To Exist or to Exit? Dynamic Managerial Capabilities and Global Connectedness in Foreign Divestment

To be existed or to exit?
Dynamic managerial capabilities and global connectedness in foreign divestment

Ha T. T. Nguyen[1, *], Jorma Larimo[2]

[1]School of Marketing and Communication, University of Vaasa, ha.nguyen@uwasa.fi

[2]School of Marketing and Communication, University of Vaasa, jorma.larimo@uwasa.fi

Abstract

International business scholars have recognized a crucial role of top managers at headquarters in strategic decisions and organizational performance. However, the managerial roles in making foreign divestment decisions is neglected. We extend the dynamic managerial capabilities (DMC) view in foreign divestment literature and explore influences of managerial human capital, managerial social capital and managerial cognition on foreign divestment probability. Elaborating further on the managerial network perspective, we examine a moderating effect of global connectedness differences on the main hypotheses. Based on a sample of 657 foreign investment cases made by 241 Finnish MNEs in 36 host countries during 2005-2015, our results show the significantly negative effects of dynamic managerial human and social capital on the divestment rate. Notably, managerial cognition measured at cultural cluster level is found to significantly decrease divestment probability. We also provide empirical evidence for the moderating effects of global connectedness differences on the main hypotheses. On the basis of our results, we encourage future researchers to focus on managerial involvement in foreign divestment research and urge MNEs to consider their dynamic managerial capabilities.

Key words: *dynamic managerial capabilities; subsidiary divestment; managerial human capital; managerial social capital; managerial cognition*, *global connectedness differences.*

To be existed or to exit?
Dynamic managerial capabilities and global connectedness in foreign divestment

INTRODUCTION

Foreign direct investment (FDI) is among the most important strategies of multinational enterprises (MNEs) to increase their competitive in global scale, to seize and sense opportunities and threats at international markets; and to explore resources that are not available at domestic markets (Hennart, 2007; Kang et al., 2017; Tasheva & Nielsen, 2020). However, a significant amount of FDIs is divested (UNCTAD, 2018), referring to deliberate and voluntary liquidation or sale of all or a major part of an active foreign operation from local countries (Boddewyn, 1979).

Recent reports show rapid changes of global economy, that significantly challenge managerial capabilities to manage business activities. For instance, The Economist (2019) reports a "slowbalisation", referring to a sluggishness of globalization. The slowbalisation creates new difficulties for managers to operate business successfully across different markets. Sneader & Singhal (2021) similarly highlight a need for developing managerial abilities, that help firms seek for more opportunities and enhance value creation. Cavusgil (2021) further discusses firm resilience, referring to firm ability to cope with adverse events. While MNEs may suffer similar disadvantages or risks of megatrends, different managerial capabilities potentially lead to different organizational resilience. Hence, MNEs need to refine their risk mitigation capabilities, and learn how to better track, anticipate and respond to megatrends; and top managers play a key role (Cavusgil, 2021). These changes urge MNEs' managers to develop their managerial capabilities to evaluate strategic opportunities and improve organizational resilience, and particularly, in making foreign divestment decisions.

Extant studies propose that there are cases when MNEs actively decide to exit their foreign subsidiaries from local countries though (i.e., Sun et al., 2018), MNEs generally avoid to exit from local countries due to several reasons. First, when divesting a foreign subsidiary, benefits received at the foreign market may be lost, while profit shifting channels, which are significantly critical to MNEs' performance success, may be harmful; and thus, divestment is always an "extreme" case (Farah et al., 2021; Song & Lee, 2017). Second, prior research proposes that MNEs divest their foreign subsidiaries mainly because of poorly financial performance. Hence, there is a significant connection between MNEs' and managers' reputation and foreign divestment (Boddewyn, 1983;

Ghertman, 1988; Resmini & Marzetti, 2020). Stated differently, foreign divestment may harm the MNEs' and the managers' reputations.

In addition, Fiss & Zajac (2006) argued that when a subsidiary performs poorly at a foreign country, divestment is not a favorable option, because local stakeholders, i.e., local authorities, have a normative expectation that MNEs would develop local economies. Accordingly, divestment may destroy the MNEs' symbolic management toward local stakeholders, which would place the MNEs and their subsequent investments at local countries in disadvantageous positions. Hawn (2021) further proposes that due to upfront financial costs, termination fees, firm reputation and credibility, MNEs tend to avoid ending previous investments. Recently, scholars also argue that foreign divestment is an ultimately irrational objective because the divestment would stifle innovation, increase costs and close off profitable opportunities (Williamson, 2021; Witt et al., 2021). Collectively, we propose that in general, MNEs and their managers tend to avoid divestment (Benito, 2005; Dhanaraj & Beamish, 2009; Peng & Beamish, 2019; Tan & Sousa, 2019).

Extant research explored various antecedents of foreign divestment (see Arte & Larimo, 2019; Coudounaris et al., 2020; Schmid & Morschett, 2020, for a more detail). The reviews have pointed out a missing link between foreign divestment and roles of powerful actors, i.e., top management teams (TMTs), who are fully in charge of making divestment decisions (Arte & Larimo, 2019; Tan & Sousa, 2019). This is an omission, given that although external uncertainties or internal constraints may influence foreign divestment, divestment decision is actually justified and made by top executives, who are geographically and emotionally remoted from targeted subsidiaries (Benito, 1997; Ghertman, 1988; Tan & Sousa, 2019; Wright & Thompson, 1987). In essence, managers are not always making rational decisions, instead the decision-making process is likely influenced by managerial capabilities (Aharoni et al., 2011; Fredrickson & Carpenter, 2001; Hambrick & Mason, 1984; Weber et al., 2020), managerial characteristics (i.e., Adner & Helfat, 2003), or managerial perspectives toward the gains – losses of current issues and future prospect (Weber et al., 2020; Witt & Lewin, 2007). Taken together, we argue that exploring how managerial capabilities influence foreign divestment is fruitful.

