

Essays on Regional Management Centres: Subsidiary management at the crossroad of psychic distance and regionalization

Nina Magomedova

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PhD in Business | **Nina Magome**





PhD in Business

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Моим родителям

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Chapter 1.

Thesis introduction

1.1. Context and motivation. What does this thesis study and why is it important?

Multinational companies (MNCs) are considered as the most important conveyors of business globalization (Dunning, 1994). Global operations are crucial for the existence of MNCs since international expansion is often a necessary condition for MNCs to survive in the long term. For instance, Carr and Garcia (2003, p.672) argue that for MNCs that are eager to maintain leadership positions in their industry, global market domination prescriptions are 'highly pertinent'. However, in the process of global expansion, they face arduous challenges, such as the difficulty of employing people from diverse cultures and approaches to business, the relationship between the parent company and the geographically remote foreign subsidiaries, the integration of the new operations with the existing ones, and the extent to which the operations will be adapted to the foreign environment versus maintaining parent company practices (Appelbaum et al., 2011, Kamoche, 1996; Prahalad & Doz, 1987; Rosenzweig & Singh, 1991).

On top of that, MNCs face another important challenge – the changing geography of international business (IB). Most of the MNCs have appeared in the territories and the business traditions of the Western world. Meanwhile, much evidence and statistical data show that IB pole is rapidly moving towards emerging economies (UNCTAD, 2019). The drastic changes in the geography of IB have unveiled young, high-speed, agile economies, with enormous underserved consumer markets, and these have created unprecedented business opportunities for MNCs around the world.

The attractive slice of pie, nevertheless, is difficult to bite, due to geographical and, more importantly, non-spatial, psychic distance that translates into differences in demand patterns, the necessity of adapting product lines to new customers, as well as difficulties in communication, acquisition of new knowledge and transferring it across borders. Moreover, MNCs need to compete with local companies that do not face a so-called liability of foreignness (Hymer, 1976; Kindleberger, 1969), i.e., additional costs that arise from operating in an unknown geographically distant environment, as well as cultural, political and economic differences between the corporate home market and the new target market (Zaheer, 1995).

To serve these unfamiliar markets, MNCs need a dynamic strategy to overcome the lack of knowledge and to introduce themselves to these new countries successfully. To achieve the efficient coordination of these distant markets, MNCs rely on a strategy of creating an integrated network of affiliates located in some particular region and administering them from an intermediate level organizational unit, i.e., delegating this unit the role of a Regional Management Centre (RMC). RMCs are intermediate level organizational units, such as Regional Headquarters, whose sphere of influence extends over affiliates located in a particular region (Chakravarty et al., 2017; Dicken, 2003). RMCs have attracted considerable attention from the IB scholars in recent years due to their increasing importance and employment by MNCs globally (Belderbos et al., 2017; Luiz & Radebe, 2016; Pla-Barber & Camps, 2012). The MNC regional configuration has also demonstrated its superior effectiveness in the expansion and coordination of international MNC activities in comparison with global integration or multidomestic approaches. This allows scholars to speculate about their growing pertinence for practitioners in the coming years (see, for instance, Chakravarty et al., 2017; Schotter et al., 2017). In light of that, a research line on the frontier of economic geography and management, called regionalization has appeared (see, e.g., Lasserre, 1996; Rugman & Verbeke, 2004, 2007). It illustrates the MNC strategy of creating an integrated network of subsidiaries within a specific region administered through RMCs.

The main arguments in favour of such regional structures are concentrated around the observation that in comparison with any other strategies, RMCs tend to deal better with the two fundamental issues of MNCs: (1) balancing conflicting demands for global integration and local responsiveness (Prahalad & Doz, 1987); and (2) reducing transaction costs associated with economic, cultural, geographical, and other differences (Ghemawat, 2003; Rugman & Verbeke, 1992) between countries or, in other words, with psychic distance (Johanson & Vahlne, 1977).

One of the types of RMCs that has attracted recent scholarly attention is known as a springboard subsidiary. This organizational unit was first introduced by Pla-Barber and Camps (2012), who defined it as an MNC's foreign affiliate established in a strategically chosen location (a springboard country) that allows rapid entrance into a host region by acquiring strategic knowledge about it with the purpose of overcoming the MNC's competitive disadvantages and developing a strong position in the host region (Bergström, 2006; Pla-Barber & Camps, 2012). This RMC type is characterized by (1) its 'outsidership', i.e., it is located outside the target region, and (2) its intermediate proximity, especially in terms of psychic distance, to both the headquarters (HQ) and the target region. These RMCs look to balance the interests of a parent company and the target region affiliates through the exploitation of its subsidiary-specific and locationspecific advantages. Their use is less common among MNCs due to their unconventionality and ambidextrous character, which is why they are heavily under-theorized in IB research. However, the scarce academic research has already demonstrated a superior capacity to address one of the main issues of MNCs of balancing global integration and local responsiveness. Given their practical value for MNC management, the choice to analyse these RMCs within the field of internationalization seems relevant.

The next section is dedicated exclusively to reviewing the progress in IB literature on springboard subsidiaries, since a large part of this dissertation focuses on these peculiar organizational units.

1.2. Progress in IB research on Springboard subsidiaries

The concept of a springboard subsidiary is relatively new with only a handful of empirical and theoretical articles on it, and its full understanding is still to be achieved. According to the literal definition, a 'springboard' is a strong, flexible board that is used for jumping very high in gymnastics or diving (Merriam-Webster, 2015).

The more figurative meaning of a 'springboard' is 'a point of departure, something that supplies conditions for a beginning, change, or progress' (Dictionary.com, 2015), 'helps you start an activity or process' (Merriam-Webster, 2015), or 'a basis from which other things grow or develop' (Cambridge, 2015). Practitioners use the concept of a springboard when speaking about a subsidiary that performs the function of a platform for entering, re-entering, growing and/or administering foreign regions. For example, the German MNC – ARAG Group acquired Spanish DEPSA insurance company to enter a new region, Latin America¹.

A few attempts have been made to conceptualize the springboard concept through the definition of diverse units of analysis: springboarding, springboard country and springboard subsidiary (Bergström et al., 2006; Caicedo-Marulanda et al., 2015; Chaves, 2018; Pla-Barber & Camps, 2012; Villar-García et al., 2017). The list of definitions is presented in Table 1.1.

Table 1.1. Main definitions in the field of a springboard subsidiary

Reference	Concept and its definition
Bergström (2006)	Springboarding – a way for a firm to enter psychically distant countries through developing and utilizing its networks and accumulating market knowledge in a 'third country' that is associated with a relatively short psychic distance for a particular firm. It is able to facilitate the accumulation of market knowledge that may be generalised in a market associated with relatively higher psychic distance; and it is able to facilitate the development and utilization of networks of other actors in markets associated with relatively higher psychic distance.

¹ "The recent purchase of the Spanish DEPSA: Direct Line Insurance operation is a further sign of the ARAG Group's continued commitment to Spain" (2015)

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Pla-Barber & Camps (2012)	Springboard country – a country that maintains an intermediate position in terms of distance, institutional knowledge and business knowledge between the country of origin and the country where the investment is being made.
Pla-Barber & Camps (2012)	Springboard subsidiary – a subsidiary that is located in the springboard country and has successfully incorporated the specific advantage of the springboard country into its subsidiary-specific advantage.

The first work that precipitated the appearance of a springboard subsidiary concept was a dissertation by Bergström (2006) that introduced a definition of springboarding as a way of entry into psychically distant countries through developing and utilizing the firm's networks and accumulating market knowledge in a third country (a springboard country), which would be in an intermediate position in terms of psychic distance between the home and the host countries. They present a multiple case study analysis of Swedish SMEs that used Singapore as a springboard country to enter the Asian region. The Asian region was perceived by the Swedish SMEs as psychically distant, whereas Singapore was viewed as a 'Westernised' country due to previously developed relationships with the country by Swedish, as well as other European (or 'Western') firms. Thus, the study showed that the propensity of Swedish SMEs to enter the Asian region using Singapore as a springboard country was higher. This study employs the theoretic lens of the Uppsala model (Johanson & Vahlne, 1977, 1990; Johanson & Wiedersheim-Paul, 1975) that proposes that firms gradually increase their international involvement due to the lack of knowledge and psychic distance. As a consequence, the internationalisation decisions of firm managers have an incremental character, and the internationalisation process evolves in an interplay between the development of knowledge about foreign markets and operations, on the one hand, and an increasing commitment of resources to foreign markets, on the other hand (Johanson & Vahlne, 1977). In that sense, the processes of knowledge acquisition and knowledge transfer are easier between the regions with lower psychic distance. Therefore, in order to overcome a large psychic distance between the MNC's home country and the host target market, the firm is motivated to use an affiliate in a third country that is less psychically distant from the corporate home country but at the same time has substantial business experience or strong cultural ties with the target region (Johanson & Vahlne, 1977, 1990). The use of this third affiliate

is supposed to help overcome psychic distance between the parent company and the target region and facilitate the administration of cross-national activities in this region (Bergström, 2006).

This incipient idea of administering a target region through an RMC located in a third country, i.e., outside both a parent company's home country and a target region, was further developed and conceptualized in the seminal paper by Pla-Barber and Camps (2012) that defined the two key units of analysis: springboard subsidiary and springboard country. Their vision of using a springboard subsidiary is similar to the 'springboarding' of Bergström (2006) in the sense that they see the use of 'a third subsidiary' as the advantage in the internationalisation strategy of an MNC. In particular, this 'third subsidiary' must be located in a 'springboard country' as a means of acquiring the necessary experiential knowledge² for breaking into a new market. They give the example of Spain as a springboard country for entering Latin America, arguing that the 'institutional knowledge'³ and 'business knowledge'⁴ of the Latin American markets that Spanish subsidiaries possess tend to be unique and give them superior capabilities to manage investments in that region.

A springboard subsidiary is defined as a subsidiary that is located in the springboard country and has successfully incorporated the specific advantage of this springboard country into its subsidiary-specific advantage (Pla-Barber & Camps, 2012). This definition is based on the argument that there are so-called subsidiary-specific competencies and capabilities (Hamel & Prahalad, 1994) that can be successfully exploited throughout an MNC. However, the knowledge that lies at the core of these competencies cannot be easily diffused within an MNC (Rugman & Verbeke, 2001), which makes these competencies and capabilities unique for a particular subsidiary. In that sense, Pla-Barber and Camps (2012) argue that for a subsidiary to become a springboard, a set of advantages unique to this subsidiary is crucial. They give the examples of Spanish subsidiaries that possess knowledge about the

² Experiential knowledge is defined as a kind of knowledge that is acquired through the firm's direct experience in the target country (Zaheer, 1995).

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³ *Institutional knowledge* refers to a company's knowledge of the culture of a country, its language, traditions, behavioural norms, education systems, laws, regulations and business customs (Kostova & Zaheer, 1999).

⁴ *Business knowledge* is defined as the knowledge of potential customers, competitors and market conditions in a particular country (Johanson & Vahlne, 1977).

Latin American market, the institutional and psychic proximity between Spain and Latin America, and argue that due to their unique advantages Spanish subsidiaries represent a perfect platform for European companies that have intentions to enter the South American region (Pla-Barber, 2012, 2014; Pla-Barber et al., 2009; Pla-Barber & Camps, 2012).

In recent years, the IB literature has made significant advancements in analysing springboard subsidiaries. The systematic literature review of academic publications in the databases Web of Science, Scopus and Google Scholar, using the keywords 'springboarding', 'springboard subsidiary', and 'springboard strategy' revealed 144 publications. After an in-depth examination of each academic publication, only 12 studies specifically focused on advancing the understanding of this type of RMCs were found to be directly related to the current research (see Table 1.2).

