowledge base enhances through interactions with local networks, and this enhanced knowledge can be transferred back to the MNE network (Karna, Täube, & Sonderegger, 2013).

External embeddedness serves as an important information source for subsidiaries to identify entrepreneurial opportunities (Cooper, 2001). It provides the subsidiary access to new opportunities (Andersson et al., 2005) and motivation from the external competitive environment (Santangelo, 2012), all of which are important for initiative realization (O'Brien et al., 2019). External embeddedness plays a bridging role between subsidiary entrepreneurial orientation and initiative realization – subsidiary managers act as enablers of embeddedness, which mobilizes subsidiary entrepreneurship leading to initiative realization (O'Brien et al., 2019). External embeddedness also has implications for the MNE headquarters. Research suggests that HQs are also embedded in the external networks of subsidiaries, sharing the same mechanisms with subsidiaries with regard to embeddedness and development of entrepreneurial capabilities and actively building relationships with the subsidiary network (Dellestrand, 2011; Hoenen & Kostova, 2015).

Linking to institutional distance, while institutional distance may affect subsidiary entrepreneurship possibilities, external embeddedness may bridge gaps due to distance by encouraging subsidiary proximity to the different environment. Empirical evidence suggests that distance between firms on one dimension can be bridged through proximity on another dimension (Capaldo & Petruzzelli, 2014). Based on the above, we argue that subsidiaries may bypass the negative influences of institutional distance on subsidiary initiatives through embedding in their external networks. The moderating role of external embeddedness is hypothesized as follows:

H1b: External embeddedness moderates the relationship between informal institutional distance and subsidiary initiatives, such that the informal institutional distance and subsidiary initiative negative relationship is weaker when subsidiary external embeddedness is higher.

Managing the dispersed corporate entrepreneurship from its subsidiaries is challenging for the MNE (Birkinshaw, 1997). This is because the institutional distance between the HQ and a subsidiary can be large, and subsidiary specific advantages and MNE firm specific advantages (being geographically dispersed) can be different (Rugman, Verbeke, & Nguyen, 2011). This is also because the subsidiary's ability to learn and develop its innovation capability is much dependent on the host environment characteristics, which can be different from the MNE home environment (Verbeke & Yuan, 2013; Williams & Du, 2014). These asymmetries affect HQ-subsidiary relationships (Kong, Ciabuschi, & Martín, 2018). Institutional distance amplifies complexity as greater distance between the subsidiary and the MNE leads to misunderstandings – on part of the MNE as well as the subsidiary – particularly in terms of understanding the dynamics of the host environment (Kostova, 1999).

It is important to note that due to differences, the distance between the subsidiary and the MNE may be inflicted by the MNE HQ and sister subsidiaries, and it may also be self-inflicted by the subsidiary. For example, some subsidiary managers seek to be more autonomous, having entrepreneurial (Dörrenbächer & Gammelgaard, 2016), or even empire building motives, and may in some cases act incongruently with the overall plan of the MNE (Mudambi & Navarra, 2004a; Rugman & Verbeke, 2001). Differences may also be due to subsidiary advantages being location-bound (Meyer, Mudambi, & Narula, 2011), while the interest in a subsidiary's competence and ability to successfully transfer its competencies to the MNE depends much on the similarities between the host and the home country environments (Kostova & Zaheer, 1999; Xu & Shenkar, 2002).

Subsidiaries compete for MNE attention and resources (Ambos & Birkinshaw, 2010), and while subsidiaries may have other sources, a majority of them typically rely on their parent MNE for resources (Williams, McDonald, Tüselmann, & Turner, 2008). HQs are also generally

interested in embedding resources to their subsidiaries as they are interested in exploring further product and market opportunities (Andersson et al., 2002; Verbeke & Yuan, 2020). However, while HQ managers are key deciders of whether the subsidiary initiative should be approved, scaled-up or winded-up (Verbeke & Yuan, 2020), the institutionally different host environments may cause subsidiaries to receive lesser MNE engagement as the HQ will be unfamiliar with the subsidiary's local environment and may be suspicious of the unknown (Birkinshaw & Ridderstråle, 1999; Lunnan, Tomassen, Andersson, & Benito, 2019).