Our research explores influences of managerial capabilities and constitutes foreign divestment literature in two ways. First, we extend the dynamic managerial capabilities (DMC) perspective to examine how managerial capabilities, i.e. human, social and cognitive capabilities, influence foreign divestment probability. DMC refers to the capabilities that managers pose to build, integrate and, reconfigure organizational resources and competences (Adner & Helfat, 2003). While DMC is widely discussed in organizational strategies and performance studies (Adner & Helfat, 2003;

Helfat & Martin, 2015; Kor & Mesko, 2013), this perspective is neglected in foreign divestment literature. Second, we consider influences of global connectedness differences, referring to interaction levels between individuals and groups around the world to obtain information or to diffuse their own activities, on modifying the effects of managerial capabilities. When technology is developing rapidly, especially with the exponential growth of Internet of Things (UPS, 2020), the influences of global connectedness should be emphasized. Our tenet is global connectedness differences may generate higher levels of liability of foreignness (Berry et al., 2010; Pattnaik & Lee, 2014) and reduce managerial capabilities to support firms achieve legitimacy; and thus, increasing propensity of divestment (Kostova & Zaheer, 1999).

THEORY AND HYPOTHESIS DEVELOPMENT

Prior literature in DMC has confirmed a significant influence of managerial capabilities on firm ability to cope with changes of external environment, and to survive longer (Teece, 2007). As noted, although there are studies discussing how DMC influences strategic choices and organizational performance (i.e. Tasheva & Nielsen, 2020), to our best knowledge, there are no studies unveiling the influences of DMC on foreign divestments. Aiming at investigating managerial roles in foreign divestment, we follow Tasheva & Nielsen (2020) and emphasize on the global aspects of the DMC when theorizing our hypotheses.

Dynamic managerial capabilities (DMC)

Adner & Helfat (2003) introduce the concept of DMC to underpin the heterogeneity in managerial decisions and firm's subsequent performance. DMC reflects three underlying factors, namely managerial human capital, managerial social capital and, managerial cognition, which represent different aspects of managerial capabilities (Adner & Helfat, 2003; Tasheva & Nielsen, 2020).

First, managerial human capital refers to learned skills and experiences that managers developed via general education, training, or learning (Adner & Helfat, 2003; Helfat & Martin, 2015). Achieved knowledge and experience enrich managerial capabilities to accurately evaluate current situations, to quickly acquire new knowledge, to appropriately align organizational resources; and to generate strategic alternatives, choices and competences to cope with rapid changes in external environment.

Second, managerial social capital relates to social relationships, developed through regular contacts and interactions, that confer influence, control and power (Adner & Helfat, 2003; Helfat & Martin, 2015). Social relationships are useful for managers to access diverse information from various sources, to improve their information processing ability; and thus, modifying their evaluation and expectation about organizational achievements (Kor & Mesko, 2013). In the era of information,

which is occupied with inaccurate news and wrong knowledge, developing strong ties with key members of the information sources helps managers focus on right things, collect additional information and process data in an efficient and coherent manner (Mintzberg, 1979).

Third, Adner & Helfat (2003) have added a contribution of managerial cognition, relating to managerial beliefs and mental models, to managerial capabilities (Adner & Helfat, 2003; Helfat & Martin, 2015). Executives develop their cognition lens from previous experiments, work experiences, accomplishments, personal background and failures, that shape how they perceive future situations, alternatives and consequences (Hambrick & Mason, 1984; Helfat & Martin, 2015; Kor & Mesko, 2003). The three aforementioned factors offer a rationale for observing differences in managerial assessments and decisions under similar circumstances (Adner & Helfat, 2003; Helfat & Martin, 2015; Tasheva & Nielsen, 2020).

Managerial human capital and foreign divestment decisions

Previous literature proposes that managerial human capital is useful for managers and their MNEs' internationalization in several ways. First, managerial human capital enhances firm ability to overcome liability of foreignness, to deal with "psychic distance" of subsequent investments, to develop innovative performance; and, to access local resources and other opportunities (Nielsen & Nielsen, 2011; 2013; Tan & Sousa, 2019; Tasheva & Nielsen, 2020). Second, Zeng et al. (2013) conclude that managerial human capital helps firms identify fundamental differences among prior experience; and thus, avoiding making susceptible errors to FDIs' decisions (Athanassiou & Nigh, 2002; Herrmann & Datta, 2005).

Third, international experiences help managers integrate effectively different cultural systems (Nielsen, 2010; Nielsen & Nielsen, 2011; 2013). These managers could also improve their information processing capabilities and widen their attitudes towards opportunities and threats (Fredrickson & Carpenter, 2001; Tushman & Nadler, 1978). Collectively, we argue that managers who have higher levels of international human capital are positively associated with better strategic decisions; and thus, reducing divestment propensities. In addition, when subsidiaries face difficult situations, these managers could propose more strategic alternatives, rather than divestment (Arte & Larimo, 2019; Song & Lee, 2017; Tan & Sousa, 2019).

Hypothesis 1: Managerial human capital decreases the propensity of foreign divestments

Managerial social capital and foreign divestment decisions

Social relationships with internal and external partners, i.e., international assignees, boundary spanners or international contacts, facilitate managerial access to external resources and internal information; and thus, developing DMC (Adner & Helfat, 2003; Helfat & Martin, 2015; Mintzberg, 1979; Tasheva & Nielsen, 2020). When MNEs' managers are overwhelmed by complex information about local institutional environments, social ties help managers access accurate information and avoid taking managerial risks caused by inappropriate knowledge or fake news (Tasheva & Nielsen, 2020).

Strong networks with local partners and agencies are also helpful for managers to quickly acquire knowledge and tactics; and thus, coping better with the host institutional environments and being able to predict future changes at the host countries (Kostova, Roth & Dacin, 2008; Roth & Kostova, 2003). Nielsen (2010) further adds that social ties provide managers with international opportunities, that increase subsidiary survival chances. Collectively, we argue that managerial social capital reduces the foreign divestment probability.

Hypothesis 2: Managerial social capital decreases the propensity of foreign divestment

Managerial cognition and foreign divestment decisions

Managerial cognition refers to beliefs and mental models that shape managerial perspective and influence managerial decisions (Adner & Helfat, 2003). Managerial cognition is an important source of DMC as it reflects managerial perception and prediction toward current and future events; and managerial capabilities to generate strategic alternatives, especially when managers are not always having full information to make decisions because of bounded rationality (Adner & Helfat, 2003; Hambrick & Mason, 1984).