Table 1.2. Systematic literature review of publications on springboard subsidiares

N	Authors	Publication title	Public ation year	Source Title	Metho dology	Main findings
1	Bergström	Springboarding: a study of Swedish SMEs established in Singapore	2006	Jönköping International Business School	Multip le case study	The analysis of Swedish SMEs that expanded into the Asian market shows that 'springboarding' from Sweden to Asia through a branch located in Singapore seems more effective, as the Singapore branch shortens psychic distance between the Swedish parent company and the Asian target region.
2	Pla-Barber, Camps- Torres & Madhok	Springboard country and springboard subsidiary: a new outlook on internationalization into Latin America	2009	Globalization , Competitive- ness and Governabilit y	Theor y develo pment	The article examines the 'springboard country' and 'springboard subsidiary' concepts, based on the reality of Spanish-Latin American relations from a management research perspective. The two concepts are introduced for the first time: a 'springboard subsidiary' is a subsidiary company that makes the localization advantages of the 'springboard country' into a true specific advantage for the company.
3	Pla-Barber & Camps	Springboarding: a new geographical landscape for European foreign investment in Latin America	2012	Journal of Economic Geography	Theor y develo pment	The paper conceptualizes the springboard country and springboard subsidiary, stating that subsidiaries that are located in springboard countries and have successfully incorporated their location specific advantages give MNCs superior capabilities to expand, control and administer a target region.
4	Pla-Barber	Springboard affiliates: an organizational innovation in the	2012	Estudios gerenciales	Theor y develo pment	The paper discusses the theoretical contents of the concepts of springboard country and springboard affiliate, continuing the debate that had arisen in the previous publications. A springboard affiliate is becoming an organizational innovation

N	Authors	Publication title	Public ation year	Source Title	Metho dology	Main findings
		globalization of European companies in Latin America				that allows making the best use of the advantages of springboard countries aimed at improving the efficiency of globalization strategies on the part of European companies in Latin America.
5	Uribe- Arévalo, del Valle Santos- Alvarez, García- Merino	The internationalization of the Graphic communication Industry in Colombia: the guild's springboard effect	2012	International Journal of Business and Management	Theor y develo pment	This research suggests an analysis of the guild's role in the Graphic Communication Industry in Colombia and its effect as a springboard that facilitates the internationalisation of its affiliates through supporting programs and export promotions, thus highlighting the role of formal mechanisms in the institutional settings of Spain – Latin America
6	Pla-Barber, Villar & Silva- Domingo	Parenting MNC networks through springboard subsidiaries	2013	ACEDE 2013 Conference proceedings	Multip le case study	Based on qualitative data, the scholars propose three stages of a springboard subsidiary's life-cycle: establishment, consolidation, and maturity, each of which reflects distinct roles and loci of decision making among the three actors involved: headquarters, springboard subsidiary and local subsidiary. Overall, our study sheds distinct light on when and how headquarters adds value by matching parenting to the context.
7	Caicedo- Marulanda, Pla-Barber & Leon-Darder	A Micro- econometric analysis of the Springboard Subsidiary: a The	2015	Economics: The Open- Access, Open-	Quanti tative study	Based on panel data estimations for subsidiaries of European MNCs with a presence in Spain, the authors find that if the subsidiary is located in the springboard country, then the performance improvement of the subsidiary is about 49

N	Authors	Publication title	Public ation year	Source Title	Metho dology	Main findings
		Case of Spanish Firms		Assessment E-Journal		percentage points. When the Spanish subsidiary is considered a springboard subsidiary, its performance is 7.7 percentage points higher than the performance of other subsidiaries that are not springboard subsidiaries.
8	Villar, Pla- Barber, Silva- Domingo & Maghok	How can multinationals improve inter- regional expansion? The case of springboard subsidiaries for Latin America	2017	Universia Business Review	Multip le case study	Based on the expansion strategy of five European multinational firms, the authors develop an inductive model in which headquarters functions - coordination and knowledge creation processes - are distributed between the parent company and the springboard subsidiary along an accumulative process of capabilities. This model reflects the type and degree of commitment of both actors in each stage: whereas in the initial phase the springboard subsidiary and the headquarters act as substitutes, they execute complementary functions with the development of the local network in the target region.
9	Villar, Dasi, Botella- Andreu	Subsidiary-specific advantages for interregional expansion: the role of intermediate units	2018	International Business Review	Quanti tative study	Based on a dataset covering 188 subsidiaries, the study shows that the probability of taking on the role of springboard by a subsidiary is contingent upon experiential knowledge about the target region, as well as a rich knowledge base derived from a wide range of activities and a broad geographical scope. On the contrary, possession of slack resources does not necessarily mean that a subsidiary will take on this role, as such slack must be combined with experiential knowledge.

N	Authors	Publication title	Public ation year	Source Title	Metho dology	Main findings
10	Pla-Barber, Villar, &Madhok	Co-parenting through subsidiaries: a model of value creation in the multinational firm	2018	Global Strategy Journal	Multip le case study	The article analyses a model of interregional expansion of multinational firms by using springboard subsidiaries that serve as a bridge between headquarters and local subsidiaries since they share institutional and business ties with both. The authors develop a model in which some parenting functions, such as coordination, control, and knowledge creation, are distributed between headquarters and the springboard subsidiary during the process of capabilities accumulation.
11	Chaves	The springboarding network: multinationals in Latin America	2018	International Journal of Emerging Markets	Quanti tative study	From a sample of 154 subsidiaries, three categories for multinational's networks are created, with the Spanish subsidiary acting as the leader: strategic centres, administrative centres and regional headquarters. Findings provide evidence of cultural features, industry behaviour and the multinational's size and entry mode influence these networks
12	Pla-Barber, Botella- Andreu, &Villar- García	Intermediate Units in Multinational Corporations: Advancing Theory on their Co- parenting role, dynamics and outcomes	2020	International Journal of Management Reviews	Literat ure review	Through a systematic review of 68 studies published between 1996 and 2020, the scholars develop a conceptual framework that integrates complementary streams of theoretical and empirical research on the intermediate organizational units, pointing out springboard subsidiaries as subsidiaries that are assigned some resources to perform HQ functions at a cross-regional level

As can be appreciated from Table 1.2 that summarizes the findings of these articles, the majority of them are focused on understanding of the phenomenon of a springboard subsidiary, advancing its theoretical conceptualization, through theory development papers (4), and qualitative studies (4), with a minority of quantitative studies (3). The scholars propose interesting findings, such as the benefit of co-parenting, i.e., a model in which some parenting functions as control, coordination and knowledge creation are distributed between a parent company and a springboard subsidiary, which can benefit expansion in a specific target region (Villar-García et al., 2017). Other papers discuss the various stages of the progress of a springboard subsidiary, from its nascence to its dissolution, distinguishing between the stages of establishment, consolidation, and maturity. The scholars argue that different stages of the springboard subsidiary's changing role bring different value to an MNC and once their necessity is no longer pertinent, they are dissolved or lose their superior mandate (Pla-Barber et al., 2015). Moreover, quantitative studies centre on the performance measurement of the MNCs that use springboard subsidiaries, as well as the analysis of factors that help springboard subsidiaries to perform their roles more successfully. Thus, the academic literature finds that the performance of springboard subsidiaries is 7.7% higher than the performance of other subsidiaries located in the same country (Caicedo-Marulanda et al., 2015). Moreover, the probability of taking on the role of a springboard by a subsidiary depends on its experiential knowledge about the target market, whereas financial and other resources do not ensure that a subsidiary will take on a springboard role (Villar-García et al., 2018).

In light of these contributions, the present thesis tries to advance the understanding of these RMCs and their ability to handle the challenges of the international expansion of MNCs.

1.3. Thesis objectives and structure

The literature review on springboard subsidiaries has shown that these RMCs seem to effectively address the issue of balancing global integration and local responsiveness due to their ability to exploit location specific advantages and subsidiary-specific capabilities. However, there are still some gaps to be addressed.

To begin with, it is still not clear how an ordinary subsidiary with some location specific advantages develops its strategic role into a springboard while its neighbouring affiliates within the same location do not. In this sense, there is no research on the contingency factors that boost the development of an ordinary subsidiary into a springboard. This kind of organizational reconfiguration seems to be of particular interest for subsidiaries located in mature markets because the growth opportunities in these markets are quite limited, which is why becoming a springboard presents the interesting option of improving their role, position and power within the MNC network. Therefore, the first objective of this thesis is to identify the drivers of the nascence of a springboard subsidiary. To fulfil the objective, we have analysed three European MNCs through a series of in-depth semi-structured interviews with the top management of springboard subsidiaries and affiliates located in their target region. All interviewed managers had been working in each MNC throughout the evolution of examined subsidiaries from ordinary into springboard, which allowed us to get first-hand evidence of this organizational transformation. For a more thorough and comprehensive analysis we have chosen the framework proposed by Dörrenbächer and Gammelgaard (2006) that divides the contingency factors of a subsidiary's role transformation into those related to (1) host-country localization advantages, (2) subsidiary's capabilities, and (3) micro-political HQsubsidiary negotiation processes. The findings of this study show that the evolution of a subsidiary's role into that of springboard is not an intended organizational change but rather a realized strategy as the result of a set of interrelated factors that created necessary conditions for the subsidiary's role transformation. To begin with, subsidiaries are influenced by simultaneous changes in their home market and the host target region, an outstanding condition not available to other types of RMCs. Furthermore, for subsidiaries to become springboards, they need to convince HQ of the indispensability of the advantages specific to their location for the successful coordination of the activities in a target region, i.e., language, cultural proximity and the accumulation of previous experience in working with this region. Additionally, the subsidiaries need to be able to demonstrate the HQ's dependency on them in the acquisition of these location-specific advantages. Only if a subsidiary succeeds in both and is supported by the external marketrelated circumstances is there a high probability of it becoming a springboard.

In the course of the accomplishment of the first study, the interviewees highlighted the importance of the springboard subsidiaries in 'translating messages' from the HQ to the target regional affiliates, and vice versa, and in serving as a 'filter' for the communication between the two. The issue was not the language, but rather what is called psychic distance in the IB literature. This has awakened our interest and prompted us to deepen the understanding of the role of these RMCs in the facilitation of the internationalisation processes between the parent company and the target region's affiliates from the perspective of psychic distance. The contributions on this topic are extremely scarce, and although there have been some speculations about a possible negative effect of 'sprinbgoarding' on psychic distance between a parent company and its target region affiliates (Bergström, 2006), no research has focused on understanding how springboard subsidiaries reduce psychic distance and the transaction costs associated with it. Therefore, the second objective of this dissertation is to explore how springboard subsidiaries affect psychic distance between the parent company of the MNC and the local affiliates in a target region.

To achieve the second objective, we applied a single-case study methodology. This methodology is appropriate when a case is extremely revelatory and exemplar. For these purposes, we have chosen the case of a German editorial company that manages activities in the Latin American market through a springboard subsidiary located in Spain. We analysed secondary data on the editorial industry in Germany, Spain and six Latin American countries. We also did a macro analysis of these eight countries, including common factors of psychic distance, such as language, culture, institutional distance and economic development. Furthermore, we conducted in-depth interviews with the springboard subsidiary management in order to have a more qualitative first-hand perspective. The findings of this study show that putting a springboard subsidiary in Spain between a German HQ and Latin American affiliates has actually shortened the psychic distance in terms of language, cultural, institutional and economic dimensions. In particular, when summing up the distances between the parent home country (A), the springboard subsidiary's country (B) and a country within the target region (C), the distance AB + BC was actually lower than AC, which means that to go from Germany to Latin America through Spain is actually shorter than going directly from Germany to Latin America. This was also supported by the testimonies from the case study analysis. The interviewee confirmed

that such dissimilarities as culture, speed of the economic cycles and some administrative issues that result from institutional dissimilarities, are perceived as less inhibiting when the communication flow passes through the 'filter' of Spain. Moreover, the position of Spain outside the target region also contributes to the reduction of psychic distance as Spain is perceived as impartial and not involved in the intra-regional conflicts and prejudices commonly found between neighbouring countries.

The results revealed in this study give rise to a great interest in the issue of shortening psychic distance. Principally, the conclusions of the study – AB + BC < AC – contradict the very basics of geographic distance. The IB literature on psychic distance has already pointed to some important dissimilarities between geographic and psychic distance, such as distance asymmetry (Hakanson & Ambos, 2010; Shenkar, 2001); hence, the contribution of the single-case study prompts further research in this direction. In particular, we were interested in finding out whether the case of Germany–Spain–Latin America was unique, or rather exemplar, and if MNC from other origins with different target regions could benefit from the location of their RMCs in Spain. Moreover, we wonder whether it is possible to find an optimal location for RMCs that would minimize psychic distance and transaction costs between different regions of origin and destinations.

All these questions lead us to pose the third objective of this thesis, which consists of proposing an RMC location optimization model based on the psychic distance perspective in order to find the best RMC location that minimises distance between a parent home country and its target region affiliates.

To achieve the third objective of the thesis, we collected secondary data on 25 different variables from 125 countries. The values of variables that changed over time were taken from 12 consecutive years, from 2005 to 2016. We first used exploratory factor analysis to reduce some of the variables to four psychic distance dimensions (political, demographic, economic, and educational), then we added the cultural distance using Kogut and Singh (1988) index and took variables of geographical distance using the package Geosphere in R. The rest of the variables (indicators for language, religion, colonial and trade ties) were taken as separate dimensions. In total we obtained ten psychic distance dimensions: political, demographic, economic, education, language, religion, culture, colonial ties, trade ties and geographic

distance. Afterwards we developed an algorithm that would allow us to obtain the weight for each of the dimensions that would minimize the psychic distance index in total. To do so, we used an evolutionary computation technique called 'differential evolution' (package DEoptim in R). We developed an algorithm in R that allowed us to find the weight using the data from the battery of fitness tests. These data were based on the academic evidence on springboard subsidiaries that assumes that this type of RMC is able to reduce psychic distance. Once the weights were obtained, we applied them to other countries and regions.

The results of the third study show that the ten dimensions chosen for the RMC location optimization model all demonstrated its relevance for RMCs. However, according to the weights obtained in the study, their comparative importance is different. For instance, the dimensions that relate to formal country characteristics, such as political and economic development, as well as former colonial ties and present trade relationships seem to be relatively more important than other dimensions. On the contrary, the dimensions that relate to informal country factors, such as culture, or even language and religion, seem to be less important. Additionally, we applied the obtained weights to the geographic settings outside those listed in the battery of fitness tests and found more locations for RMCs far beyond the ones analysed in the previous literature. We also found that the obtained weights had some limitations in term s of geography, showing no congruent results for the settings of Europe – Asia, for instance. The findings obtained in this third study prompted some interesting contributions (discussed later in this thesis), and offer new avenues for further investigation. Table 1.3 presents the summary of the primary and secondary objectives of this thesis.

Table 1.3. Thesis objectives and structure

Title Objective

Chapter 2: The nascence of a springboard subsidiary: drivers of a subsidiary's role development

Primary

To explore the antecedents of the evolution of an ordinary subsidiary into the intermediate organizational units of springboard

Secondary

- 1. To evaluate the drivers related to the double external environments of subsidiaries that boost their strategic role
- 2. To analyse some subsidiary-specific capabilities that lead to the evolution of their role.
- 3. To scrutinize the role of micro-political negotiation processes between a subsidiary and its parent company that help develop its role.

Chapter 3: Reducing psychic distance through springboard subsidiaries: an exploratory case study

Primary

To explore how springboard subsidiaries as RMCs affect psychic distance between their parent company and the administered target region.