An important aspect here is the difference in the formal regulatory environment. Where the institutional environments are different, the needs for subsidiary to engage in local innovation activity increases (Bittencourt, de Mattos, & Borini, 2017; Dunning & Lundan, 2008a, 2008b). This is because formal institutional distance negatively influences subsidiary product and process innovation capabilities as well as the subsidiary's possibility to transform these low complexity technological capabilities to broader R&D capacities (Rodrigues et al., 2020). However, this varies with context (Geleilate, Magnusson, Parente, & Alvarado-Vargas, 2016; Wu, 2013). For example, while subsidiaries hosted in technologically advanced contexts may, with regard to R&D and innovation, benefit from the less ambiguous regulatory environment (Gaur & Lu, 2007), this is less likely for subsidiaries hosted in developing economies, where the regulatory environment is generally perceived to be weaker, complex and less stable (Ionascu, Meyer, & Estrin, 2004; Meyer, Estrin, Bhaumik, & Peng, 2009; Meyer & Nguyen, 2005; Shirodkar & Konara, 2017). Formal institutional distance affects subsidiary performance (Shirodkar & Konara, 2017). Furthermore, a different institutional environment per se negatively influences subsidiary initiatives (Ahworegba & Colovic, 2019), particularly where institutional environments are weaker and unstable.

However, all subsidiaries face some level of liability of foreignness (Hymer, 1960; Zaheer, 1995) as well as outsidership (Johanson & Vahlne, 2009). One would assume that

where host-home country distances are substantial in terms of informal and formal institutions, the subsidiary will likely face more isolation from the MNE network as it will be more difficult for the MNE to understand and manage the differences in both the formal and informal environments. In such situations, the MNE's interest in providing resource support for subsidiary initiatives is more likely to diminish than where the subsidiary host country is institutionally distant only on either of the two dimensions. From resource dependence (Pfeffer & Salancik, 1978) and social exchange (Emerson, 1976; Stafford, 2008) perspectives, which suggest that MNEs are partly dependent upon their subsidiary resources, the implication would likely be negative. Since MNE has less knowledge about and confidence in the subsidiary's external environment, the subsidiary is less likely to receive resource support or a preferential treatment from the MNE. Hence, we propose a moderating role of the formal institutional distance as follows:

H2a: Informal institutional distance and MNE resource support for subsidiary initiatives are negatively associated.

H2b: Formal institutional distance moderates the relationship between informal institutional distance and MNE resource support for subsidiary initiatives such that the informal institutional distance and MNE initiative support negative relationship is stronger when the formal institutional distance is higher.

Moderating Role of Reverse Knowledge Transfers

A conjecture of this study is that when subsidiaries involved in knowledge outflows (transfer of knowledge and skills from the subsidiary to the MNE or reverse knowledge transfers) take initiatives, the likelihood of the subsidiary receiving resource support for its initiatives

increases. Knowledge flows indicate a subsidiary has a certain level of integration and embeddedness with the MNE. Internal integration increases HQ attention, which is much needed for the initiative process and subsidiary performance (Ambos & Birkinshaw, 2010); empirical evidence suggests that HQ attention is positively associated with reverse knowledge transfers (Yu, Liu, & Bai, 2019). Internal embeddedness also enables the subsidiary to transfer knowledge back to the MNE (Gölgeci, Ferraris, Arslan, & Tarba, 2019).

Initiatives enable subsidiaries to develop capabilities which can be transferred back to the MNE (Raziq, Rodrigues, Borini, Malik, & Saeed, 2019). Such resource transfers are not just beneficial for the subsidiary but also important for them to sustain their distinctive resources and capabilities in the host market, upgrade them continuously, and integrate them with the MNE network (Ferraris, 2014). Initiatives and external embeddedness enhance subsidiary capabilities (Birkinshaw, 2014; Dezi, Ferraris, Papa, & Vrontis, 2019), which enable them to integrate their various resources. An enhanced knowledge management capability, for example, enables the subsidiaries to better combine the externally acquired knowledge with the knowledge they have acquired internally (Ferraris, Santoro, & Dezi, 2017). Such knowledge is beneficial for the MNE and this integration makes the knowledge more applicable to the MNE.

While reverse knowledge transfers benefit the MNEs in terms of enhanced corporate performance (Yeh & Hsiao, 2020), subsidiaries engaged in reverse knowledge transfers equally enjoy special status and influence (in the form of bargaining power) in the MNE network (Birkinshaw et al., 1998; Cavanagh & Freeman, 2012; Mudambi, Pedersen, & Andersson, 2014). Sharing competencies with the MNE enable the subsidiaries to benefit in terms of gaining such bargaining power in the MNE (Mudambi, Pedersen, et al., 2014), which the subsidiaries may use to pursue their own independent agendas (Mudambi & Navarra, 2004b) such as initiatives. Resource dependence theory (Pfeffer & Salancik, 1978) suggests that resource dependence among firms lead to power relationships. In the context of MNEs