National culture has a profound effect on individual values, beliefs and cognitive structures (Hofstede, 1980). Nielsen & Nielsen (2011; 2013) propose that national origin influences how managers perceive and interpret internal and external environments; and thus, shaping managers' reactions and strategic choices. Tasheva & Nielsen (2020) similarly argue that foreign-born managers, positioned as business leaders, could provide superior performance under pressures of rapid changes in external environments because of their open attitudes and flexible mindset. Furthermore, understanding institutional differences is important for making better international strategies. Hence, heterogeneous cultural management groups, rather than homogeneous ones, are better in overcoming cognitive bias, in interpreting accurately formal and informal institutional

differences; and in making better decisions relating to global asset orchestration (Nielsen & Nielsen, 2011; 2013; Tasheva & Nielsen, 2020). Collectively, we argue that managerial cognition is useful for interpreting institutional differences, leading to lower propensity of divestments.

Hypothesis 3: Managerial cognition decreases the propensity of foreign divestment

Global connectedness differences, DMC and foreign divestment

Extant research proposes that due to institutional differences, MNEs and their foreign subsidiaries have difficulties to understand local requirements for achieving legitimacy, leading to higher foreign divestment probability (Kang et al., 2017; Pattnaik & Lee, 2014; Peng & Beamish, 2019; Sartor & Beamish, 2020). Prior scholars have focused on specific institutions, i.e., cultural, economic, political or, geographic institutions (Gaur & Lu, 2007; Kang et al., 2017; Sartor & Beamish, 2020; Tsang & Yip, 2007). However, while these studies provide MNEs with guidance on how to deal with the institutional differences, the studies do not go far enough to provide a comprehensive knowledge about influences of institutional differences.

In today's knowledge economy, firms' ability to capture quickly knowledge development and to stay connectedness with other units in the global arena is more important. Companies need to take proactive plans to deal with rapid changes in external environment, especially with changes in technological development, to prevent failure (UPS, 2020). Berry et al. (2010) introduce global connectedness, referring to interaction levels between resident individuals and companies around the world, influences firm abilities to obtain information and to diffuse their own activities. This institution captures the differences in connectedness between countries via physical travel (i.e., tourism) and Internet use. However, this institution has received scant attention in extant literature (Kang et al., 2017; Pattnaik & Lee, 2014).

Our research focuses on global connectedness differences because of two critical reasons. First, because of development in technological sectors, differences in global connectedness influence firm abilities to tap into distant knowledge sources, to quickly provide guidance and support to their subsidiaries to deal with suddenly changes in local countries. Second, as our research objective is to explore managerial roles in making divestment decisions, delving into influences of connectedness is crucial to understand how managers could access subsidiary's situations at local countries.

In line with previous studies (i.e., Kang et al., 2017; Pattnaik & Lee, 2014), we argue that global connectedness differences increase foreign divestment probability because the differences hamper the information and knowledge diffusion, which influence managerial capabilities to make strategic

decisions in good time manner. In addition, higher levels of global connectedness differences decrease subsidiaries' connectedness with headquarters; and thus, the subsidiaries may receive less attention, managerial guidance and resource inputs from headquarters.

Hypothesis 4: Global connectedness differences increase the propensity of foreign divestment.

We develop further our arguments relating to moderating effects of global connectedness differences on the DMC – foreign divestment relationship. Specifically, we argue that, when an MNE enters a foreign country, which has higher levels of global connectedness differences from the MNE's home country, the differences bring more challenges for MNE's managers to access information sources or knowledge hubs at local countries; and thus, hampering managerial capabilities to take advantages of their human, social capital and managerial cognition to achieve the legitimacy. Managers are also difficult, i.e., to connect with their local social ties established from their past years, to apply their accumulated experiences to subsequent investments, or to take advantage of their heterogeneous cultural origins when dealing with host legitimacy's requirements. In addition, managers need to rely more heavily on external ties to access local knowledge, which are more difficult to judge the accuracy of the received information. Therefore, we propose the following:

Hypothesis 5: When the level of global connectedness differences increases, it decreases negative effects of dynamic managerial human capital (H_{5a}); of dynamic managerial social capital (H_{5b}); and of dynamic managerial cognition (H_{5c}) on the propensity of foreign divestment.

RESEARCH METHOD

Sample

We test our hypotheses in the context of Finnish MNEs and their foreign investments made between 2005 and 2015, and the situation of those investments at the end of 2018. Despite its small scale in the global arena, Finnish economy is the eleventh most competitive nation out of 140 ranked countries in 2018 (Global Competitiveness Report, 2018). Koch, Koch & Shenkar (2016) further argue that although most leadership and organizational theories emerge from the Western context, this regional cultural context has not been investigated widely in IB fields and particularly, in foreign divestment literature. Therefore, we selected the Finnish MNEs to intensify our knowledge about how Western MNEs develop their international strategies. We choose the timeframe 2005-2015 to check the divestment rate during the financial crisis which make the foreign investments and divestments be more sensitive. We focus only on manufacturing sector to avoid potential

confounds (Tihanyi et al., 2000). Our homogeneous sample also eliminates opportunity costs because of differences in human capital across industries (Elfenbein & Knott, 2015).

We collected the Finnish MNEs' information from Thompson and ORBIS databases, systematic analysis of the annual reports, press releases of the investing firms, the data gathered in FDI surveys and direct contact with investing companies. For information about DMC, we collect executive information through Orbis, firm annual reports, company's websites, LinkedIn, and Digital Institute Finland. We have also contacted TMT members to have their updated CVs. If there is a contradictory information between two different sources, we will follow the official company's website. Our retrieval provided us 721 subsidiaries, in which, we deleted 45 cases because of missing values and another 19 cases because the cases were later divested as consequences of corporate divestment. Hence, our final sample data consists of 657 investment cases made by 241 firms in 36 foreign countries, from which 131 cases (20%) are divested at the observing time.

Variables

The dependent variable in this study is the probability of foreign divestment and it is operationalized as 1 for divestment, otherwise 0 (Getachew & Beamish, 2017; Kang et al., 2017; Peng & Beamish, 2019).