Secondary

- 1. To analyse the impact of the intermediate psychic proximity of these organizational units on the overall psychic distance between a parent company and a target region.
- 2. To evaluate the impact of their out-of-the-target-region location on the overall psychic distance between a parent company and a target region.

Title Objective

Chapter 4: Optimizing Regional Management Centre locations from a psychic distance perspective: an evolutionary computation approach

Primary

To find optimal locations for RMCs by proposing a location optimization model that includes 10 psychic distance dimensions and uses a differential evolution algorithm that calculates individual weights for each of the dimensions.

Secondary

- 1. To define the most relevant psychic distance dimensions for the RMC location, considering the specific tasks and duties of these organizational units.
- 2. To define the variables that explain each of the 10 dimensions and collect longitudinal data.
- 3. To develop an algorithm that computes the weights for each psychic distance dimension that optimizes the RMC location.
- 4. To apply the computed weights to different trajectories of international expansion of hypothetical MNCs in order to find the optimal location for RMCs where psychic distance between a parent company country and a target region will be minimized.

1.4. Dissemination strategy

The outputs of the thesis have been presented, submitted and/or published in various editions the full list of which is presented below:

Academic conferences

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. (2016). Reducing psychic distance through springboard subsidiaries, *European International Business Academy (EIBA) Annual Conference*, Vienna.

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. (2017). Interregional Internationalization: an exploratory approach towards the emergence of a springboard subsidiary", *Asociación científica de economía y dirección de empresa (ACEDE)*, Aranjuez.

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. (2018). Transformation of a Subsidiary into Springboard: Antecedents and Outcomes, *Strategic Management Society (SMS) Annual Conference*, Paris.

Peer-reviewed publications

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. (2017). Reducing Psychic Distance Through Springboard Subsidiaries: An Exploratory Case Study. In *Distance in International Business: Concept, Cost and Value* (pp. 471-493). Emerald Publishing Limited. (2017 CiteScore 0.47, SJR Q3)

Under review

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. The naissance of a springboard subsidiary: drivers of a subsidiary role evolution. *Management decision*. (2019 Impact factor 2.723, JCR Q2, 2019 CiteScore 0.83, SJR Q1)

Other activities and publications

Magomedova, N., Achcaoucaou, F., & Miravitlles, P. (2017). Interregional internationalization: an inductive approach towards the emergence of a springboard subsidiary. In *Strategy, change and business networks* (XXVII ACEDE Proceedings) Asociación de Economía y Dirección de Empresas-ACEDE. ISBN: 978-84-697-3588-6.

Magomedova, N., Achcaoucaou, F., & Miravitlles, F. (2017). The contingency factors of the emergence of a springboard subsidiary. An inductive approach, *Seminari de Recerca, Universitat Internacional de Catalunya*.

Magomedova, N., Achcaoucaou, F., & Miravitlles, F., & Roche, D. (2020). Optimizing the location for Regional Management Centres through the perspective of psychic distance: an evolutionary computation approach, *Seminari de Recerca, Universitat Internacional de Catalunya*.

1.5. Concluding remarks

This thesis is a testimony that the topics of subsidiary role development, regional configuration strategies of MNCs, and psychic distance are of utmost academic interest and of imminent managerial importance. The objectives of this dissertation are based on a thoroughly conducted systematic

literature review and prompted by the findings suggested in the studies themselves. The studies conducted within the framework of this thesis apply the qualitative methodologies of a multiple-case study and a single-case study, as well as quantitative methods of exploratory factor analysis and evolutionary computation. Such exhaustive methodological approaches have given us the chance to come to interesting conclusions and to propose thought-provoking discussion for IB scholarship.

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Chapter 2.

The nascence of a springboard subsidiary: drivers of a subsidiary role development

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Abstract

Purpose – The aim of this study is to explore the drivers that boost the evolution of a subsidiary's strategic role from an ordinary subsidiary into a Regional Management Centre of springboard in multinational companies.

Design/methodology – The authors apply a multiple case study methodology to analyse the transformation of three Spanish subsidiaries of European multinational companies into springboard subsidiaries to pursue opportunities in Latin American region.

Findings – The results evidence that the development of springboard subsidiary's role is influenced by a set of preliminary factors that include: (1) the coincidence of a favourable economic change in the target region of expansion and unfavourable market conditions in springboard subsidiary's home market; (2) localization-specific advantages of a subsidiary that allow it to develop unique capabilities, such as ability to reduce psychic distance between headquarter and target region, balance intra-regional conflicts inside the target region, and transfer knowledge from headquarter to the target region effectively; and (3) micro-political headquarter-subsidiary negotiation processes as a result of subsidiary' strong initiative, peculiarities of the structure of a multinational company, and a strong dependency of the headquarter on subsidiary's unique capabilities.

Originality/value – The study contributes to International Business literature by providing an in-depth analysis of springboard subsidiary evolution and explaining how ordinary subsidiaries located in saturated markets can cause organizational change and achieve the extension of their strategic role into RMCs.

Keywords: springboard subsidiary, subsidiary role evolution, regional management centre.

2.1. Introduction

The increasing global competition, caused by evolving consumer trends, appearance of new markets and competitors from diverse backgrounds, creates intricate challenges for multinational companies (MNCs) (Mazon et al., 2017). Given the complexity of providing efficient responses to environmental changes, management scholars call for more research-based papers that can help MNCs to intelligently redirect their strategies accordingly and adapt their organization structure "in a boundary-less world" (Singh, 2018:2).

Under these circumstances, subsidiaries receive a special protagonism in the MNC's international expansion, and get a chance to develop a strategically important role in exploring and leveraging new foreign market opportunities (Ghoshal & Bartlett, 1990; Andersson & Forsgren, 2000; Doz & Prahalad, 2018), especially in increasingly distant regions. The development of a subsidiary role has been in the focus of the International Business (IB) literature for the last three decades. It is represented as a fundamental shift in the subsidiary's strategy (White & Poynter, 1984), and is defined as evolution in subsidiary's unique, value-creating resources and gained strategic responsibilities (Egelhoff, Gorman and McCormick, 1998). Indeed, foreign affiliates have rapidly evolved from being strategy implementers in their local markets to becoming actively involved in strategy formulation of the MNC on a regional level (Asakawa & Lehrer, 2003; Hoenen, Nell & Ambos, 2014). This is particularly observable for MNCs that operate in regions that are deeply dissimilar from the MNC's home country in terms of psychic distance (Sousa & Bradley, 2005). An intended strategy to address this challenge is to delegate certain administrative tasks to a local subsidiary within the region that would serve as a Regional Management Centre (RMC) for this area. However, studies find that due to some intraregional conflicts these local RMCs do not always handle their tasks successfully (Brock, Johnson and Zhou, 2011; Alfoldi, Clegg and Mcgaughey, 2012). Therefore, MNCs' management is called to sharpen their wits and look for more efficient strategies of coordinating affiliates in distant and fragmented target regions.

In this regard, IB scholars pay increasing attention to MNCs that implement innovative strategies of inter-regional expansion through a new type of RMC. In particular, instead of coordinating foreign affiliates in a new

region directly, some MNCs use an already existing subsidiary outside the region to take advantage of its managerial expertise and institutional knowledge about the target region (Pla-Barber & Camps, 2011; Villar, Dasí & Botella-Andreu, 2017). Such units are known as springboard subsidiaries, and are defined as RMCs that are located in the intermediate position in terms of institutional distance and experiential knowledge between the home country and the target region (Pla-Barber & Camps, 2011). This strategy has proven to be particularly effective for MNCs that operate in the dynamic environments of inter-regional expansion, and the debate around this subsidiary role is incrementing rapidly (Magomedova et al., 2017; Pla-Barber et al. 2017; Villar et al., 2018). Given the novelty of a springboard role, the IB literature has been hitherto focused on the understanding of its unique features, and until now has not had a chance to address the issue of how certain subsidiaries change their role into springboards. Such organizational transformation bears great interest, since it becomes a unique opportunity for subsidiaries in mature markets with limited possibilities for local growth, to expand their strategic role beyond their domestic borders, and gain the role of springboard.

Therefore, the objective of this study is to present a comprehensive analysis of the drivers that boost the transformation of an existing subsidiary into an RMC of springboard. To do so, we use an exploratory case study analysis of three European MNCs that manage foreign affiliates located in Latin America through their RMCs located in Spain. The results reveal that setting up a springboard subsidiary is not an intended organizational change, but a realized strategy of an MNC as the result of HQ-subsidiary bargaining processes in an attempt to adapt to dynamism of intra-regional expansion.

The article proceeds with the theoretical framework for drivers of the transformation of subsidiary into springboard. Then, the study presents methodology and research findings. Finally, conclusions, limitations and future research lines are proposed.

2.2. Drivers of a springboard subsidiary role evolution

The concept of a subsidiary role development on the basis of its own strategic business decisions was first considered by Prahalad and Doz, (1981). The idea that a subsidiary can grow its own importance and the sphere

of influence within the MNC was quickly picked up by the IB scholars and formed a distinguished research line on subsidiary role evolution (White and Poynter, 1984; Jarillo and Martíanez, 1990; Paterson and Brock, 2002). Within this research line there were proposed classical frameworks on subsidiary role evolution emphasizing three main drivers: the MNC itself and competition from other subsidiaries, the subsidiary management desire to increase autonomy and intra-organizational network, and the local environment that gives the subsidiary specific opportunities to develop its role (Bartlett and Ghoshal, 1989; Birkinshaw and Hood, 1998). This framework was later adopted and further developed by Dörrenbächer & Gammelgaard (2006) that divide the contingency factors of subsidiary role transformation into those related to (1) host-country localization advantages, subsidiary's capabilities, and (3) micro-political HQ-subsidiary negotiation processes. Unlike the classical framework, the paper of Dörrenbächer & Gammelgaard (2006) emphasizes that the strategic intend of HQ might be changed because of negotiation processes with its subsidiaries, where each subsidiary's bargaining power is determined by an interplay of its capabilities and host-country localization advantages, thus providing a more multifaceted explanation of the intra-organizational processes related to subsidiary role development. The present study follows the framework proposed by Dörrenbächer & Gammelgaard (2006) to explore the factors of the development of springboard role.

To begin with, localization advantages linked to a subsidiary role development are related to changes in host market conditions (Benito et al., 2003; Egelhoff et al., 1998). Specifically, subsidiaries are more likely to extend their strategic scope when there are favourable changes in a host country's competitive environment, such as decreasing protectionism associated with political transitions and emerging international competitiveness (Dörrenbächer & Gammelgaard, 2006). Scholars further highlight that improved infrastructure, social conditions and economic growth in a host country, also play an important role for the change of scope of the local subsidiary (Rugman and Douglas, 1986; Egelhoff, Gorman and McCormick, 1998), thus limiting their observations to a single specific location of a foreign subsidiary. In the case of springboard subsidiaries, however, the picture is expected to be more complicated, given the fact that these units are linked to more than one host region normally geographically

extended in distance (Pla-Barber and Camps, 2011), thus, expanding the traditional paradigm.

Furthermore, subsidiary's own value adding capabilities influence its role transformation within the MNC. Considering an MNC as a collection of globally dispersed affiliates that have access to unique resources (Nohria & Ghoshal, 1997), subsidiary's capabilities are, therefore, central for its role development. Specifically, resources are distributed asymmetrically within the MNC, which sometimes creates a strong dependence of the MNC on a particular subsidiary's capabilities (Amit & Schoemaker, 1993). In the case of springboard RMCs, these capabilities are associated with their localization specific advantages (Pla-Barber & Camps, 2012). In particular, springboard subsidiaries are located in countries, which offer intermediate psychic proximity to both HQ's home country and a target region where the administered affiliates are located (Bergström, 2006), which converts them into important bridges between the HQ and the target region. Moreover, the fact that springboard subsidiaries are located outside the target region can also contribute to the development of unique capabilities necessary to facilitate administration of foreign affiliates in fragmented markets with deep intra-regional conflicts. Therefore, the development of a springboard role is a clear case of MNC's resource dependence on a specific subsidiary. This case indeed was not fully considered in the Dörrenbächer and Gammelgaard (2006) framework, since their contigency factors were inferred from a situation where HQ's dependence on subsidiary's resources was weak, and in this sense, empirical evidence from springboard susbdiairy might extend this framework.

Ultimately, subsidiary role development is strongly determined by intraorganizational micro-political processes that impact HQ's intended strategy (Dörrenbächer and Gammelgaard, 2006). In order to develop a strategic role of an RMC, subsidiary management has to struggle hard to be recognized by HQ (Ghoshal & Bartlett, 1990; Birkinshaw, 1996; Birkinshaw & Hood, 1998). The bargaining process between HQ and subsidiary management is crucial in endowing subsidiaries to advertise their capabilities to HQ, and eventually help subsidiaries to enable emergent, or realized, strategies that modified or even contradicted HQ's initial strategic intent (Bamford, 2006). The achievement of a mandate of an RMC is a particularly contested organizational terrain, which stimulates top management of the subsidiaries to enhance their strategic role within the MNC by taking initiatives and competing against other units of the MNC thus demonstrating entrepreneurial behaviours (Birkinshaw & Hood, 1998; Taylor, 2001). So far, the IB literature on springboard subsidiaries does not contain explicit observations on the role of the intra-firm bargaining processes in its pursuit of subsidiary role transformation. Rather it is suggested that the HQ deliberately appoints the role of springboard to a subsidiary that possesses some localization advantages without analysing the circumstances that led to such decision (Bergström, 2006; Pla-Barber & Camps, 2012; Marulanda et al., 2015). Therefore, further evidence is needed to extend the understanding of these organizational units.