(Cuervo-Cazurra, Mudambi, & Pedersen, 2019; Dörrenbächer & Gammelgaard, 2011), a subsidiary engaging in reverse knowledge transfers (Mudambi, Pedersen, et al., 2014; Najafi-Tavani, Zaefarian, Naudé, & Giroud, 2015) gains power through gaining formal attention (recognition to subsidiary capability) of the MNE (Wang, Hua, Wu, Zhao, & Wang, 2019). Thus, subsidiaries engaged in reverse knowledge transfers can develop a position that is conducive to issue-selling, which is important for the initiative process (Dörrenbächer & Gammelgaard, 2016). Social exchange theory suggests that positive outcomes from an activity lead to reciprocity and repetition of the activity (Emerson, 1976; Stafford, 2008). From these perspectives, a subsidiary that is engaged in reverse knowledge transfers will have MNE trust and confidence in its entrepreneurial initiatives, a bargaining power to pursue initiatives, and a preferential treatment because of the beneficial exchanges, all leading the subsidiaries with better chances of receiving resource support for initiatives. Hence, we hypothesize as follows:

H3: Subsidiary reverse knowledge transfers moderate the relationship between subsidiary initiatives and MNE resource support for subsidiary initiatives such that the likelihood of subsidiary taking initiatives getting MNE resource support is higher where the subsidiary is engaged in reverse knowledge transfers.

Finally, we propose that subsidiary initiatives mediate the relationship between informal institutional distance and MNE resource support for subsidiary initiatives. This involves two moderators, including external embeddedness (Path A), and reverse knowledge transfers (Path B). We propose a moderated mediation hypothesis as follows:

Hypothesis 4: Subsidiary initiatives through the moderators, external embeddedness, and reverse knowledge transfers, mediate the relationship between informal institutional distance and MNE resource support for subsidiary initiatives.

Figure 1 shows the conceptual framework of the study. The dependent variable (DV) is MNE resource support for subsidiary initiatives. The framework contains (i) one independent variable (IV), informal institutional distance; (ii) a mediator variable, subsidiary initiative; (iii) a moderator between the IV and the mediator, external embeddedness; (iv) a moderator between the IV and the DV, formal institutional distance; and, (v) a moderator between the mediator and the DV, reverse knowledge transfers. The framework also includes control variables as subsidiary age, subsidiary size, and industry, to take account of heterogeneity across subsidiaries.

***** Insert Figure 1 about here *****

DATA AND METHODS

Data

The empirical context of this study is foreign-owned MNE subsidiaries in New Zealand. Being a small island country with a key distinctive feature of geographical remoteness, New Zealand is generally an under-researched context. Investments to New Zealand come mainly from MNEs originating in Australia, USA, and Western European countries. New Zealand shares characteristics with other relatively small, and peripheral countries (Benito & Narula, 2007; Gammelgaard, McDonald, Tüselmann, Dörrenbächer, & Stephan, 2009; Raziq, Benito, Toulson, Malik, & Ahmad, 2019), and this provides scope for generalizing findings from the

study. From a knowledge sharing/sourcing and embeddedness perspective, the New Zealand context is also interesting as it is often argued that foreign MNEs in small open economies as New Zealand mostly source knowledge locally and transfer back to MNE (Scott-Kennel & Saittakari, 2020; Singh, 2007).

Data were collected through a survey conducted in 2012-2013. This is was a pragmatic choice based on considerations such as data accessibility and existing templates for data collection and variable measurement, as method choices are guided by their appropriateness for achieving research objectives (Silverman, 2013) as well as the approach adopted in similar studies (see Hurmerinta-Peltomäki & Nummela, 2004). However, such choices also reflect the philosophical stance of a researcher (Blumberg, Cooper, & Schindler, 2005). Drawing on survey methods, we adopt a 'positivistic' research lens, whereby deductive theory testing (Bryman, 2012) involves formulation of hypotheses that are tested using quantitative analysis techniques (Hair, Risher, Sarstedt, & Ringle, 2019). While suitable for the purposes of our study, we acknowledge that alternative approaches, such as probing into the research issues through qualitative methods to obtain rich, more personal and less structured data, would be desirable and recommended.

A sampling frame of 1,037 foreign-owned firms was compiled using Kompass New Zealand as the principal source. The sampling frame comprised the three key sectors of the New Zealand economy: services, manufacturing, and primary industries. Confirmation of postal addresses via telephone and emails resulted in a useable sampling frame of 952 firms. Questionnaires were sent to the CEO (or head) of the subsidiary in New Zealand via post and email, with information sought on the New Zealand-based operations as a whole. MNE-subsidiary studies mainly focus on the subsidiary top management (e.g. CEO, country manager, managing director etc.) for obtaining responses, because such individuals have the overall view

of subsidiary operations and are better linked up with the MNE network internally and externally than, for example, functional or middle-level managers.