Individuals belonging to top management teams are executives at the very highest level of management, i.e., chairmen, chief executive officers, presidents and chief operating officers, and the next highest ties, i.e., executives at their vice president positions, regardless their potential different titles, depending on their organizations (Wiersema & Bantel, 1992). Data on executive characteristics were collected at the individual level and then, aggregated to the team level by use of different measures. Following Tasheva & Nielsen (2020), we collect global managerial human capital as 1 for executives have experiences working or schooling abroad, otherwise 0. To access global managerial social capital, we coded 1 for executives used to hold foreign membership abroad, otherwise 0. Furthermore, we measure global managerial cognitive via their national diversity, a heterogeneous operationalization based on the Blau index (i.e., Nielsen & Nielsen, 2011; Tasheva & Nielsen, 2020):

$$B = \left[1 - \sum (p_i)^2\right]$$

where p is the percentage of members in the i^{th} group. We refer to Berry et al. (2010) to measure global connectedness score of each country. Global connectedness differences refer to differences in score of this indicator between countries, using Mahalanobis distance (Berry et al., 2010).

Elaborating on extant literature on TMTs and foreign divestment, we control several variables belonging to TMTs, subsidiary, parent and country levels. At TMT level, we control TMT size and age, which were measured by the total number of TMT members and by the average age of TMT members, respectively. At the subsidiary level, we control age (years from establishment), equity ownership level (wholly owned subsidiaries WOS vs. joint ventures IJV), entry mode (greenfield vs. acquisition) and the relatedness of the unit. We also control for parents' size (total sales), R&D intensity and degree of diversification. At the country level, we control for host country economic development (GDP growth), risk in the investment year (ECR country scores), change in political risk (differences in ECR country scores), host country income level (GDP), cultural distance (GLOBE), and geographic distance (great circle distance between countries).

Analytical Strategy

Prior scholars (i.e., Arregle, Hébert & Beamish, 2006; Nielsen & Nielsen, 2011) argued that FDI strategies, including foreign divestment, are influenced by various variables belonging to FDI-, firm-, country-levels and the interactions among them (Berry, 2013; Kang et al., 2017; Song, 2015). The non-independence of observations may lead to bias in interpreting statistical results. Ignoring the nested structure of data would potentially increase methodological errors (Arregle et al., 2006). Nested models also incorporate random effects to account for cluster-specific homogeneities of the outcome (Lee et al., 2019; Osborne, 2000). Taken together, we applied the hierarchical logistic regression model (HLM) to examine foreign divestment probability.

FINDINGS

In order to test the validity for the multilevel hierarchical model analysis, we examined potential problems related to variables' distribution and checked if the assumptions for running these analyses are violated. To avoid potential significant level of skewness of total sales, we computed a logarithmic transformation for this variable to measure firm size. We keep original operationalization of others because they were distributed normally. We also checked the outlier's problems among variables using Mahalanobis' distance and Cook's distance measure, the results showed that there are no outliers in our sample. The results confirmed the validity for running the hierarchical linear analyses. Table 1 provides descriptive statistics.

Insert Table 1 about here

The research design resulted in a hierarchical structure with three levels of variables: TMT-, firm- and country levels. The results are reported in Table 2. Model 1 includes only control variables,

while Models 2 to 6 are testing our hypotheses. In general, our control variables significantly influence foreign divestment, except for geographic distance. Precisely, we found that TMT size, product diversification, acquisition, risk in investment year, increase in host country risk, and cultural distance increase foreign divestment, while TMT age, firm size, R&D intensity, subsidiary age, WOS, relatedness, GDP growth and host country economic development decrease propensity of foreign divestment.

Insert Table 2 about here

To test hypotheses 1 to 3, we included managerial human capital, social capital and cognition in Model 2. Precisely, we found that managerial human and social capital decrease foreign divestment probability ($\beta_{\text{human capital}}$= -0.410; $\beta_{\text{social capital}}$= -0.259) at 0.001 level, respectively. However, managerial cognition does not change significantly divestment probability, even though the coefficient is negative ($\beta_{\text{cognition}}$ = -0.042). Thus, hypotheses 1 and 2 are supported, while hypothesis 3 is not supported.

We proposed in hypothesis 4 that global connectedness differences bring more difficulties that hamper long-term performance; and thus, leading to higher rates of foreign divestment. In Model 3, global connectedness differences are significant and positive (β = 0.023, p value < 0.001). Hence, hypothesis 4 is supported. We further argue that, global connectedness differences escalate challenges for TMTs to take advantage of their DMC; and thus, modifying the negative influence of DMC on foreign divestment. We test these hypotheses in Model 4 by adding interaction terms of DMC and global connectedness differences. In general, our results show that the interaction terms are significant and negative, except for the effect of managerial cognition. Hence, hypotheses 5a and 5b are supported, while hypothesis 5c is not supported. Collectively, we conclude that global connectedness differences decrease the negative effects of dynamic managerial human and social capital on foreign divestment probability.

Robustness Check

We run several *post hoc* tests for consolidating our results. First, previous scholars (i.e., GLOBE (House et al., 2004); Hofstede, 2001; Schwart, 1994) confirm that national culture is not different from countries belonging to same cultural cluster, i.e., the U.S and the England; China and Singapore, etc. Because our sample includes executives sharing similar cultural norms, i.e., Swedish and Finnish, we follow recommendations from previous scholars (i.e., Arregle et al., 2013; Demirbag et al., 2020), to recode our managerial cognition as cultural cluster level, instead of national level. Then, we rerun Models 2 and 4 to check the hypotheses 3 and 5c regarding to the

effect of managerial cognition on foreign divestment and the moderating effect of global connectedness differences on this relationship. Interestingly, our results show that considering managerial cognition at cluster level, managerial cognition decreases foreign divestment probability ($\beta_{cognition}$ = -0.154, p value < 0.01), while global connectedness differences significantly moderate the negative effect. We presented the results in Models 5 and 6 of Table 2.