2.3. Methodology

2.3.1. Method description

Considering an exploratory character of the research question of this article, we use a case study methodology due to its potential to generate novel and ground-breaking theoretical insights (Yin, 2017). We have used purposeful sampling technique, as proposed by Patton (2005), to identify cases of European MNCs (outside Spain) that use springboard subsidiaries in Spain to coordinate their expansion to the Latin American continent. First, we have analysed press articles of the last 30 years included in Factiva database, contrasted the obtained information with official MNCs' annual reports, and identified a dozen of European MNCs that suited the searched pattern. Second, we have contacted the selected firms via telephone calls, providing a detailed description of our research purpose. The telephone interviews have helped us identify the specific top managers within the Spanish subsidiaries and Latin American units that were responsible for the decision-making processes during the expansion in the region. A crucial factor for us has been to choose firms where these top managers, with an average of 15 years of experience within the companies, could provide firsthand longitudinal evidences of the events that happened in the course of the conversion of the subsidiaries into springboard, including pre-expansion and post-expansion state of the companies. As a result, we have chosen three European MNCs (Dutch, German and French) with a very similar expansion strategy but very different characteristic features (e.g. size, age, industry,

organizational structure, previous international experience, etc.), which allowed for cross-case comparison (Meyer, 2001). Tables 2.1 and 2.2 summarize the information about the companies and the interviewees.

Table 2.1. Sample Description

	HQ location, year founded	Industry	N° of employees	Turnover	Springboard subsidiary location
SOFTW	Holland, 1993	Software	Ca. 130	Ca. 20 million €	Barcelona, Spain
EDIT	Germany, 1835	Editorial and communication	Ca. 170000	Ca. 17 billion €	Barcelona, Spain
TRANSP	France, 1928	Transportation	Ca. 34500	Ca. 6,9 billion €	Madrid, Spain

Table 2.2. Data collection

MNC	Interviewee position	Interviewee's experience within the company	Interviewee location	Total interview length
SOFTW	Spanish Subsidiary's Top Manager	More than 20 years. Headed the expansion into Latin American region from the beginning. He is also one of the three members of the MNC's Board of Directors.	Spain	180 min
SOFTW	México & Caribe Regional Manager,	More than 5 years. Entered the company at the moment when it began to expand into Mexico and headed its expansion in Mexico and Caribe region.	México	120 min
SOFTW	Ecuador General Manager,	More than 5 years. General Manager of MNC's external partner that acts as its exclusive representative on all Ecuadorian market.	Ecuador	60 min

MNC	Interviewee position	Interviewee's experience within the company	Interviewee location	Total interview length
EDIT	Spanish Subsidiary's Chief Officer,	About 20 years. Heads Spanish and Latin American market of the MNC.	Spain	165 min
TRANSP	Spanish Subsidiary's Top Manager,	More than 10 years. Managed inter-regional Spanish-Latin American operations.	Spain	130 min
TRANSP	Latin American Regional Manager, Former Spanish subsidiary's top manager	More than 20 years. Headed Spain and Latin American market expansion while the subsidiary was springboard. Managed and controlled Regional Headquarters in Brazil from 2009 to 2014.	Brazil	140 min

The data has been collected through semi-structured interviews in two rounds, complemented by financial statements, interim and annual reports, official webpages and other documents provided by the MNCs, with a total of 120-250 pages of secondary data per case. Previous to the interviews, the interviewees were given an interview script, focused on the evolution of the subsidiary's strategic role, and relationships with the HQ and the Latin American region over time. Given the geographical dispersion of the interviewees, the interviews were conducted either in person or by Skype. The interviews of both rounds, with the duration between 1 and 2 hours each, were recorded and transcribed in full, and triangulated with the field notes, annual and financial reports, as well as during the within-case and cross-case analysis (Yin, 2017). The results of the research were sent to the interviewees in order to receive their feedback and, if needed, point out inaccuracies.

2.3.2. Case description

SOFTW MNC subsidiary was founded in 1993 with the MNC's objective to expand in the Spanish market. After successfully achieving growth in its home market, the subsidiary started exploring foreign market opportunities in geographically proximate territories, such as Southern Europe and Northern Africa. Once it gained experience opening nearby geographical markets and after years of observing positive changes in Latin American market, the subsidiary came up with the initiative to start the expansion into this region. Initially HQ wanted to delegate this expansion to the US unit, but finally it decided to delegate the Spanish subsidiary the RMC role of springboard in 2012. Since then, the MNC went from having no presence in Latin American market to about 10 countries in just 6 years. This growth resulted in the raise from 0 to 15% of total sales of the company between 2012 and 2016, with the growth rate of almost 200% per year. In 2018 the company approved the decision of the Spanish subsidiary to open a wholly owned subsidiary in Colombia, thus confirming its role of an intermediate level unit.

EDIT MNC subsidiary was established in 1962, with a singular objective to grow within the Spanish market. However, in 1970s the subsidiary independently initiated exploration of business opportunities in Latin American countries. In parallel to the Spanish subsidiary's actions in this region, the company also expanded into Latin America directly through its HQ as well as other organization units. Among others, the company was trying to close the acquisition deal with one of the major companies in this region, but its attempts were fruitless. Meanwhile, decades of successful operations of the Spanish subsidiary in this region demonstrated its superior capabilities to manage this market, which resulted in the HQ's decision to delegate it the role of springboard and centralize all regional activities through this subsidiary in 2012. The subsidiary immediately took over the acquisition deal and after some months of intense negotiations, the Spanish subsidiary successfully closed the deal, which permitted the MNC to double its size in the region, and accelerate the company's growth there.

TRANSP MNC subsidiary was established in 1989, after the acquisition of an existing Spanish company, with the principal motive of exploiting opportunities in Spain. Prior to the acquisition the subsidiary already had some activities in the Latin American region, which it continued to develop afterwards, simultaneously with MNC's own operations there. Although HQ's direct operations in Latin America were successful enough, they noticed that the Spanish subsidiary's activities in the region were growing in sales faster mainly due to its initiative of diversifying the services offered. That made the HQ conclude that the MNC was not exploiting all the

opportunities in this growing market, and in 2005 it decided to delegate the springboard role for this region to the Spanish subsidiary. The diversification of services allowed the MNC to strengthen the company's presence there, and helped the local Latin American subsidiaries gain enough expertise and autonomy to be administered from within the region by 2009.

Despite differences in the trajectories of the three subsidiaries, the cases have some striking similarities in circumstances that provoked the change of subsidiaries' role into springboard. The following section will explore what contingency factors contributed to the transformation of Spanish subsidiaries from units of local importance to regional springboards.

2.4. Research findings

2.4.1. Changes in a target region and subsidiary's home country

According to Dörrenbächer & Gammelgaard (2006), the first contingency factor of subsidiary role transformation is a favourable change in the host market conditions. The case of springboard subsidiaries, however, is special and more complex, as they are located outside the target region. In particular, unlike the model proposed by Dörrenbächer & Gammelgaard (2006), where only the host market's conditions are taken into account, it is important to consider the conditions not only in the subsidiary own home market but also in the host target market. In this sense, SOFTW company detected an important industrial transformation in Latin American market that created an increasing interest in the MNC's software. The company saw the current perspective as a "favourable circumstance" to expand their activities into this region. Similarly, EDIT top management noticed a stable improvement of education level in all Latin American countries, which created a significant growth of the number of people interested in reading that was expected to be increasing even more in future. The evidence from the two companies was supported by TRANSP's Subsidiary Director:

"Late 90s—early 2000s was a period when Latin American countries began to establish themselves in terms of political stability, dictatorships started to disappear, populist movements and *guerillas* started to calm, and this change

created a series of positive socio-economic conditions and legislative stability."

Contrarily to the positive change in Latin American market, it was a period of stagnation in the subsidiaries' home market, Spain. The interviewees evidenced that although the Spanish subsidiaries wanted to grow internally, their local market opportunities were limited, which pushed them to look for new markets. Therefore, their propensity to benefit from the opportunities in Latin American market was even stronger. As EDIT interviewee posits:

"Our industry is saturated here in Spain, and I don't see how we can grow here any further. The sales stabilized years ago and since then they are more or less on the same level. The market tendencies can change but not the market size, so for us it was natural to look for opportunities outside".

In other two cases, the economic crises of 2001 and 2008 brought about the negative change in Spain. The slowdown in domestic sales created a stimulus for Spanish subsidiaries to explore new opportunities outside (see Figure 1 for more quotes). This means, that a positive change in the host environment does help to understand the transformation of a subsidiary into springboard but it does not end there. In particular, the combination of the favourable change in the target region and unfavourable conditions in springboard subsidiary home market, such as saturation and stagnation, both boosted this organizational change (see Figure 1 for more quotes). Therefore, we put forward the following proposition:

Proposition 1. The coincidence of favourable conditions in the target region environment with unfavourable conditions in the subsidiary's home market, drives the development of springboard role.

2.4.2. Subsidiary capabilities

Another pillar of the subsidiary role change is the development of its own capabilities. As stated above, subsidiaries have access to localization-specific advantages, which gives them the opportunity to develop unique capabilities.

First, the interviewees highlighted that Spanish subsidiaries had superior capabilities of understanding local market's needs and facilitating

communication between HQ and the target region due to psychic proximity between Spain and Latin American countries. As the interviewees posit "sharing the same language accelerates a lot of business processes". However, it is not purely linguistic similarity that helped Spanish subsidiaries to understand Latin American market, but rather a multifaceted psychic proximity between Spain and Latin America. In the words of EDIT subsidiary interviewee:

"I, as a Chief Officer [of Spanish subsidiary], always insisted that all the negotiations must go through us, because we kind of filter the information so that both parties understand each other better. And it is not because of the language: there is a person in the HQ that speaks Spanish perfectly, but when he speaks to Latin American colleagues, they don't understand each other, because the way of doing things, the way of thinking is different."

These differences in mind-sets often result in more profound problems, such as lack of understanding and trust, that can deeply affect the negotiations between the two parties (see Figure 1 for more quotes), and in this sense, the Spanish subsidiary's psychic proximity to Latin America is undeniable. Additionally, Spain has very strong institutional connections with the European countries, which, as EDIT interviewee posits, "helps European investors feel more comfortable to work with uncertain Latin American market through Spain". This intermediate psychic proximity of Spanish subsidiaries converted them into a kind of "bridges" between the two regions, which gave them strong capabilities to understand local markets better, facilitate inter-regional communication and, consequently, helped them to develop their strategic role.

Furthermore, the interviewed firms pointed at Spanish subsidiaries' capabilities to balance intra-regional conflicts and coordinate activities within the region more effectively. In this sense, the interviewees highlighted an evident divergence of intra-regional Latin American cultures, which is often overlooked by European firms. As SOFTW Regional Director for Mexico and Caribe posits:

"There are quite a lot of dissimilarities in Latin American region, and even though we speak the same language, in this sense this region is very much like Europe. For example, if you mix up Argentinean and Uruguayan accents, which are very similar by the way, they will be annoyed. How to explain this to a German person?"

Such intra-regional differences can be even more deepened by intra-regional conflicts and political rivalry that can increase the psychic distance within the area (see Figure 1 for more quotes). In that sense, Spanish subsidiaries are not involved into intra-regional prejudices of Latin American affiliates and maintain a somewhat impartial position. For instance, TRANSP interviewee claimed that the Spanish subsidiary "agglutinates diverse cultures of Latin American countries", while SOFTW interviewee noticed that his strong Valencian accent was perceived positively by all Latin American affiliates, and the fact that it was not Latin American seemed to be important. This extra-regionalism and the perceived impartiality made it possible for Spanish subsidiaries to balance intra-regional conflicts and acquire superior capabilities of coordinating regional activities, which in turn increased their chances to develop springboard role.

In turn a better understanding of local markets and capability to coordinate the region of these subsidiaries, helped them to develop superior capabilities of knowledge transfer between their HQs and Latin America. Thus, SOFTW interviewee points out:

"The process of transfer of our technology involves face-to-face negotiations to adjust the technology to local markets that normally last from 2 to 3 days, and training sessions of some weeks. Of course, they can be done in English, but they involve discussions with a lot of nuances. When you switch to another language you lose these nuances, and with them you lose some valuable information as well."

The loss of the "nuances", or in other words, tacit information, during the process of transferring knowledge across borders results in the decrease of effectiveness of the internationalization process. This makes it more difficult for HQ to work with Latin America directly, which gives an opportunity to Spanish subsidiaries, with their superior knowledge transfer capabilities, to propose themselves as intermediate units.

Similarly, Spanish subsidiaries turned out to be crucial in reverse knowledge transfer, i.e. when local subsidiaries generated new knowledge and created new products that were beneficial for the whole MNC. For instance, for EDIT company such reverse knowledge transfer has led to the discovery of local authors whose books became worldwide bestsellers:

"Thanks to our Chilean subsidiary, we have recently contracted a Chilean author, who has 27 million followers in YouTube. His book is going to be a hit and we are preparing to sell it all around the world. There was another author, contracted by our Colombian subsidiary, which was an absolute triumph – 11 hours signing books. These were the discoveries of our local subsidiaries, which without their help, we wouldn't be able to have."

It is important to clarify that the probability of detecting and discovering these new products would be implausible without the coordinating help from the Spanish subsidiary. In particular, the specificity of the editorial industry is that it is extremely multi-domestic: writers prefer to be published in local editorials, which makes the role of local subsidiaries crucial in capturing new authors. To successfully deploy their crucial role, local subsidiaries need to have trust from the higher organizational levels and, in this sense, mutual understanding between the Spanish subsidiary and Chilean subsidiary increases level of trust. As the result, Chilean management is less restrained to take initiative of looking for new potential products (or, in this case, writers) and share their "discoveries" with the Spanish subsidiary, whereas the Spanish subsidiary trusts the local subsidiaries' guts and welcomes this sort of initiatives (see Figure 2.1 for more quotes). The significant increase of knowledge flow between local units and the Spanish springboard subsidiary makes the discovery of locally born innovations possible.