Measurement and Analysis

The constructs are presented in the appendix section, which specifies the source from where they are adapted/adopted. Variable items are measured on five-point Likert scales. The external embeddedness construct comprises four items and measures the extent to which the subsidiary is engaged with local New Zealand firms and other external firms abroad in product/knowledge exchanges. The informal institutional distance construct comprises five items and measures the extent to which the subsidiary host country is institutionally different to the subsidiary home country with regard to aspects such as economy, finance, administration, knowledge, and social. The subsidiary initiative construct comprises four items representing different types of initiatives: local (one item), internal (one item), and global (two items) taken by the subsidiary in the last five years. The reverse knowledge transfers construct comprises knowledge outflows to HQ and subsidiaries with regard to product design, and marketing. The MNE resource support for subsidiary initiative construct measures the extent of financial, human and technology resource support received by the subsidiary with regard to the initiatives taken in the last five years (1=none, 2=partial, 3=full). The control variables are operationalized as; subsidiary age (1=up to 10 years, and 2=more than 10 years), subsidiary size (1=up to 50 employees, and 2=more than 50 employees), and industry (1=primary, 2=manufacturing, and 3=services).

For formal institutional distance, we follow Kaufmann, Kraay, and Mastruzzi (2007) and measure in three dimensions: voice and accountability, rule of law, and regulatory quality. We use WGI (2013) data on these dimensions, and following the Kogut and Singh (1988)

formula, we use data scores format ranging from -2.5 to 2.5 to calculate the institutional distance between the subsidiary host (New Zealand) and home countries. This approach has been used in previous studies (see e.g. Abdi & Aulakh, 2012; Gaur & Lu, 2007; Ho, Ghauri, & Larimo, 2018; Rodrigues et al., 2020).

For analysis, we use a variance-based structural equation modeling technique using the SmartPLS tool (Ringle, Wende, & Becker, 2015) to estimate both the measurement and the structural models. There are two techniques available for structural equation modelling: (a) variance-based (partial least squares) PLS-SEM; and, (b) co-variance-based SEM (CB-SEM) (Hair, Ringle, & Sarstedt, 2011). Hair et al. (2011) offer a guideline on SEM techniques suggesting that when the goal of the study is to predict key target constructs or identifying key 'driver' constructs, the appropriate analysis technique is PLS-SEM, whereas when a study aims at theory testing or comparison of alternative theories, the appropriate technique is CB-SEM. As the key objective of this study is identifying the determinants of MNE engagement in subsidiary initiatives (MNE resource support for subsidiary initiatives), and we are identifying key target constructs, our preferred technique is PLS-SEM. Furthermore, Hair et al. (2011) recommend using PLS-SEM when a model has many constructs and variables such as moderators and mediators. In all, the PLS-SEM technique seems most appropriate for this study.

RESULTS

In total, 429 responses were received representing the following countries of origin: Australia (112), USA (111), Japan (38), UK (37), Germany (31), and the remaining broadly representing Western European, Asian, and Oceanic countries. With regard to industry, 237 (55.2%) of the respondent subsidiaries belong to the services industry, 187 (43.6%) to manufacturing industries, and five (1%) from the primary sector. Primary processing in New Zealand is predominantly domestically owned, which explains the small proportion of foreign primary

sector subsidiaries in the sample, compared to the services and manufacturing subsidiaries. Respondents represented a number of industry sectors including construction, accommodation, education, electricity, food services, IT, financial, media, education, retail and wholesale, real estate, publishing, sports, telecommunications, waste services, forestry, health services, and administrative/management services.

The responses involved both early and late responses, and, so, to check for a non-response bias we used the extrapolation method (Armstrong & Overton, 1977; Pace, 1939). We grouped late (40%) and early (60%) responses as those that were contacted with and without a reminder, respectively. We then employed an analysis of variance test and compared the means of the studied variables for both the groups. Results showed clearly non-significant differences in means, indicating little or no non-response bias.

As a test for robustness², we employed confirmatory tetrad analysis (CTA-PLS) (Gudergan, Ringle, Wende, & Will, 2008); an established check for robustness of the measurement model, empirically looking at whether the model is formative or reflective (Hair et al., 2019). The study uses a reflective model based on literature (the specification of a model as reflective or formative should be determined theoretically), but CTA-PLS offers a further empirical analysis based on the data (Hair, Hult, Ringle, & Sarstedt, 2017). The assumption is that if the CTA-PLS results show one or more of CI (adjustment low) and CI (adjustment up) values having different signs, the model is reflective. Results from CTA-PLS showed a presence of zero value between CI-low and CI-up for a majority (5 out of 9) of cases, hence empirically approving our reflective model (Hair et al., 2019). For a check on the structural model, we checked for unobserved heterogeneity (Sarstedt et al., 2020), and employed a multigroup analysis (Matthews, 2017) across our control variables: subsidiary age (young, old), size

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² It is important to note that robustness tests for PLS-SEM still are in their infancy stages.