Second, because of the popularity of survival analysis in foreign divestment literature, we replace our hierarchical logistic regression by survival analysis (Kang et al., 2017; Pattnaik & Lee, 2014; Song & Lee, 2017), and rerun all models in Table 2 for consolidating our findings. Nevertheless, instead of using the basic Cox model, which assumes no unobserved heterogeneity or event dependence, we apply a frailty Cox proportional hazard model to test the likelihood of foreign divestment (Berry, 2013; Lee, Chung & Beamish, 2019). This frailty model accounts for cluster-specific homogeneities, the inherent nature that the subsidiary is nested in its parents (Austin, 2017; Lee et al., 2019). The frailty models also consider if the same firm may suffer the hazard more than once as a result of unmeasured causes (Berry, 2013). In general, the results are largely consistent with our main findings. The results could be found upon author contact.

Finally, because our sample includes investments from 2005 to 2015 and check divestment situation of those investment until 2018, the sample may be biased because the financial crisis in 2008 could increase foreign divestment probability. Hence, we divide our sample into 2005-2010 and 2011-2015 and compare the results. We found that although the number of divestment cases in the first period is higher, the general results are largely identical. We do not report the results for brevity.

DISCUSSION AND CONCLUSIONS

Elaborating on the DMC perspective, our research examines how managerial human, social capital and cognition influence foreign divestment; and investigates how global connectedness differences modify these influences. In doing so, we contribute to foreign divestment literature in several ways.

Theoretical contribution

First, we extend and provide validity of the DMC concept to foreign divestment literature (Adner & Helfat, 2003; Helfat & Martin, 2015; Tasheva & Nielsen, 2020). While extant foreign divestment studies focus on effects of external and internal antecedents, we explore active roles of top managers, who are fully in charge of making divestment decisions. Our tenet is that DMC enhances managerial capabilities, i.e., information processing, resource exploitation and exploration, or

applying accumulated experience, to manage foreign subsidiaries efficiently; and thus, reducing the likelihood of foreign divestment.

Second, while previous management studies tend to focus only on one or two dimensions of the DMC, which an exceptional study of Tasheva & Nielsen (2020), our study is among the first studies exploring simultaneously the effects of three dimensions of the DMC and provides a comprehensive knowledge on how DMC influences foreign divestment probability. More precisely, our study shows that managerial human and social capital are negatively associated with the divestment probability. Previous scholars confirmed that human and social capital bolster managerial network and enhance their global perspective (Fredrickson & Carpenter, 2001; Herrmann & Datta, 2005; Li, 2018). Those managers are also efficient in generating and integrating novel ideas and, in allocating resources (Nielsen & Nielsen, 2011; 2013). Consequently, managerial human and social capital help managers develop better strategies, leading to lower propensity of divestment.

Third, we emphasize how cultural cluster provides significant knowledge on influences of managerial cognition, compared to national culture. Precisely, when we took national origin as the core element to assess the managerial cognition, our empirical findings do not support for the hypothesis. However, our post host results show that managerial cognition significantly decreases foreign divestment probability when generated at cluster level. This interesting result shows that citizens from a same cultural cluster may share similar cultural norms and beliefs, leading to homogeneous in mindset and perception. Hence, we conclude that, managerial cognition, generated from heterogeneous cultural clusters, supports managers make better organizational decisions; and thus, leading to lower propensity of divestment.

Furthermore, our research confirms that differences in global connectedness hamper the knowledge and information diffusion between head offices and foreign subsidiaries as well as between countries, leading to higher levels of foreign divestment. The differences also bring more challenges to top managers to take advantage of their DMC. Hence, global connectedness differences decrease the negative effect of DMC on foreign divestment probability.

Managerial Implication

Our managerial implications are straightforward. Our study provides several proposals for MNEs to design their human resources. First, we show that dynamic human and social capital could reduce foreign divestment probability; and thus, MNEs and their head offices (HO) should pay more attention to the decision-makers' DMC to assign appropriately human recourses for making specific strategic decisions. Second, because we found a notable finding that managerial cognition generated

at cultural cluster level, instead of national level, significantly decreases foreign divestment probability, we encourage MNEs and their HO to diversify dynamic managerial cognition at cultural cluster level, instead of focusing only on national origins of the executives. Furthermore, we urge MNEs and their HO to alleviate positive effects of global connectedness differences on foreign divestment by, i.e., providing supports and increasing connection between HO and foreign subsidiaries to strengthen knowledge and information diffusion.

Future Directions

Our research opens up several existing rooms for future studies. First, we discuss influences of managerial human, social capital and cognition on foreign divestment probability. Management scholars highlight significant effects of several upper-echelons characteristics, which our study does not capture. This limitation could be addressed by, i.e., investigating how TMT gender, tenure and functional experience, among others, constitute DMC.

We also measured DMC by taking the average scores, except for the managerial cognition. Future studies could replicate our models with the heterogeneous of the characteristics. In addition, due to a lack of financial information at subsidiary level, we could not control those variables (Makino et al., 2007; Tan & Sousa, 2019). Hence, we encourage future research to consider these variables to develop our nuanced knowledge about how subsidiary characteristics modify managerial involvement.

Moreover, our hierarchical analysis strategy is also worth to re-examine in different contexts, i.e., top executives of the U.S, Japanese and Western European MNEs, as well as from emerging markets, i.e. Indian, Korean, Chinese, Brazilian MNEs, to generalize our findings. In closing, we encourage future research to focus on regional borders, i.e., MNEs exit all of their foreign subsidiaries from a region or a sub-region, because MNEs make decisions at cluster level (i.e., Arregle et al., 2013; Demirbag et al., 2020).

REFERENCES

Adner, R. and Helfat, C. E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic Management Journal*, 24, 1011–1025.

Aharoni, Y., Tihanyi, L. and Connelly, B. L. (2011). Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business*, 46(2), 135–142.

Arregle, J, Miller, T., Hitt, M. and Beamish, P. (2013). Do regions matter? An integrated institutional and semiglobalization perspective on the internationalization of MNEs. *Strategic Management Journal*, 34, 910–934.

Arregle, J. L., Hébert, L. and Beamish, P. W. (2006). Mode of international entry: The advantages of multilevel methods. *Management International Review*, 46(5), 597–618.