Summarizing the arguments mentioned in this section, we put forward the bellow propositions:

Proposition 2a. Subsidiary's capability to reduce inter-regional psychic distance between HQ and a target region increases the likelihood for achieving springboard role.

Proposition 2b. Subsidiary's capability to balance intra-regional conflicts in a target region increases the likelihood for achieving springboard role.

Proposition 2c. Subsidiary's capability to transfer knowledge in both directions – from HQ to a springboard subsidiary and from a springboard subsidiary to a target region – increases the likelihood for achieving springboard role.

2.4.3. Impact of micro-political processes and subsidiary initiative on HQ's intended strategy

The third pillar that boosts the transformation of a subsidiary into springboard is related to intra-organizational micro-political bargaining processes. As mentioned before, Spanish subsidiaries had access to unique capabilities engrained in their localization advantages, such as psychic intermediate proximity and extra-regionalism. These capabilities are tacit in their nature, and difficult to be perceived at first sight from the HQ perspective. This explains the fact that in none of the three cases, delegating springboard role to a Spanish subsidiary was HQ's initial strategic intent. The Spanish subsidiaries' interviewees evidenced that they needed to "fight" for the role of springboard against other organizational units. In cases SOFTW and EDIT, their intra-firm competitors were US subsidiaries, because a priori it seemed somewhat logical for the HQ due to "geographical proximity, time zone and common business practices" with Latin America, as EDIT interviewee posits. In case TRANSP, the rival was the HQ itself:

"According to the MNC's structure of that time, all the international activities were mainly managed from the International Department located in the French HQ. The attempt to compete for this role against this department was essentially an attempt to change the status quo."

In order to clearly manifest their tacit capabilities, the Spanish subsidiaries needed to demonstrate their superiority by taking initiatives outpacing internal competitors. These initiatives were expressed in proactive attitude of top managers of the Spanish subsidiaries on the one hand, and their disposition to accept risks, on the other hand. For instance, SOFTW subsidiary had been observing the development of Latin American region during years prior to the MNC entry, and was the first to point out the upcoming opportunities in this market to the Board of Directors. TRANSP subsidiary chose another approach and deployed their own expertise to offer

a service to the Latin American market that the company itself had never thought about before. In all the three cases the initiate always came from the Spanish subsidiary itself. In the words of TRANSP interviewee:

"We started to exploit new opportunities in Latin America, because to depend on France was a reactive manner of doing business, whereas to exploit the opportunity to propose a completely new service to Latin American market was a proactive way of seeing business. The new contract was 100% Spanish subsidiary initiative. We detected it, we carried it out, and we presented the results to the HQ."

Likewise, SOFTW's Spanish subsidiary interviewee claimed that he "was not afraid of facing risks of failure if the new market opportunities did not work", when there was a possibility to pursue new geographical areas or new business lines. Such behaviour made the HQs realize that these subsidiary unique resources were crucial to achieve success in inter-regional expansion. At the same time, the tacit nature of these resources made HQs somewhat dependent on the Spanish subsidiaries, which dramatically challenged their initial strategic intent.

This realization, however, coincided with, and might be partly attributed to, another important issue – the peculiarities of MNCs' structure themselves. In particular, in all the three cases, the MNC's structure was decentralized, with considerable autonomy delegated to subsidiaries, which definitely influenced the capacity of Spanish subsidiaries to take proactive actions and allocate resources according to their autonomous decisions. Moreover, in cases EDIT and TRANSP, the process of gaining springboard role by the Spanish subsidiary coincided with structural changes of the whole organization – EDIT was consolidating its corporate structure after a series of mergers that happened during the 2000s, whereas TRANSP was being reorganized from product division to geographical division structure prior to the delegation of springboard role to the Spanish subsidiary (see Figure 2.1 for quotes). Such structural peculiarities made advertising of subsidiaries' capabilities easier, and they actively used the period of the overall organizational transformation and somewhat blurred decision making centre, with the objective to gain the bargaining power and negotiate the

development of their strategic role, thus changing HQ's initial strategic intent. Therefore, our next propositions are:

Proposition 3a. Decentralized structure and organizational changes boost the subsidiary's initiative to develop the unique resources associated to a springboard role.

Proposition 3b. HQ's strong dependence on subsidiary's unique resources increases subsidiary's bargaining power to negotiate a springboard role.

Host country &

subsidiary home

market

conditions

Figure 2.1. Cross-case analysis

believe in Spain we understand it better." Case 3, Top Manager, Spain.

"Our expansion to Latin America started when one of our clients in Spain decided to go there, after some financial problems that they experienced during the crisis of 2008-2012. It is also true that we had been observing Latin American markets for a while by that time and seen some important industrial changes that had created opportunities for us." Case 1, Top Manager, Spain. Positive change in a target "The process of gaining springboard role partially coincided with the crisis of 2001, when the local [Spanish] market started to reduce. We region & negative change started looking for opportunities outside the local market and Latin America was somewhat a natural choice for us. When we started in the subsidiary's home analysing this market, we realized that we could propose maintenance service offered in Spain. It opened a completely new market for the market company, which was substantial in size, much more stable, and did not depend on economic cycles." Case 3, Top Manager, Spain "There were petitions from our clients in Latin America, like "Don't put a French in front of me", and I guess that it is because there is some sort of idiomatic kinship between Latin America and Spain." Case 3, Top Manager, Spain "There is a big difference between the US and Ecuador in the way of thinking, and, as a consequence, much less confidence. They don't have enough patience and the willingness to adapt, whereas we, Ecuadorians, are soft culture, and do not tend to jump into things. With Spain the dialogue is more frank, we saw genuine interest from the Spanish subsidiary, and the ability to truly understand our needs The Channel director even changed his Castellano Spanish to Latin Spanish to adapt to us". Case 1, General Manager, Ecuador. "Partners from India, for examples, seem to lack trust when working with us, which limits our possibilities to grow there. On the contrary, Capability to reduce interwith Latin American countries the communication is franc, which results in a higher rate of sales growth". Case 1, Top Manager, Spain. "Every country in this region is different, and when I speak to a, say, Mexican, it is not the same as to speak to an Argentinean. And in the HO they see Latin America as a homogeneous market," Case 2, Chief Officer, Spain, "There is an obvious difference of working with different countries in this region, because all of them have quite different industrial development, political systems, and negotiation style, some of them are more transparent and direct, and others are more ambiguous. And I

"The fact that I am from Spain is perceived positively in all the Latin American countries I've been to. Because we are outside the region, we are not perceived as rivals, but rather as a bridge between Latin American and Europe". Case 1, Top Manager, Spain.

"Our relationship with the Spanish subsidiary can be described as 6 years of constant learning from each other. Obviously, the technology is theirs, but they were always eager to understand the needs of our market, and adjust the product accordingly, unlike, for example, our US partners. The fact that we share the language and are culturally proximate facilitated the learning process, and knowledge transfer between us". Case 1, General Manager, Ecuador.

"Our ability to transfer our unique knowledge to Latin American market, and successfully benefit from the new opportunities became crucial in the decision of delegating us springboard role". Case 3, Top Manager, Spain

"When the opportunity in Latin American region was detected, the initial idea was to manage the region through the US subsidiary, because it is closer in terms of geographical distance and time zone, and business culture on both continents is quite similar. Our subsidiary needed to demonstrate that we were better prepared for this task". Case 1, Top Manager, Spain.

"To be delegated the role of springboard was not easy. We needed to fight for it, and we gained it gradually, demonstrating that we were worth it. For example, when we took the initiative to acquire a major company in Latin American market, my boss from the HQ, who had been negotiating with them for 3 years, said to me "It is impossible to do, you won" to be able to close the deal. "And we did it. It was hard, but we did it." Case 2, Chief Officer, Spain.

"During the six years of our relationship with the Spanish subsidiary, we have never been in contact with the headquarters, nor with the CEO of the company. All the negotiations were carried out from Spain, and it was Spanish subsidiary's initiative to collaborate with us from the very beginning". Case 1, General Manager, Ecuador.

"The delegation of springboard role happened in parallel with structural changes of the MNC, from product to geographical division. So on the one hand we were lucky. But on the other hand, the HQ could have delegated this role to a subsidiary inside the region, and didn't because it saw our unit as more prepared and experienced". Case 3, Top Manager, Spain.

Capability of balancing intra-regional conflicts

Knowledge transfer

Intra-firm competition – HQ initial strategic intent

Subsidiary initiative

Micro-political processes

MNC structure related issues

2.5. Discussion

The framework proposed by Dörrenbächer and Gammelgaard (2006) has helped observe the transformation of a subsidiary's strategic role into an RMC unit of springboard from three different angles: the external factors of market conditions, the specific advantages of a subsidiary itself, and the intraorganizational negotiating processes between the top management of the subsidiary and the HQ.

First, the coincidence of favourable changes in the target market and unfavourable conditions in the subsidiaries' home market became an important factor of such transformation. In this sense, the confluence of the events in the home market and the host region allowed subsidiary managers to expose abilities to hunt for new opportunities even in conditions of limited growth in the home market and upgrade their strategic role within the MNC. These proactive entrepreneurial behaviours of subsidiary managers have been highlighted in the academic literature as an important prerequisite for a subsidiary evolution (Alfoldi, Clegg, & McGaughey, 2012; Birkinshaw & Hood, 1998). Indeed, such behaviours allow a subsidiary to develop competitiveness that eventually helps it thrive in the process of exploration and exploitation of new opportunities. They also contribute to creation of a competitive internal arena and internal benchmarking that becomes indispensable in the negotiation processes of the subsidiary role transformation with the HQ that will be discussed further.

Second, the peculiar localization advantages, such as intermediate psychic proximity to both HQ and the target region, and the extra-regional position, gave the subsidiaries an opportunity to develop unique capabilities, such as better understanding of target market needs, ability to balance intra-regional conflicts and boost the knowledge transfer between HQs and the target region. In this case, the capability of subsidiary managers to entrepreneurially take advantage of the positive and negative market circumstances also played a crucial role. In particular, such assets, as cultural, linguistic and institutional proximity, were advantages available to other affiliates in the same Spanish market, nevertheless, only the particular units studied in this paper capitalized these assets. On the contrary, the location in a saturated European market on the one hand, and the liability of outsidership on the other hand, could be considered as disadvantages, but were turned into key assets by the subsidiary managers. Thus, the fact of being located in a well-developed

Spanish market earned them legitimacy from less developed Latin American market, whereas strong ties with the home European region helped them to gain trust of the European HQ and investors. Moreover, being located outside the target region could have been interpreted as a drawback, described in the academic literature as liability of outsidership (Rugman & Verbeke, 2008), because it would be expected to lose tacit knowledge in the process of its cross-border transfer. However, introducing one more node in the international expansion – the springboard subsidiary – actually had a positive effect, ensuring better understanding between the target region and the HQ, the enhanced interpretation of the tacit knowledge across borders, and bolder initiatives of local target region subsidiaries that felt more confident in their decision taking when working through the Spanish subsidiary rather than directly with the HQ. Hence, the entrepreneurial efforts and cross-cultural sensitivity of Spanish subsidiary managers helped turn the liability of outsidership of these RMCs into their primary asset.

And finally, active initiative taking furthered by the then-happening MNC's overall organizational transformation, earned the subsidiaries a strong bargaining power in the negotiating of their strategic role within the MNCs. This, however, was not an easy win. Indeed, a more logical and optimized way of coordinating Latin American activities seemed either a traditional establishment of other types of RMCs, such as regional headquarters within the region, or the use of the HQ's international department and thus managing the distant activities directly. In fact, the participation of the Spanish subsidiary was initially perceived as useless in all the three cases, and to prove their indispensability was a challenging endeavour for the subsidiary management. To do so, the managers started looking for loopholes in the current system in order to turn the existing and not always supportive circumstances in their favour. In this sense, the intraorganizational processes that occurred in the MNCs, like structural changes in EDIT and TRANSP, and the absence of a rigid organizational structure of SOFTW, became a unique chance for the Spanish subsidiaries to change their role. This was the period of redistribution of decision-making power within the MNCs, and the proactive initiative taking of subsidiary managers allowed them to achieve their goal.

All in all, the delegation of springboard role to Spanish subsidiaries contradicted HQ's initial intent, and the pressure of strong interrelated factors

made MNCs' top management recognize the imminence of changing the intended strategy and realize that despite the seemingly unusual indirect way of organizing international activities, the use of regional outsiders as springboards to coordinate a targeted region is surprisingly beneficial. This initial managerial myopia brings to mind Mintzberg's "strategy safari" metaphor (Mintzberg, 2003). If strategy makers are Mintzberg's "blind people" and the strategy formation is the "elephant", seeing the chain of minor circumstantial coincidences that proceeded the appearance of springboard subsidiary helps to see the "elephant", because "to comprehend the whole we need to understand the parts" (Mintzberg, 2003:105).

2.6. Conclusions

Prompted by the scarcity of empirical evidences on the process of springboard subsidiary role development, this paper analyses the drivers that boost this organizational transformation. We adopted the framework of subsidiary role development proposed by Dörrenbächer and Gammelgaard (2006), and conducted an exploratory case study of three European MNCs that used their Spanish subsidiaries to expand into Latin American market. This study shows that the delegation of a springboard role to the Spanish subsidiaries was not an MNC's initial intent, but the result of a specific set of interrelated factors that created the necessary conditions for a subsidiary to win the springboard role.