(above 50, below 50) and industry (services, manufacturing). We did not find any significant differences across the model paths across the control groups, indicating that the entire dataset is appropriate for analysis.

Based on the guidelines from Podsakoff, MacKenzie, Lee, and Podsakoff (2003), we took steps to reduce common method variance prior to the survey. Furthermore, we run the Harman's single factor test (see Harman, 1976), which shows a total variance at 25.18%. This is well below the 50% limit mark, indicating little need to be concerned about common method bias. The inner variance inflation factor (VIF) values between the constructs are around 1 (max 1.6), except for the "initiative \leftrightarrow MNE resource support for initiative" construct, where VIF is 3.4. This value is less than the threshold of 5 recommended for variance-based (Ringle, Wende, & Becker, 2015) as well as covariance-based (Kline, 1998) structural equation modelling, and is well below the 10 threshold for multivariate models (Hair, Black, Babin, & Anderson, 2009). In all, multicollinearity does not appear to be an issue among the variables in our model.

Confirmatory factor analysis was conducted to check measurement scales properties (see Tables 1 and 2). Cronbach's alpha, discriminant validity, convergent validity, and composite reliability tests were conducted. Constructs' intercorrelations were also examined. AVE scores are above 0.5, the constructs' factor loadings ranging from 0.6 to 0.98 (indicating good convergent validity), as well as the composite reliability scores above 0.7 (see Table 1), all above the required thresholds for reliability and validity (Hair et al., 2017). Cronbach's alpha scores are mostly very high, with the exception of the subsidiary initiative and the MNE resource support measures scoring 0.66 and 0.62 respectively, which still indicate acceptable reliability (Hair et al., 2017). The AVE square root values are higher than the correlation coefficients between the latent variables (see Table 2), showing good discriminant validity (Fornell & Larcker, 1981). Our results from the measurement model show that our data meets

the PLS-SEM requirements (Hair et al., 2011), further justifying the appropriateness of our analysis approach.

***** Insert Table 1 here *****

***** Insert Table 2 here *****

Looking at subsidiary demographics, around 83% of the subsidiaries are more than 10 years old, and the sample divides into one half of small firms with up to 50 employees and another half of larger firms with more than 50 employees. To generate t-statistics and to test the significance of indirect effects, we use the bootstrapping (bias corrected bootstrap confidence interval) method (Preacher & Hayes, 2008) for all 5,000 re-samples, due to its appropriateness to test the indirect effects (Cheung & Lau, 2008; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; MacKinnon, Lockwood, & Williams, 2004; MacKinnon, Warsi, & Dwyer, 1995). Our model captures a considerable amount of the variance for endogenous latent variables; subsidiary initiative at 57% ($R^2 = 0.566$), and MNE resource support for initiative at 38% ($R^2 = 0.38$). This reflects a substantial ability of the model to predict the variance caused by the exogenous variables over the endogenous latent variables (Cohen, 1988).

Looking at the direct and indirect effects (see Table 3), results show that informal institutional distance is negatively associated with subsidiary initiatives as well as the MNE resource support for subsidiary initiatives, as hypothesized in H1a and H2a. External embeddedness positively moderates the negative relationship between informal institutional distance and subsidiary initiatives, hence, supporting H1b. Formal institutional distance positively moderates the negative relationship between informal institutional distance and MNE resource support for subsidiary initiatives, as hypothesized in H2b. Reverse knowledge

transfer positively moderates the positive relationship between subsidiary initiatives and MNE resource support for subsidiary initiatives, thereby supporting H3. Finally, subsidiary initiatives through moderators – external embeddedness, and reverse knowledge transfers – mediate the relationship between informal institutional distance and MNE resource support for subsidiary initiatives, which supports H4. We also find negative relationships of formal institutional distance and subsidiary age with the MNE resource support for subsidiary initiatives, but the results are less pronounced and conclusive (statistical significance at p<0.1).