Arte, P. and Larimo, J. (2019). Taking stock of foreign divestment: Insights and recommendations from three decades of contemporary literature. *International Business Review*, 28(6), 101599.

Athanassiou, N. and Nigh, D. (2002). The impact of the top management team's international business experience on the firm's internationalization: social networks at work. *Management International Review*, 42(2), 157–181.

Austin, P. C. (2017). A tutorial on multilevel survival analysis: Methods, models and applications. *International Statistical Review*, 85(2), 185–203.

Benito, G. R. G. (1997). Divestment of foreign production operations. *Applied Economics*, 29(10), 1365–1377.

Benito, G. R. G. (2005). Divestment and international business strategy. *Journal of Economic Geography*, 5(2), 235–251.

Berry, H. (2010). Why Do Firms Divest? *Organization Science*, 21(2), 380–396.

Berry, H. (2013). When Do Firms Divest Foreign Operations? *Organization Science*, 24(1), 246–261.

Berry, H., Guillén, M. F. and Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies*, 41(9), 1460–1480.

Boddewyn, J. J. (1979). Foreign Divestment: Magnitude and Factors. *Journal of International Business Studies*, 10(1), 21–26.

Boddewyn, J. J. (1983). Foreign direct divestment theory: Is it the reverse of FDI theory? *Weltwirtschaftliches Archiv*, 119(2), 345–355.

Cavusgil, T. (2021). Megatrends and International Business. In *Megatrends in International Business,* Palgrave MacMillan.

Coudounaris, D. N., Orero-Blat, M. and Rodríguez-García, M. (2020). Three decades of subsidiary exits: Parent firm financial performance and moderators. *Journal of Business Research*, 110(June 2019), 408–422.

Demirbag, M., Glaister, K. W. and Sengupta, A. (2020). Which regions matter for MNEs? The role of regional and firm level differences. *Journal of World Business*, 55(1), 101026.

Dhanaraj, C. and Beamish, P. W. (2009). Institutional environment and subsidiary survival. *Management International Review*, 49(3), 291–312.

Elfenbein, D. W. and Knott, A. M. (2015). Time to exit: Rational, behavioral, and organizational delays. *Strategic Management Journal*, 36(7), 957–975.

Farah, B., Elias, R., Chakravarty, D. and Beamish, P. W. (2021). Host country corporate income tax rate and foreign subsidiary survival. *Journal of World Business*, 56(2), 101186.

Fiss, P. C. and Zajac, E. J. (2006). The symbolic management of strategic change: Sensegiving via framing and decoupling. *Academy of Management Journal*, 49(6), 1173–1193.

Fredrickson, J. W. and Carpenter, M. A. (2001). Top Management Teams, Global Strategic Posture, and the Moderating Role of Uncertainty. *Academy of Management Journal*, 44(3), 533–545.

Gaur, A. S. and Lu, J. W. (2007). Ownership strategies and survival of foreign subsidiaries: Impacts of institutional distance and experience. *Journal of Management*, 33(1), 84–110.

Ghertman, M. (1988). Foreign Subsidiary and Parents' Roles During Strategic Investment and divestment decisions. *Journal of International Business Studies*, 19(1), 47–67.

Global Competitiveness Report (2018), "Global Competitiveness Report", available at: https://www.weforum.org/reports/the-global-competitveness-report-2018 [Retrieved 2018, August 21].

Hambrick, D. C. and Mason, P. A. (1984). Upper Echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.

Hawn, O. (2021). How media coverage of corporate social responsibility and irresponsibility influences cross-border acquisitions. *Strategic Management Journal*, 2(1), 58–83.

Helfat, C. E. and Martin, J. A. (2015). Dynamic Managerial Capabilities: Review and Assessment of Managerial Impact on Strategic Change. *Journal of Management*, 41(5), 1281–1312.

Hennart, J.-F. (2007). The theoretical rationale for a multinationality-performance relationship. *Management International Review*, 47(3), 423–452.

Herrmann, P. and Datta, D. K. (2005). Relationships between top management team characteristics and international diversification: An empirical investigation. *British Journal of Management*, 16(1), 69–78.

Hofstede, G. 1980. *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W. and Gupta, V. (Eds) 2004. Culture, leadership and organizations: The GLOBE study of 62 societies. Thousand Oaks, CA: Sage.

Kang, J., Lee, J. Y. and Ghauri, P. N. (2017). The Interplay of Mahalanobis Distance and Firm Capabilities on MNC Subsidiary Exits from Host Countries. *Management International Review*, 57(3), 379–409.

Koch, P. T., Koch, B., Menon, T. and Shenkar, O. (2016). Cultural friction in leadership beliefs and foreign-invested enterprise survival. *Journal of International Business Studies*, 47(4), 453–470.

Kor, Y. Y. and Mesko, A. (2013). Dynamic managerial capabilities: configuration and orchestration of top executives' capabilities and the firm's dominant logic. *Strategic Management Journal*, 34(2), 233–244.

Kostova, T., Roth, K. and 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.

Kostova, T. and Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1), 64–81.

Lee, H., Chung, C. C. and Beamish, P. W. (2019). Configurational characteristics of mandate portfolios and their impact on foreign subsidiary survival. *Journal of World Business*, 54(5), 100999.

Li, P. Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review*, 27(1), 125–138.

Makino, S., Chan, C. M., Isobe, T. and Beamish, P. W. (2007). Intended and unintended termination of international joint ventures. *Strategic Management Journal*, 1132(April), 1113–1132.

Mintzberg, H. (1979). The structuring of organizations. Englewood Cliffs, NJ: Prentice-Hall

Nielsen, B. B. and Nielsen, S. (2011). The role of top management team international orientation in international strategic decision-making: The choice of foreign entry mode. *Journal of World Business*, 46(2), 185–193.

Nielsen, B. B. and Nielsen, S. (2013). Top management team nationality diversity and firm performance: a multilevel study. *Strategic Management Journal*, 34(3), 373–382.

Nielsen, S. (2010). Top management team internationalization and firm performance. *Management International Review*, 50(2), 185–206.

Osborne, J. W. (2000). Advantages of hierarchical linear modeling. Osborne, Jason W. Practical Assessment, 7(1), 1–3.