The paper makes several contributions. First of all, unlike previous literature that highlights that the development of a subsidiary role is closely related to the changes in a market where the subsidiary is located, double springboard subsidiary's settings further the complexity of factors related to its transformation. In particular, the study shows that springboard role development simultaneously depends on favourable economic change in the target region, and some limitations for growth, stagnation or even negative economic change in subsidiaries' home market. Such confluence of market related factors in the development of springboard subsidiary role differentiates it from all other types of RMCs and makes them somewhat unique. Moreover, this study shows that HQs find themselves greatly dependent on the resources available to springboard subsidiaries, due to their tacitness and difficulty to be copied or transferred, which give these units

indispensable negotiating power. We, thus, respond to the gap, highlighted by the IB scholars, to analyse the shaping of MNC's strategy in the cases when HQ is highly dependent on its subsidiaries in terms of their resources (Dörrenbächer & Gammelgaard, 2006). Finally, springboard subsidiary role development is the result of an ensemble of factors, some of which are in the reach of subsidiary's influence (such as, initiative, development of unique capabilities and effective negotiating) and some are out of the reach of its influence (such as, market related factors and major changes in MNC's organizational structure).

The paper has important managerial implications for both HQ management and subsidiary management. In the conditions of growing rivalry and turbulent environment, HQ managers may myopically insist on direct entry to the distant regions, prioritizing geographic proximity and mistakenly assuming that such approach will accelerate their expansion. Instead, they should look within the corporation and give an opportunity to already existing subsidiaries that have developed unique capabilities to successfully perform the role of bridges, or springboards, which allow to coordinate regional activities more effectively. Moreover, subsidiary managers should exploit their unique location resources, such as historical, cultural and linguistic ties to develop knowledge transfer capabilities beyond their own intra-regional market and, simultaneously, pursue appearing managerial opportunities over new regions. This will increase their value, as well as guarantee their survival in the long term, which is especially important for subsidiaries that operate in mature markets with limited growth possibilities.

This study is the first attempt to understand the process of the development of springboard role and has some anticipated limitations. First, the analysis covers a very specific context – Spanish springboard subsidiaries of the European MNCs that coordinate affiliates in Latin America, which limits the possibility to generalize the results. Second, although the interviewees' testimonies were triangulated with MNCs' annual reports, press releases and press articles, our findings are vastly based on recollections of the informants. Given a growing interest in the IB community towards springboard subsidiaries, further research must ignite academic debate on this peculiar organizational unit. In particular, we encourage scholars to look for other possibilities around the world and propose a study that would analyse new

geographical settings where subsidiaries can develop a springboard role. We also propose to contrast the suggested propositions in a quantitative study that would allow to expand the understanding of the present results. Ultimately, we invite further research on factors of dynamic business environments that shape MNCs' realized strategies in the process of intraregional expansion.

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Chapter 3.

Reducing psychic distance through springboard subsidiaries: an exploratory case study

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Abstract

Purpose – The aim of this study is to explore how springboard subsidiaries affect psychic distance between the headquarters of multinational companies and a distant target region.

Design/methodology/approach – The study applies a single case study methodology to analyse a springboard subsidiary located in Spain that helps its German headquarters to pursue opportunities in psychically distant Latin American region

Findings – The findings suggest that springboard subsidiaries help MNCs to reduce the perceived psychic distance between their HQ and a target region due to (1) their intermediate psychic proximity in both directions (i.e. to the HQ and the target region), and (2) their location outside the target region, which makes them somewhat 'impartial' and not involved in intra-regional conflicts; the study also shows that the sum of psychic distance stimuli between HQ's home country – springboard subsidiary's country and springboard subsidiary's – Latin American countries is actually smaller than the direct psychic distance between HQ's home country and Latin American countries.

Originality/value – No previous studies explored the effect of springboard subsidiaries on psychic distance.

Keywords: regional management centre, springboard subsidiary, psychic distance, single case study

3.1. Introduction

During the past thirty years the international business (IB) has witnessed drastic increase in foreign direct investments in geographically, economically, and culturally dispersed directions (UNCTAD, 2016). Driven by an attempt to benefit from the progressively globalized marketplace, multinational companies (MNCs) move increasingly away from their home countries to pursue business opportunities in distant new markets. However, the successful exploitation of these geographically dispersed opportunities is hindered by what IB researchers refer to as psychic distance (Dow, 2000; Dow & Karunaratna, 2006; Drogendijk & Zander, 2010; Hakanson, 2014; Hakanson & Ambos, 2010; Hakanson, Ambos, Schuster, & Leicht-Deobald, 2016; Hutzschenreuter, Kleindienst, & Lange, 2014; Johanson & Vahlne, 1977, 1990, 2009).

The concept of psychic distance was first used by Beckerman (1956) and is understood as the "factors that prevent or disturb the flow of information between firms and markets" (Johanson & Wiedersheim-Paul, 1975, p.308). Since Beckerman's (1956) seminar work, prolific research has evidenced the significant effects of psychic distance on many outcomes of MNC internationalization process, including entry mode choice, trade flows, sequence of internationalization, and even organizational performance (e.g., Brewer, 2007; Evans & Mavondo, 2002; Kogut & Singh, 1988; Morosini, Shane, & Singh, 1998; Nebus & Chai, 2014; Nordstrom & Vahlne, 1994; Reuss & Lamont, 2009). Notably, recent studies suggest that despite the advances in transportation and communication technologies, as well as an increase of volumes of international trade, the concern about psychic distance is still relevant (Berry & Brock, 2004; Brock, Johnson, & Zhou, 2011; Dow & Karunaratna, 2006).

Given the significant impact of psychic distance on international operations, MNCs are prone to use mechanisms that allow them to overcome barriers and obtain better results in psychically distant markets. One of such mechanisms is the creation of an integrated matrix of local subsidiaries in a distant region administered through Regional Management Centres (RMC) called springboard subsidiaries (Caicedo-Marulanda, Mora-Rodriguez, Pla-Barber, & Leon-Darder, 2015; Pla-Barber & Camps, 2012; Pla-Barber, Villar, & Silva Domingo, 2015).

Despite the advancements in the IB literature on springboard subsidiaries (Caicedo-Marulanda et al., 2015; Pla-Barber & Camps, 2012; Pla-Barber et al., 2015), there is still a lack of empirical studies on their role as RMCs. Therefore, the objective of this study is to explore how springboard subsidiaries affect the psychic distance between a HQ and a target market. Specifically, we use a single case study methodology to analyse a springboard subsidiary located in Spain that helps its German headquarters (HQ) to pursue opportunities in psychically distant Latin American market. Hence, based on our exploratory analysis, this paper contributes to a deeper understanding of the role played by this RMC in reducing psychic distance between its HQ and a distant target market.

The paper proceeds with the theoretical framework on psychic distance in IB literature and springboard subsidiaries as RMCs. Afterwards, the paper methodology is presented. Furthermore, we demonstrate the results of the case study analysis, exploring the influence of a springboard subsidiary on the perceived psychic distance. And finally, we present the conclusions, managerial implications, and proposals for future research.

3.2. Theoretical background

3.2.1. Psychic distance in IB literature

The concept of psychic distance has become a 'cornerstone of the IB research' over the past three decades because of its powerful impact on international trade and business (Hutzschenreuter et al., 2014, p.38). Since the first appearance of this concept in the study by Beckerman (1956), numerous researches have contributed to its further clarification (Dow & Karunaratna, 2006; Johanson & Vahlne, 1977; Evans, Treadgold, & Mavondo, 2000; Kogut & Singh, 1988; Dikova, 2009; Hutzschenreuter et al., 2014). Moreover, recent studies underline the importance of differentiation of country-level factors preventing or disturbing the flows of information between different markets, i.e. psychic distance stimuli, and the decision-maker's perception of psychic distance (Dow & Karunaratna, 2006). In our study, we follow the logic proposed by these scholars and compare country-level psychic distance stimuli and the MNC management's perception of psychic distance.

Among the factors that constitute psychic distance, language, culture, institutional and country development, and industrial development seem to be of a significant concern among the IB scholars. First, language dissimilarities are evident stimuli of psychic distance, because international trade and FDI flows are fundamentally based on verbal and written communication, i.e. spoken, printed and digitalized language (Selmier II & Oh, 2012). Language dissimilarities often hinder communication between business partners, decrease efficiency of negotiations and increase transaction costs (Klitmoller & Lauring, 2013). Therefore, the effects of differences in language are included in numerous studies on psychic distance (Dow & Karunaratna, 2006; Hakanson & Ambos, 2010; Lopez-Duarte & Vidal-Suarez, 2013). Additionally, using English as a *lingua franca* of the IB can alleviate language dissimilarities (Nickerson, 2005). Therefore, some studies suggest to measure not only the country's national language, but also consider the command of English (Kedia & Reddy, 2016; Reiche, Harzing, & Pudelko, 2015), proposing the TOEFL (Test of English as a Foreign Language) as an indicator of the level of English in a country (Nickerson, 2005; Reiche et al., 2015).

Second, cultural differences may lead to misinterpretation and miscommunication between the negotiating parties and result in the increased costs of doing business abroad (Zaheer, 1995). Indeed, some scholars recognize that culture plays a key role in psychic distance, and consider it a central factor for measuring psychic distance (Morosini et al., 1998; Tihanyi, Griffith, & Russell, 2005; Shenkar, Luo, & Yeheskel, 2008). Cultural distance is often calculated as a difference among a combination of Hofstede's four original dimensions: power distance, individualism, uncertainty avoidance, and masculinity (Hofstede, 1980). However, since 1980 the study of Geert Hofstede was extended, and the four-dimensional framework was amplified by two more dimensions: long-term orientation and indulgence (Minkov & Hofstede, 2011). In this paper we consider both, four-dimensional and six-dimensional frameworks⁵.

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⁵ Beyond Hofstede's research on cultural dimensions (1980) there currently exist several alternative new measures (see e.g. House et al., 2004; Gesteland, 2005; Trompenaars, 2003). Nevertheless, Hofstede's classical contribution remains the most influential one in the psychic distance literature.

Third, psychic distance is affected by the political and institutional conditions in countries (Kostova, 1997; Kostova & Zaheer, 1999). Recent analyses of divergences in institutional development of countries have revealed that countries with poorly developed regulatory institutions appear to be perceived as less transparent and more difficult to understand by managers from countries with stronger institutional structures (Hakanson & Ambos, 2010). Moreover, distance in country economic development has been acknowledged as an important factor in influencing demand structure, consumption patterns, and even communication and interaction norms (Dow & Karunaratna, 2006; Hutzschenreuter et al., 2014; Malhotra et al., 2009). In the IB research, country development is often measured by Gross Domestic Product (GDP) in current prices and GDP per capita, which have proven to be effective indicators of differences in country industrial development (Chan, Isobe, & Makino, 2008; Dow & Karunaratna, 2006; Hakanson & Ambos, 2010; Malhotra et al., 2009).

Additionally, recent studies suggest that the psychic distance can be affected by migration flows. For instance, Hakanson et al. (2016) propose that people who have emigrated to a particular foreign country, are likely to have conveyed the information about this country to their friends and relatives at home, which raises familiarity to this country and makes it seem less distant. Thus, this factor is also an important contributor to the perception of psychic distance between countries. Specifically, if some country receives many immigrants from a particular geographic region, it will be perceived as less distant by this same region, even despite language, cultural, institutional and industrial differences that exist between them.

All in all, the IB literature shows that psychic distance cannot be considered as a single factor but rather a set of diverse antecedents. Hence, the multidimensional character of psychic distance and its inhibiting effects on internationalization processes are one of the major drawbacks to overcome by MNCs.

3.2.2. Springboard subsidiary as a Regional Management Centre

Among possible alternatives to address the problem of psychic distance between a home country and its target regions, the use of a springboard subsidiary appears to be a relevant solution. The intermediate position of these RMCs may help to reduce the perceived psychic distance and, consequently, propose MNCs an alternative approach to administering psychically distant target regions.

The conceptualization of springboard subsidiary was first proposed in the study of Pla-Barber and Camps (2012) on the example of Spain as a 'springboard country' to coordinate MNC's activities in the Latin American region. These scholars call such subsidiaries as springboards and define them as organizational units that are "located in the intermediate position in terms of institutional distance and business knowledge between the MNC home country and a target region, and that have successfully incorporated the specific advantages of their location" (Pla-Barber & Camps, 2012, p. 533).

In particular, they find that the lack of institutional and business knowledge about a psychically distant target market forces MNCs to use an indirect way of acquiring this knowledge through the experience of their subsidiaries located in a country with strong business ties and experiential knowledge about this target region (Pla-Barber & Camps, 2012). In that sense, the ease of knowledge flows between a HQ and the affiliates in a host region is one of the most influential factors that helps to exploit efficiently target market opportunities (Johanson & Vahlne, 1977; Reiche et al., 2015), and springboard subsidiaries seem to be an effective mechanism to this end. Consequently, MNCs are prone to give these subsidiaries the role of an RMC for the whole target market in order to exploit synergies, and implement key strategic decisions, such as decisions on investment, internationalization, and even introduction of new product lines (Pla-Barber & Camps, 2012; Pla-Barber et al., 2015). Accordingly, these RMC units are endowed with a high level of autonomy from HQ, which "is not limited to activities within the local market but extends to activities on a regional scale, i.e., the countries for which it serves as a springboard" (Pla-Barber & Camps, 2012, p. 531).