***** Insert table 3 here *****

DISCUSSION, IMPLICATIONS AND LIMITATIONS

Discussion of Findings and Contributions

First, informal institutional distance is negatively associated with subsidiary initiatives. However, the likelihood of informal institutional distance affecting subsidiary initiatives is high where the subsidiary external embeddedness is low. In other words, where a subsidiary is heavily embedded in its external network, its entrepreneurial initiatives are less affected by informal institutional distance. So, it can be argued that external embeddedness counterbalances the negative effect of institutional distance. Previous studies have looked at the individual effects of institutional distance (Asmussen et al., 2009; Bresciani & Ferraris, 2016; Williams & Nones, 2009) and external embeddedness (Ferraris et al., 2017; Figueiredo, 2011; Un & Rodríguez, 2018) on innovation. The new insight provided by our study is the joint and contingent effects on how subsidiaries can overcome the negative effects of informal institutional distance through external embeddedness.

Second, reverse knowledge transfers positively moderate the relationship between subsidiary initiative and MNE resource support for such initiatives. Put differently, reverse

knowledge transfers encourage MNE engagement, commitment and collaboration in subsidiary initiatives. This insight adds to our knowledge about the role of HQ managers, and their response (Ciabuschi et al., 2011; Verbeke & Yuan, 2020), and approval (Gorgijevski et al., 2019) of subsidiary initiatives.

Third, we show that informal institutional distance is negatively associated with MNE-subsidiary collaboration on initiatives. Furthermore, we show that formal institutional distance positively moderates this negative relationship. This suggests that the likelihood of informal institutional distance affecting MNE-subsidiary initiative collaboration is lower where formal institutional distance between the subsidiary host and home countries is low or in other words where the regulatory proximity is high. As such, subsidiaries are least likely to receive MNE resource support for subsidiary initiatives where their host institutional environment is different from their home institutional environment on both the formal as well as informal aspects. We advance knowledge by exposing the contingency of formal institutional distance, which addresses recent calls for considering institutional distance as a moderator (Xu et al., 2021; Yeh & Hsiao, 2020). We also contribute by showing as to when subsidiaries are better able to counterbalance (i.e., where the formal institutional distance is low) the negative effects of informal institutional distance on MNE-subsidiary initiative collaboration. We demonstrate that proximity on one dimension can counterbalance distance on another dimension.

Fourth, we expose the positive role of dual embeddedness in the relationship between institutional distance and subsidiary entrepreneurship. The linkage between external embeddedness and corporate entrepreneurship has received little attention (O'Brien et al., 2019). While it is recognized that MNE firm specific advantages and host country advantages support subsidiary development, such factors alone do not necessarily lead to subsidiary role development, unless a subsidiary is dually embedded in knowledge networks (Achcaoucaou, Miravitles, & León-Darder, 2017). By examining the moderating roles of external

embeddedness and reverse knowledge transfers, we offer implications for dual embeddedness vis-à-vis subsidiary initiatives and MNE subsidiary initiative collaboration. We demonstrate that dually embedded subsidiaries can bypass negative effects of institutional distance, develop competencies, and become a source of competence-creation for the local firms (through external embeddedness) as well as the MNE (through reverse knowledge transfers) as a whole.

Finally, this study makes an empirical contribution by focusing on the relatively little researched context of New Zealand, but its key insights are probably applicable to small open advanced economies (SMOPECs) more generally (Scott-Kennel & Saittakari, 2020). Our moderated mediation model provides evidence of both subsidiary external and internal embeddedness, and points to how dual embeddedness may counterbalance negative effects of institutional distance on the subsidiary initiatives and the MNE-subsidiary initiative collaboration. These findings should be generalizable, although other studies are needed to verify such a claim.

Implications for Theory

Resource-dependence theory (Pfeffer & Salancik, 1978) proposes that MNEs can benefit from the specialized resources of their subsidiaries. However, subsidiaries are less likely to develop resources that can be shared with the MNE where the host institutional environment is different to the subsidiary home environment (Asmussen et al., 2009; Williams & Nones, 2009). This study provides insights that nuances our understanding of the relationship between subsidiaries and MNEs. Specifically, we find that dual embeddedness counterbalances such negative effects, making MNEs better able to draw upon the subsidiary resources. In addition, resource dependencies between a subsidiary and the MNE create (bargaining) power relationships

among those engaged in exchange. A dually embedded subsidiary is better able to increase its bargaining power vis-à-vis the MNE, which the subsidiary may use for its own development.

The study also has an implication for the social exchange theory, which proposes that relationships among actors can be developed using a subjective cost-benefit analysis, which by involving trust and rewards for repeated action, leads to satisfaction in terms of returns to those involved in the exchange (Blau, 1964; Emerson, 1976; Homans, 1961; Stafford, 2008). Applied to institutional distance, it can be argued that dual embeddedness allows internal and external resource integration (Ferraris et al., 2017), which encourages social exchanges between the subsidiary and the MNE even though they are based in institutionally distant contexts. Dual embeddedness provides benefits to the subsidiary, in terms of receiving MNE resource support for its initiatives, particularly when the subsidiary is contributing to the MNE firm specific advantage. The exchange process involves MNE, which benefits from the subsidiary resource base, as well as the subsidiary, which benefits through the MNE support for its entrepreneurial initiatives.