Pattnaik, C. and Lee, J. Y. (2014). Distance and divestment of Korean MNC affiliates: The moderating role of entry mode and experience. *Asia Pacific Business Review*, 20(1), 174–196.

Peng, G. Z. and Beamish, P. W. (2019). Subnational FDI Legitimacy and Foreign Subsidiary Survival. *Journal of International Management*, 25(3), 1–19.

Resmini, L. and Marzetti, G. V. (2020). Home bias in divestment decisions of multinational corporations in the EU. *Review of International Economics*, 28(3), 799–813.

Roth, K. and Kostova, T. (2003). The use of the multinational corporation as a research context. *Journal of Management*, 29(6), 883–902.

Sartor, M. A. and Beamish, P. W. (2020). Integration-oriented strategies, host market corruption and the likelihood of foreign subsidiary exit from emerging markets. *Journal of International Business Studies*, 51(3), 414-431.

Schmid, D. and Morschett, D. (2020). Decades of research on foreign subsidiary divestment: What do we really know about its antecedents? *International Business Review*, 29(4), 101653.

Schwartz, S. H. (1994). Are there universal aspects in the structure and content of human values? *Journal of Social Issues,* 50(4), 19–45.

Sneader, K. and Singhal, S. (2021). The next normal arrives: Trends that will define 2021—and beyond. Available at https://www.mckinsey.com/featured-insights/leadership/the-next-normal-arrives-trends-that-will-define-2021-and-beyond [Retrieved 2021 August 31].

Song, S. (2015). Exchange rate challenges, flexible intra-firm adjustments, and subsidiary longevity. *Journal of World Business*, 50(1), 36–45.

Song, S. and Lee, J. Y. (2017). Relationship with Headquarters and Divestments of Foreign Subsidiaries: The Hysteresis Perspective. *Management International Review*, 57(4), 545–570.

Sun, J., Wang, S. L. and Luo, Y. (2018). Strategic entry or strategic exit? International presence by emerging economy enterprises. *International Business Review*, 27(2), 418–430.

Tan, Q. and Sousa, C. M. P. (2019). Why Poor Performance is Not Enough for a Foreign Exit: The Importance of Innovation Capability and International Experience. *Management International Review*, 59(3), 465-498.

Tasheva, S. and Nielsen, B. B. (2020). The role of global dynamic managerial capability in the pursuit of international strategy and superior performance. *Journal of International Business Studies*, in press.

Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350.

Tihanyi, L. Ellstrand, A. E., Daily, C. M. and Dalton, D. R. (2000). Composition of the Top Management Team and Firm International. *Journal of Management*, 26(6), 1157–1177.

The Economist (2019). "The steam has gone out of globalization", available at: https://www.economist.com/leaders/2019/01/24/the-steam-has-gone-out-of-globalisation [Retrieved 2021, August 27].

Tsang, E. W. K. and Yip, P. S. L. (2007). Economic distance and the survival of foreign direct investments. *Academy of Management Journal*, 50(5), 1156–1168.

Tushman, M. L. and Nadler, D. A. (1978). Information Processing as an Integrating Concept in Organizational Design. *Academy of Management Review*, 3(3), 613–624.

UNCTAD (2018). "World investment report 2018", available at: https://unctad.org/en/PublicationsLibrary/wir2018_en.pdf (accessed August 23, 2018).

UPS (2020). "Turning Megatrends into Market Advantages", available at: https://www.ups.com/assets/resources/media/en_US/turning-megatrends-to-market-advantage-2020.pdf [Retrieved 2020, May 28].

Weber, C. E., Chahabadi, D. and Maurer, I. (2020). Antecedents and performance effect of managerial misperception of institutional differences. *Journal of World Business*, 55(1), 101018.

Wiersema, M. F. and Bantel, K. A. (1992). Top Management Team Demography and Corporate Strategic Change. *Academy of Management Journal*, 35(1), 91–121.

Williamson, P. (2021). De-Globalisation and Decoupling: Post-COVID-19 Myths versus Realities. *Management and Organization Review*, 17(1), 29–34.

Witt, M. A. and Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, 38(4), 579–594.

Witt, M. A., Li, P. P., Välikangas, L. and Lewin, A. Y. (2021). De-globalization and Decoupling: Game Changing Consequences? *Management and Organization Review*, 17(1), 6–15.

Wright, M. and Thompson, S. (1987). Divestment and the Control of Divisionalised Firms. *Accounting and Business Research*, 17(67), 259–267.

Zeng, Y. Shenkar, O., Song, S. and Lee, S. H. (2013). FDI Experience Location and Subsidiary Mortality: Differences in National Culture and the Expansion of Korean MNEs. *Management International Review*, 53(3), 477–509.

Table 1. Descriptive Statistics and Pearson Correlations (n = 657)