To sum up, in the case of psychic distant regions, it is difficult for the HQ to exploit local opportunities directly because of information deficiencies. Hence, channelling knowledge flow through an autonomous springboard subsidiary, which shares to a greater degree of HQ's organizational goals, ambitions and understanding, should result in a significant reduction of psychic distance.

Moreover, springboard subsidiaries are characterised by their 'extraregional location', i.e., location outside the target region of local affiliates (Pla-Barber & Camps, 2012). More specifically, they are likely to be located in a place that is not necessarily within the target region (unlike regional headquarters), but is rather in the midway between a target region and a HQ in terms of psychic distance (Bergström, 2006). Such intermediate location of springboard subsidiaries places them simultaneously close towards both a HQ and a target region. Additionally, the 'extra-regional' location puts these RMCs in a somewhat 'impartial', or unbiased, position, towards the target region. In other words, springboard subsidiaries are not perceived by the target region as business or political rivals on the one hand, and have important cultural and/or historical ties with this market on the other hand. Consequently, we posit that the extra-regional midway location of springboard subsidiaries, along with a high level of autonomy given to these RMCs might help MNCs to reduce psychic distance between a HQ and a target region.

3.3. Methodology

To explore how springboard subsidiaries shorten psychic distance between HQ and a target region, we use a single case study methodology (Yin, 1989). This methodology is an appropriate mean when the case is extremely revelatory and exemplar (Eisenhardt & Graebner, 2007; Yin, 2009). In fact, methodologies based on single cases allow to fit theory exactly to the many details of a particular case (Eisenhardt & Graebner, 2007), contributing to a deeper and broader understanding of specifics of a phenomenon, and providing further theoretical meanings to an already crystallized understanding of reality (Mariotto et al. 2014; Tsoukas, 2009).

To identify and select an information-rich case, we have used purposeful sampling technique (Patton, 2002). In particular, we have applied critical case technique that involves identifying and selecting individuals that are especially knowledgeable about or experienced in the phenomenon of interest (Creswell & Plano Clark, 2011). To do so, we have scrutinized Factiva database, looking for the information of MNCs that used springboard subsidiaries to expand in psychically distant regions. Given the novelty of the phenomenon of a springboard subsidiary, only a handful of cases were

identified. Some of the MNCs have been contacted via emails and telephone calls and based on the collected preliminary information and telephone talks, we have chosen only one case as the most information-rich and exemplar.

As a result, we have selected a German MNC that coordinates its activities in Latin America through its RMC located in Spain. The MNC is one of the world biggest corporations in the publishing industry. It is headquartered in Munich, Germany, and all the Latin American activities related to publishing business are controlled through its RMC located in Barcelona. The MNC presence in Latin America includes Argentina, Chile, Colombia, Mexico, Peru, and Uruguay. The overview of publishing industries of the corresponding countries is presented in Table 3.1.

Table 3.1. Publishing industry overview for 2014

Country	GDP (\$ millions)	GDP per capita	Population (millions)	IPA ⁶ ranking	Market Value (\$ millions	Number of titles	
		(\$)			sales)	(thousands)	
Germany	3,868,291	47,966	81.5	3	9,896	93,600	
Spain	1,381,342	29,861	47	9	2,331	90,802	
Mexico	1,294,695	10,326	127	17	461.5	29,895	
Argentina	543,490	12,645	42	25	620	30,850	
Colombia	377,740	7,904	49.8	29	37.9	16,030	
Uruguay	57,471	16,807	3.3	n/a	n/a	1,896	
Chile	258,062	14,528	17.8	n/a	n/a	5,702	
Peru	201,809	6,516	31.6	n/a	1.07	6,152	

Given the fact that psychic distance can be analysed through MNC's perceived psychic distance and country level psychic distance stimuli (Dow & Karunaratna, 2006) we have conducted analysis on both levels. First, the data on MNC's perceived psychic distance between the HQ and the target region have been collected through in-depth, semi-structured interview. Specifically, the interview has been held with the Spanish subsidiary top manager that had worked in the MNC since late 1990s, and has witnessed all

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⁶ International Publishers Association (IPA, 2014). The ranking estimates the publishing industry development of countries and is primarily based on a country's market value in terms of sales.

the organizational transformation processes and structural changes of the MNC over time. The interviewee has extensive knowledge and experience in the springboard subsidiary and has worked in a direct contact with the HQ management. The interview was conducted in May 2016. The duration of the interview was about three hours and was recorded and transcribed within subsequent 24 hours. The data collected through the interview has been triangulated using secondary data (media interviews, press releases, newspaper and academic articles, annual reports, etc.).

Second, country level stimuli of the corresponding countries – Germany as the HQ home country, Spain as a springboard subsidiary's country, and Latin American region countries Argentina, Chile, Colombia, Mexico, Peru, and Uruguay where the MNC has direct presence – have been analysed and compared. The stimuli that have been used for the case study are presented in Table 3.2. All the stimuli, except *Country's language* distance, have been calculated using Kogut & Singh index⁷ (1988). To measure *Country's language* distance, we have followed Dow and Karunaratna (2006) that quantify the difference between the major languages of 120 countries on a five-point scale, based on Gordon's (2005) hierarchical classification on languages. Thus, distance between Spain and Latin American countries was equal to 1 (same language), and between Germany and Latin American countries was equal to 4 (same language family).

We have also analysed *Migration* between Latin American countries, Spain and Germany, as it contributes to the asymmetry of psychic distance (Hakanson et al., 2016). Migration is taken from UN Statistical Yearbook (2014).

3.4. Results

3.4.1. Psychic distance between MNC's HQ and the target region

The MNC first entered Latin American market in the 1960s, and during several decades, key decisions were taken directly from the German HQ. By

⁷ According to Kogut & Singh (1988) index, the distance (CD_{XY}) between country X and Y is calculated as an average of differences of country scores adjusted by the variance (v_i) of the corresponding indicator: $D_{XY}=\sum\{(I_{ix}-I_{iy})/V_i\}/n$, where I_i stands from the index for the i^{th} indicator, V_i is the variance of the index of the i^{th} score, and n is the number of indicators.

the beginning of the XXI century the company's presence in this region was weakening due to, as the interviewee posits, "overall economic instability in Latin American countries on the one hand, and the erroneous investment decisions on the other hand". This situation was even more complicated because of the significant psychic distance between the HQ and the target region, in terms of language, cultural, institutional, and industrial dissimilarities.

If we compare psychic distance stimuli between MNC's home country and each Latin American country where the company operates, we see dissimilarities in diverse aspects of psychic distance (see Table 3.3). To begin with, there is a significant language distance, as Spanish and German belong to different language groups, which results in the score of 4 according to Dow and Karunaratna (2006). In addition, the comparison of TOEFL scores shows that Latin American countries, with the only exception of Argentina and Uruguay, have a significantly lower English proficiency level in comparison with Germany, with the average value of TOEFL index difference of 4.26. Moreover, if we look at cultural distance indicators we observe that, with the exception of Argentina, the difference is notable as well, especially when all six dimensions are taken into account (see Hofstede's six dimensions, on Table 3.3). In terms of institutional distance, Argentina and Mexico are the farthest countries from Germany, whereas the distance in country development – measured as GDP and GDP per capita— is high in all cases.

Similarly, the MNC's perception of these psychic distance stimuli was also high. In particular, according to the interviewee, at that time the HQ had little understanding of the host market, which was caused by a significant distance between the German HQ and Latin America, in terms of language, culture, business practices and industry trends. To begin with, language distance slowed down business processes. In order to cope with this problem, the HQ put a German person who speaks Spanish in charge of Latin American market. However, even after that, the communication was inhibited because of the cultural aspect that influences "the way of doing things" in general: "Cultural differences influence the way of thinking, behaving and even working, and a simple knowledge of language is not enough to eliminate these differences". Additionally, because of a great distance in industry development, there was a problem of understanding local customers' needs. The interviewee posits: "These markets [German and Latin American] have

different maturation rhythm, and the industry trends of more advanced countries will probably enter Latin American market in 5 years. Because of such a great gap, it's very difficult for the HQ to foresee what will be popular in Latin America".

Another peculiarity of Latin American market is its internal heterogeneity, and the existence of intra-regional psychic distance, i.e. dissimilarities among Latin American countries within the region. As Table 4 demonstrates, while country and industry development of Latin American countries in terms of GDP (with the average value 0.25), GDP per capita (with the average value 0.16) and Market Value per population (average value 0.04) are quite similar, they differ to a large extent culturally and institutionally. In particular, Hofstede's four dimensions and the institutional distance indicators show that, in some cases, the distance between two Latin American countries is greater than between parent home country and the target region; for instance, the cultural distance between Chile and Mexico (2.36) or Mexico and Uruguay (2.43), is higher than between Germany and Argentina (1.93), whereas the institutional distance between Argentina and Chile (4.43) is almost reaching the one between Germany and Colombia (4.76).

Table 3.2. Psychic distance stimuli

Psychic	Composites	Reference	Data source		
distance					
stimulus					
Language	Country's language	Dow & Karunaratna (2006); Lopez-Duarte &	Dow & Karunaratna (2006); Gordon		
		Vidal-Suarez (2013)	(2005)		
	TOEFL	Nickerson (2005); Reiche et al. (2015)	TOEFL (2015)		
Culture	Hofstede's four dimensions (Hof4) ⁸	Fletcher & Bohn (1998); Evans & Mavondo	Hofstede (1980)		
		(2002)			
	Hofstede's six dimensions (Hof6) ⁹	Minkov & Hofstede (2011); Choi, Im, &	The Hofstede Centre (2017)		
		Hofstede (2016)			
Institutional	Worldwide Governance Indicators ¹⁰	Dikova (2009); Globerman & Shapiro	World Bank (2014)		
distance		(2003); Hakanson & Ambos (2010);			
		Kaufmann, Kraay, & Mastruzzi (2009);			
Country	GDP in current prices (in \$	Dow & Karunaratna (2006); Hutzschenreuter	UN Statistical Yearbook (2014)		
development	millions)	e t al. (2014);			
	GDP per capita (in \$)	Chan et al. (2008); Dow & Karunaratna	UN Statistical Yearbook (2014)		
		(2006); van Veen, Shahib, & Aangeenbrug			
		(2014)			

⁸ Hofstede's four dimensions include: power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance (Hofstede, 1980).

⁹ Hofstede's six dimensions include: power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance, long-term orientation, indulgence (Minkov & Hofstede, 2011).

¹⁰ Worldwide Governance indicators include voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, control of corruption (World Bank, 2014).

Psychic	Composites	Reference	Data source
distance			
stimulus			
Publishing	Marker value per population: Sales	IPA (2014)	Agencia ISBN (2016); Boersenverein
industry	(in \$ millions) divided by		des Deutschen Buchhandels (2016);
development	population (in millions)		Camara Colombiana del Libro (2016);
			Camara del Libro de Chile (2016);
			CANIEM (2016); INFOARTES
			(2016); IPA (2014)

Table 3.3. Psychic distance between Germany and Latin American countries

	Language distance	TOEFL index difference	Hofstede's 4 Dimensions	Hofstede's 6 Dimensions	Institutional distance	GDP in current prices	GDP per capita	Market value per population
Argentina	4	1.30	1.93	2.81	6.29	6.95	6.36	4.99
Chile	4	7.07	5.29	4.75	0.36	8.20	5.70	n/a
Colombia	4	8.12	4.16	5.17	4.76	7.66	8.18	6.38
Mexico	4	4.37	4.72	5.65	5.17	4.17	7.22	6.08
Peru	4	4.37	5.02	4.49	4.98	8.45	8.76	6.46
Uruguay	4	0.32	5.71	4.96	0.73	9.13	4.95	n/a
AVERAGE	4	4.26	4.47	4.64	3.71	7.43	6.86	5.98

All indicators, except Language distance, are calculated using Kogut & Singh (1988) index.

Table 3.4. Psychic distance among countries of Latin America

	Hofstede's 4	Hofstede's 6	Institutional	GDP in	GDP per	Market value per
	dimensions	Dimensions	Distance	current prices	capita	population
Argentina-Chile	1.51	1.06	4.43	0.05	0.02	n/a
Argentina-Colombia	1.41	1.13	1.42	0.02	0.11	0.0859
Argentina-Mexico	1.83	1.72	1.32	0.35	0.03	0.0543
Argentina-Peru	1.18	0.90	1.04	0.07	0.19	0.0951
Argentina-Uruguay	1.10	0.78	3.36	0.15	0.09	n/a
Chile-Colombia	1.61	1.27	2.68	0.01	0.22	n/a
Chile-Mexico	2.36	1.94	3.11	0.68	0.09	n/a
Chile-Peru	0.25	0.38	3.01	0.00	0.33	n/a
Chile-Uruguay	0.71	0.57	0.44	0.03	0.03	n/a
Colombia-Mexico	0.52	0.47	0.21	0.53	0.03	0.0036
Colombia-Peru	0.68	1.07	0.25	0.02	0.01	0.0002
Colombia-Uruguay	2.18	1.88	3.02	0.06	0.40	n/a
Mexico-Peru	1.41	2.00	0.31	0.75	0.07	0.0057
Mexico-Uruguay	2.43	2.42	3.47	0.96	0.21	n/a
Peru-Uruguay	0.72	0.50	2.93	0.01	0.54	n/a
AVERAGE	1.33	1.21	2.07	0.25	0.16	0.04

All indicators are calculated using Kogut & Singh (1988) index.