Implications for Management Practice

Our findings have implications for management practice. First, virtually all subsidiaries experience distance in formal and informal institutional environments, which could negatively influence their capabilities as well as development. However, subsidiary managers as well as the managers at HQ can make efforts in socializing and developing relational embeddedness with the local firms. This will help them adjust in an institutionally distant environment and help subsidiaries pursue entrepreneurial initiatives. Second, subsidiaries can learn to integrate locally acquired knowledge with the knowledge they receive from the MNE. In this way, subsidiaries will be better able to transfer knowledge to the MNE. Managers at the HQ may

also help subsidiaries with regard to managing and integrating the subsidiary and the MNE knowledge. Such resource transfers would encourage MNEs to collaborate on subsidiary initiatives and provide resource support to them. Third, while institutional environments do not easily change, subsidiaries may learn and adapt to them, and whenever possible manage and exploit the different institutional environments (Bjerregaard & Lauring, 2012; Tracey & Phillips, 2011). Being distant on both informal and formal environments to the home country will greatly affect subsidiary entrepreneurship.

Limitations and Future Research

We follow Aguinis, Edwards and Bradley (2017) in their recent recommendation for studies that propose and test models involving moderations and mediations. Reaching deeper into the mechanisms is needed in order to develop a better understanding of a research phenomenon. Yet, a limitation of this study is that it draws on data from a single, and in terms of geography somewhat distinctive, host economy: New Zealand. Context generally matters in international business and strategy studies, and has been shown to have an impact even across seemingly similar settings (Asmussen et al., 2009; Benito, Grøgaard, & Narula, 2003). Some caution should be observed in terms of generalizing findings, but we think our findings are applicable to other SMOPECs, especially European ones such as Greece, Ireland, and Portugal, as well as the Nordic countries. Many MNE subsidiaries in those countries are likely to share characteristics with subsidiaries in New Zealand, particularly in terms of their role in MNE networks (see Gammelgaard et al., 2009).

Finally, while this study makes a contribution by studying the phenomena drawing on a large sample and an alternate – and under-researched – developed economy context, to

uncover further insights it is important to study this phenomenon in the context of emerging economies, as well as across multiple empirical contexts.

CONCLUSIONS

We conclude by summarizing the four key points of our analysis: (a) external embeddedness counterbalances the negative effects of informal institutional distance on subsidiary initiatives; (b) reverse knowledge transfers positively moderate the positive relationship between subsidiary initiatives and MNE-subsidiary initiative collaboration; (c) formal institutional distance positively moderates the negative relationship between informal institutional distance and MNE-subsidiary initiative collaboration; and (d) dual embeddedness counterbalances the negative effects of informal institutional distance on MNE-subsidiary initiative collaboration.

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APPENDIX Table A: Description of variables

Variable name	Variable items
MNE Resource Support for Initiative (Adapted from Birkinshaw (1999), Birkinshaw et al. (1998), Birkinshaw and Ridderstråle (1999))	 In the last 5 years, the company received resources (finance, human, technology etc.) from the parent company for the following activities Enhancements to existing products/services (local) Developed new products/services to be sold internationally (global) Expanding R&D activity (global) Transfer of production process to host country (internal)
	Formal Institutional Distance
Formal Institutional Distance (Kaufmann et al., 2007; WGI, 2013)	 Voice and accountability Regulatory quality Rule of law
	Engagement in following activities in last 5 years?
Subsidiary Initiatives (Adapted from Birkinshaw (1997), Birkinshaw et al. (1998))	 Enhancements to existing products/services (local) Developed new products/services to be sold internationally (global) Expanding R&D activity (global) Transfer of production process to host country (internal)
Reverse Knowledge Transfers (Harzing & Noorderhaven, 2006)	Transfer of knowledge, skills, and expertise to HQ and subsidiaries in: Product design Marketing
Subsidiary External Embeddedness (Harzing & Noorderhaven, 2006)	Subsidiary engages in product/knowledge flows with: • Local NZ companies
Informal Institutional Distance (Berry et al. (2010), Estrin et al. (2009))	 External Companies abroad New Zealand subsidiary is distant from the MNE on the following aspects: Economic
	 Financial Administrative Knowledge Social Overall

TABLES AND FIGURES

Figure 1: Informal Institutional Distance, MNE-Subsidiary Initiative Collaboration, Formal Institutional Distance, External Embeddedness and Reverse Knowledge Transfers