Variables	Mean	S.D	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1.Subsidiary divestment	0.20	0.11	1.00																			
2.TMT age	51.64	2.45	0.35	1.00																		
3.TMT size	9.33	2.35	0.05	0.05	1.00																	
4.Firm size	8.77	2.03	0.50	0.05	0.24	1.00																
5.Product diversification	9.33	2.35	0.04	0.07	0.16	-0.03	1.00															
6.R&D intensity	2.13	1.03	0.23	0.17	0.11	-0.02	0.08	1.00														
7.Subsidiary age	8.84	3.45	-0.01	-0.10	-0.03	-0.01	0.08	0.01	1.00													
8.Acquisition	0.61	0.16	0.01	0.01	0.15	0.08	0.05	-0.28	0.05	1.00												
9.WOS	0.51	0.29	-0.00	-0.04	0.06	0.05	0.07	-0.01	-0.01	-0.01	1.00											
10.Relatedness	0.95	0.22	-0.01	-0.24	-0.03	0.10	-0.08	0.03	0.09	0.08	0.06	1.00										
11.GDP growth	2.16	2.03	0.07	-0.00	-0.12	-0.00	0.10	-0.10	0.33	-0.11	-0.14	0.08	1.00									
12.Host country economic development	2.18	1.56	-.015	-0.24	-0.03	-0.11	-0.12	0.04	0.15	0.01	0.10	-0.06	-0.23	1.00								
13.Risk in investment year	84.35	14.21	-0.30	-0.01	-0.00	-0.05	0.03	-0.00	0.11	-0.04	0.01	-0.01	-0.12	-0.12	1.00							
14.Increase in host country risk	-7.46	8.57	0.02	-0.22	0. 14	-0.02	-0.18	0.03	-0.03	0.48	0.08	0.08	0.48	0.01	-0.04	1.00						
15.Cultural distance	2.68	0.54	0.49	0.11	0.12	0.14	0.23	0.00	0.01	-0.15	0.08	0.02	0.02	0.01	0.06	0.01	1.00					
16.Geographic distance	3.76	3.14	-0.01	-0.06	0.04	-0.00	0.13	-0.06	-0.00	-0.39	0.14	0.01	-0.01	-0.01	0.03	0.03	-0.19	1.00				
17.Managerial human capital	0.69	0.46	0.02	0.00	0.06	-0.10	-0.00	0.07	-0.04	0.08	0.44	0.14	-0.07	0.22	0.15	-0.01	0.23	0.35	1.00			
18.Managerial social capital	0.62	0.86	0.00	-0.03	0.16	-0.01	-0.01	0.17	-0.04	-0.04	0.05	0.22	-0.01	-0.05	0.39	0.53	-0.32	-0.01	0.33	1.00		
19.Managerial cognition	0.59	0.30	0.33	0.06	0.03	0.11	0.02	0.48	1.00	-0.58	0.23	0.54	0.74	0.15	-0.07	-0.13	-0.12	0.02	0.06	0.37	1.00	
20.Global connectedness differences	1.16	1.46	-0.19	-0.23	-0.12	-0.12	0.07	-0.04	0.39	0.33	0.53	0.61	-0.20	0.18	-0.23	0.22	0.23	0.53	-0.18	0.22	0.31	1.00

Table 2: Results of hierarchical logistic regression: the effects of DMC on the foreign divestment probability

Variables	Model 1	Model 2	Model 3	Model 4	Model 5*	Model 6*
1. TMT age	-0.194***	-0.196***	-0.196**	-0.196***	-0.197***	-0.196***
	(0.005)	(0.007)	(0.005)	(0.006)	(0.005)	(0.006)
2.TMT size	0.090***	0.092***	0.092***	0.092***	0.094***	0.091***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
3.Firm size	-0.324***	-0.318***	-0.320***	-0.258***	-0.314***	-0.308***
	(0.014)	(0.014)	(0.015)	(0.016)	(0.014)	(0.015)
4.Product diversification	0.130***	0.124***	0.126***	0.126***	0.128***	0.126***
	(0.013)	(0.012)	(0.012)	(0.013)	(0.013)	(0.013)
5.R&D intensity	-0.477***	-0.429***	-0.434***	-0.442***	-0.481***	-0.442***
	(0.074)	(0.075)	(0.075)	(0.075)	(0.074)	(0.075)
6.Subsidiary age	-0.012***	-0.008**	-0.009**	-0.030***	-0.020***	-0.009**
	(0.071)	(0.021)	(0.021)	(0.069)	(0.079)	(0.090)
7.Acquisition	0.060*	0.125*	0.123*	0.216	0.017	0.119*
	(0.901)	(0.891)	(0.891)	(0.904)	(0.982)	(0.886)
8.WOS	-0.016**	-0.005**	0.002	0.000	0.002	-0.001*
	(0.099)	(0.102)	(0.101)	(0.101)	(0.102)	(0.102)
9.Relatedness	-0.225+	-0.222+	-0.225+	-0.225+	-0.225+	-0.225+
	(0.127)	(0.127)	(0.127)	(0.127)	(0.127)	(0.127)
10.GDP growth	-0.006*	-0.007*	-0.005*	-0.003	-0.006*	-0.006*
	(0.991)	(0.995)	(0.947)	(0.996)	(0.993)	(0.992)
11.Host country economic development	-0.006***	-0.003**	-0.002**	-0.001*	-0.002	-0.002**
	(0.991)	(0.992)	(0.997)	(0.998)	(0.997)	(0.997)
12.Risk in investment year	0.064**	0.040**	0.034**	0.042*	0.039**	0.039**
	(0.107)	(0.103)	(0.112)	(0.466)	(0.478)	(0.477)
13.Increase in host country risk	0.361**	0.420**	0.432**	0.415**	0.426**	0.431**
	(0.157)	(0.160)	(0.155)	(0.156)	(0.158)	(0.159)
14.Cultural distance	0.237**	0.219**	0.236**	0.212**	0.232**	0.235**
	(0.137)	(0.138)	(0.136)	(0.137)	(0.139)	(0.133)
15.Geographic distance	0.031	0.042	0.021	0.012	0.016	0.019
	(0.049)	(0.059)	(0.050)	(0.050)	(0.050)	(0.049)
16.Managerial human capital		-0.410***	-0.412***	-0.400***	-0.404***	-0.400***
		(0.036)	(0.037)	(0.036)	(0.037)	(0.036)
17.Managerial social capital		-0.259***	-0.261***	-0.261***	-0.262***	-0.261***
		(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
18.Managerial cognition		-0.042	-0.045	-0.047	-0.154**	-0.150**
		(0.042)	(0.042)	(0.042)	(0.014)	(0.014)
19.Global connectedness differences			0.023***	0.021***		0.022***
			(0.001)	(0.001)		(0.001)
20.Managerial human capital x Global connectedness differences				0.035***		0.035***
				(0.005)		(0.005)
21.Managerial social capital x Global connectedness differences				0.025***		0.026***
				(0.004)		(0.004)
22.Managerial cognition x Global connectedness differences				0.047		0.026**
				(0.042)		(0.004)
R^2	0.47	0.62	0.64	0.68	0.63	0.70
Change in R^2		0.15	0.17	0.21	0.16	0.23
Number of cases	657	657	657	657	657	657
Number of divestments	131	131	131	131	131	131

Robust standard errors shown in parentheses, *** p-value < 0.001; ** p-value < 0.01; * p-value < 0.05; + p-value < 0.1. All models include dummies for parent firms, years and industry.

*Model 5 and 6, managerial cognition is measured at cluster-cultural base, instead of country-based.