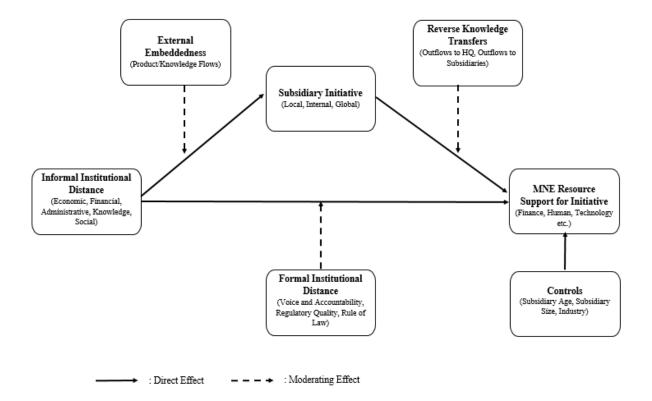


 Table 1: Constructs' Validity and Reliability

Constructs	Factor Loadings	Cronbach's Alpha	Composite Reliability	AVE	
External Embeddedness		0.610	0.792	0.562	
Product/knowledge inflows New Zealand	0.722				
Product/knowledge inflows overseas	0.669				
Product/knowledge outflows overseas	0.848				
Formal Institutional Distance		0.906	0.929	0.814	
Voice and Accountability	0.940				
Regulatory Quality	0.833				
Rule of Law	0.930				
Informal Institutional Distance		0.841	0.883	0.559	
Economic	0.835				
Financial	0.796				
Administrative	0.813				
Knowledge	0.619				
Social	0.636				
Overall	0.759				
Subsidiary Initiative		0.661	0.796	0.502	
Developed new products/services in New Zealand to be sold internationally	0.806				
Enhancements to existing products/services	0.600				
Expanding Research and Development activity	0.845				
Transfer of production process to New Zealand	0.600				
Reverse Knowledge Transfers		0.838	0.892	0.674	
Product design from New Zealand to headquarters	0.775				
Product design from New Zealand to other subsidiaries	0.820				
Marketing from New Zealand to headquarters	0.852				
Marketing from New Zealand to other subsidiaries	0.835				
MNE Resource Support for Initiative		0.620	0.797	0.567	
Resource Support received for developing new products/services in New Zealand to be sold internationally	0.807				
Resource Support received for expanding Research and Development activity	0.744				
Resource Support received for transfer of production process to New Zealand	0.705				

 Table 2: Intercorrelations and Discriminant Validity

Co	onstructs	1	2	3	4	5	6
1	External Embeddedness	0.750					
2	Formal Institutional Distance	-0.039	0.902				
3	Informal Institutional Distance	-0.287	0.028	0.748			
4	Subsidiary Initiative	0.567	-0.012	-0.604	0.709		
5	Reverse Knowledge Transfers	0.211	0.017	-0.366	0.543	0.821	
6	MNE Resource Support for Initiative	0.209	-0.068	-0.442	0.551	0.412	0.753

AVE square root values on the diagonal (in bold)

 Table 3: Structural Model

Structural Model Estimations

Hypotheses		Path Coefficients	T- Values	P	Result
Hypothesis 1a	Informal Institutional Distance → Subsidiary Initiative	-0.502	11.082	0.000	Supported
Hypothesis 1b	Moderating Effect (Informal Institutional Distance × External Embeddedness → Subsidiary Initiative)	-0.727	2.479	0.014	Supported
Hypothesis 2a	Informal Institutional Distance → MNE Resource Support for Initiative	-0.104	2.158	0.031	Supported
Hypothesis 2b	Moderating Effect (Informal Institutional Distance × Formal Institutional Distance → MNE Resource Support for Initiative)	0.209	1.970	0.049	Supported
Hypothesis 3	Moderating Effect (Subsidiary Initiative × Reverse Knowledge Transfers → MNE Resource Support for Initiative)	0.219	2.397	0.017	Supported
Hypothesis 4	Informal Institutional Distance → Subsidiary Initiative → MNE Resource Support for Initiative	-0.169	4.782	0.000	Supported
	Formal Institutional Distance → MNE Resource Support for Initiative	-0.070	1.703	0.089	
	Subsidiary Initiative → MNE Resource Support for Initiative	0.336	5.429	0.000	
	Subsidiary Age → MNE Resource Support for Initiative	-0.070	1.961	0.070	
	Subsidiary Size → MNE Resource Support for Initiative	-0.010	0.219	0.826	
	Industry → MNE Resource Support for Initiative	-0.056	1.498	0.135	