Likewise, this intra-regional heterogeneity of Latin American countries was especially strongly perceived by the MNC. Because of the strong psychic distance between the country's HQ and Latin America, the HQ failed to understand the intra-regional psychic distance. As the interviewee posits, the difference of doing business in local affiliates from different Latin American countries is quite significant, which is often "overlooked by the HQ, as they try to work with Latin America as a homogeneous region". As a result, the German MNC could not fully exploit the growing potential of the distinct Latin American countries on the one hand, and did not benefit from the existing activities, on the other hand. Additionally, the company was gradually losing control over its operations in this area as a consequence of mutual misunderstandings and miscommunication.

3.4.2. Springboard subsidiary as an intermediate level RMC unit

Meanwhile, in 2001, Spanish subsidiary started making its first steps as an RMC taking advantage of important structural changes within the corporation. The MNC created a joint venture with another editorial company that had vast activities in Latin American region. The first task that the German MNC faced was to merge its existing activities in the region with the ones of their partner. That was the time when the Spanish subsidiary began to actively take over all the merger operations in the region. Such proactive behaviour resulted in a gradual build-up of a strategic importance of the subsidiary unit within the MNC. Hence, when the HQ needed to select which subsidiary would be given the RMC role that would consolidate control over Latin American affiliates, it did not hesitate to choose the Spanish subsidiary. In particular, the Spanish subsidiary demonstrated robust capabilities to take control of the complex, but promising, market, had a rich experiential knowledge of managing important more-than-a-unit tasks and, finally, was psychically close to the target region, while at the same time having psychic similarity towards the HQ. As a result, in 2012 the Spanish subsidiary was officially appointed an RMC mandate of a springboard subsidiary for expansion into Latin America.

As a result, nowadays the Spanish subsidiary has all the basic features of an RMC. For instance, when asked which Latin American operations the Spanish springboard controls the interviewee responds: "All the Latin

American subsidiaries report to us, each general director reports to the general director here, and each financial director reports here. On the editorial level everything is coordinated from here. On the level of human resources everything is coordinated from Spain. It's Spain who directs strategies of Latin American subsidiaries".

Another RMC feature of the Spanish subsidiary is its high level of autonomy. Springboard subsidiary's autonomy is somewhat curious. It finds itself in a complex paradigm of relationships that extend into two different directions: (1) its relationship with the HQ and (2) its relationship with the target region. First, according to the interviewee, the HQ gives the Spanish RMC an "unconditional support" from its HQ not only in terms of financial investment, but also strategically, believing in their actions and supporting their initiatives. Second, when the Spanish subsidiary coordinates the firm's activities in the target region it copies to some extent, this decentralized approach of the HQ and delegates solid autonomy to its units in the target region: "[Local subsidiaries] have quite a solid autonomy. In fact, they are quite independent in their daily operations, and can publish whatever books they want on the local level." Such approach is crucial when a company deals with a heterogeneous market that requires the use of multi-domestic strategy.

This double autonomy might seem concerning, because, as some IB scholars recognize, giving too much autonomy to a psychically distant subsidiary may result in the loss of control of overseas operations, restricted knowledge flow and eventually can inhibit international expansion in the target region (Noorderhaven & Harzing, 2009; Forsgren et al., 2000; Gammelgaard et al., 2004). In the case of springboard subsidiary, it may seem that these negative effects must double, because first, HQ gives autonomy to the Spanish subsidiary, and second, the Spanish subsidiary gives autonomy to the target region. Nevertheless, using a springboard subsidiary as an RMC to administer a target region paradoxically leads to the opposite results; it improves control, facilitates knowledge flow and eases international operations by reducing the perception of psychic distance between the HQ and the target region.

3.4.3. The impact of springboard subsidiaries on HQ – target market relationships

The comparison of psychic distance stimuli between Latin American and Germany and those between Latin American and Spain helps to clarify why the Spanish subsidiary has the effect of reducing psychic distance between the HQ and the target region. In particular, Table 3.5 demonstrates that the average values of psychic distance of Spain with respect to the target region are relatively much smaller (from 1.01 to 1.78) than those of Germany (from 3.75 to 7.43). Moreover, Spain finds itself psychically more proximate towards both Germany and Latin American countries: for example, Hofstede's six dimensions' indicator for *Spain - Germany* is 2.22, and that for *Spain - Mexico* 2.65. This double proximity of Spain both to the MNC's home country and the target region puts this country in a somewhat midway between the HQ's home country and the target market.

Moreover, if we sum the psychic distance *Germany – Spain* and *Spain – Latin American country*, we see that in the majority of the cases, it will still be lower than the distances *Germany – Latin American country*. This is represented in Formula (1) as:

$$AB + BC < AC$$
, (1)

where AB is the distance between Germany and Spain, BC is the distance between Spain and Latin American country, and AC is distance between Germany and Latin American country. For example, the sum of institutional distances between Germany – Spain (0.56) and Spain – Mexico (2.44) will still be lower than the institutional distance between Germany – Mexico (5.17).

Table 3.6 represents the calculations to Formula (1) and indicates in black the results in which using Spain as springboard country lowers the psychic distance between de HQ home country and the target region, and in grey otherwise.

Table 3.5. Psychic distance between Spain and countries of Latin America, and the HQ's home country

	Language distance		0 0		J		inc	EFL lex rence		stede's 4 ensions		ede's 6 nsions		utional ance	cur	P in rent ces		P per oita	va I	arket alue per ulation
	Spain	Germ any	Spain	Germ any	Spain	Germany	Spain	Germ any	Spain	Germ any	Spain	Germ any	Spain	Germ any	Spai n	Germa ny				
Germany	4	-	2.31	-	2.71	-	2.22	-	0.56	-	3.89	-	1.67	-	2.26	-				
Spain	-	4	-	2,31	-	2.71	-	2,22	-	0,56	-	3.89	-	1.67	-	2.26				
Argentina	1	4	0.14	1.30	0.32	1.93	0.61	2.81	3.30	6.29	0.44	6.95	1.51	6.36	0.53	4.99				
Chile	1	4	1.30	7.07	0.83	5.29	0.89	4.75	0.17	0.36	0.79	8.20	1.20	5.70	n/a	n/a				
Colombia	1	4	1.77	8.12	1.81	4.16	2.24	5.17	2.27	4.76	0.63	7.66	2.46	8.18	1.05	6.38				
Mexico	1	4	0.32	4.37	1.95	4.72	2.65	5.65	2.44	5.17	0.01	4.17	1.95	7.22	0.93	6.08				
Peru	1	4	0.32	4.37	0.96	5.02	0.82	4.49	2.44	4.98	0.87	8.45	2.78	8.76	1.08	6.46				
Uruguay	1	4	0.90	0.32	0.67	5.71	0.64	4.96	0.39	0.73	1.10	9.13	0.87	4.95	n/a	n/a				
AVERAGE	1	4	1.01	4.26	1.32	4.47	1.44	4.64	1.65	3.71	1.11	7.43	1.78	6.86	1.17	5.98				

All indicators, except Language distance, are calculated using Kogut & Singh (1988) index.

Table 3.6. Sum of psychic distance stimuli

AB + BC	TOEFL index difference	Hofstede's 4 dimensions	Hofstede's 6 dimensions	Institutional distance	GDP in current prices	GDP per capita	Market value per population	
Germany -					-			
Spain –	2.45	3.03	2.83	3.87	4.33	3.18	2.79	
Argentina								
Germany -	3.61	3.54	3.11	0.74	4.68	2.87	n/a	
Spain – Chile	5.01	3.34	3.11	0.74	4.00	2.07	11/ a	
Germany –								
Spain –	4.08	4.53	4.47	2.83	4.52	4.13	3.31	
Colombia								
Germany -	2.63	4.67	4.87	3.00	3.89	3.62	3.19	
Spain - Mexico	2.03	4.07	4.07	3.00	3.09	3.02	3.19	
Germany -	2.63	3.67	3.04	3.01	4.76	4.45	3.34	
Spain – Peru	2.03	5.07	3.04	3.01	4.70	4.43	3.34	
Germany -	3.21	3.39	2.87	0.96	4.99	2.54	12/0	
Spain – Uruguay	3.21	3.39	2.87	0.90	4.99	2.34	n/a	

All indicators are calculated using Kogut & Singh (1988) index.

Table 3.7. Migration flows for 2013

Migration		From	From	From	From	From	From	From	From	
		Mexico	Colombia	Peru	Chile	Argentina	Uruguay	Spain	Germany	TOTAL
To	Mexico	0	16 005	6 767	6 056	15 746	2 726	21 700	7 145	76 145
To	Colombia	2 779	0	4 911	1 970	3 115	424	6 455	2 299	21 953
To	Peru	1 735	6 902	0	8 350	13 199	713	5 900	3 403	40 202
To	Chile	2 153	15.525	149 335	0	66 701	2 834	10 950	7 238	254 736
To	Argentina	1 931	2.301	171 964	193 007	0	119 533	90 494	8 405	587 635
To	Uruguay	483	n/a	1 368	1 393	22 425	0	14 453	877	40 999
To	Spain	47 441	359 178	190 004	62 031	268 129	79 899	0	240 003	1 246 685
To	Germany	7 219	12 375	12 375	5 156	7 219	658	88 688	0	133 690
	TOTAL	63 741	412 286	536 724	277 963	396 534	206 787	238 640	269 370	

Finally, if we compare the migration flows from and to each of the eight countries, we will see that Spain is the favourite destination for migrants from Germany, Argentina, Peru, Colombia and Mexico, and the second favourite for migrants from Chile and Uruguay, with a total number of immigrants of 1.2 million people in 2013 (see Table 3.7). Such a big number of migrants creates stronger ties between countries, especially in the direction from country A to country B (Hakanson et al., 2016), and, consequently, reduces the perceived distance in this direction.

Considering Spain as the intermediate point between Germany and Latin-American countries, the perception of psychic distance between the MNC's HQ and the target region decreases after introducing the Spanish springboard subsidiary as an RMC between them. As the interviewee posits, Spain serves as an "important filter" between the German HQ and Latin America, because "[Latin American people] are very informal, and the Germans are very strict and the Spanish are somewhere in between." He adds: "I always defend that everything that goes from Germany to Latin America needs to pass through Spain first, because we contribute to a better understanding between the HQ and the target region, and if we don't do it, [the communication] is very difficult." The interviewee concludes that Spain is closer to Latin America not only in the language but also in the way of conducting business. Moreover, even in terms of the industry level development and trends, Spain, according to the interviewee, finds itself somewhere in the midway between more advanced countries and Latin America: "Those tendencies [from advanced markets] enter Spain with the delay of 2-3 years, and will enter in Latin America in 2-3 years more. This intermediate position helps us to forecast more correctly, which products will be successful in Latin America, and which not." When the industrial differences are too big, this forecast is less reliable, which explains why the German HQ had troubles to foresee the trends of Latin American market.

Furthermore, unlike psychically distant HQ that overlook this intraregional heterogeneity, Spanish subsidiary understands the differences between Latin American countries: "Each country there is a unique culture, unique traditions, and we [Spanish subsidiary] treat subsidiaries from different countries in Latin America differently". Thus, Spanish psychic proximity to the target region helps to detect important intra-regional dissimilarities and improves the communication between them. All in all, the interviewee confirms that the coordination of Latin American activities through the Spanish springboard subsidiary has resulted in remarkably positive results, and summarizes: "in our case it worked, and we can't imagine to work it out in any other way". Thus, we can assume that the MNC's use of Spanish springboard subsidiary as an RMC helped the company to achieve its objectives to re-gain control over Latin American market and take full advantage of the market opportunities there.

3.5. Conclusions

This paper is an attempt to understand the effect of springboard subsidiaries as RMC units on MNC's international activities in psychically distant markets. Although, recently there have been done substantial advancements on the topic of a springboard subsidiary (Caicedo-Marulanda et al., 2015; Pla-Barber & Camps 2012; Pla-Barber et al. 2015), there is still a lack of empirical studies on the role and effects of springboard subsidiaries. Therefore, our contribution into the IB literature has been to analyse how and why putting a springboard subsidiary in the midway between the HQ and the target region influences psychic distance between the two.

To address this objective, we used a case study methodology and analysed a German MNC that expanded into Latin America through its Spanish subsidiary. The results of the paper show how springboard subsidiaries shorten the perceived psychic distance between a HQ and a target region.

When we summed up the distances *HQ home country* – *springboard subsidiary country* (AB), and springboard subsidiary country – target market country (BC) (see the Conceptual Model in Figure 1), in the majority of cases, these sums were less than the distance between *HQ home country* – target market country (AC).

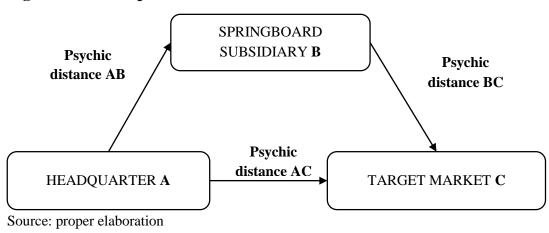


Figure 3.1. Conceptual Model

Thus, using a springboard subsidiary as an RMC contributes to a better understanding of the MNC's strategic goals in the target region and helped the springboard subsidiary to balance the interests of HQ in the target region. Specifically, our paper shows that springboard subsidiaries find themselves in an intermediate position between HQ's home country and the target region in terms of psychic distance stimuli and MNC perception, and are almost equally close to both the MNC's home country and the target market.

An important factor that helps springboard subsidiaries to perform their intermediate level duties is their 'outsidership' (Pla-Barber & Camps, 2012), i.e., their position outside the target region. Local level subsidiaries are sometimes reluctant to collaborate with their neighbouring countries because of the intra-regional psychic distance intensified by political rivalry and international relations conflicts. On the contrary, springboard subsidiaries do not experience this intra-regional hostility and the collaboration with separate countries in the target region is more fluid. Thus, administering the affiliates in a target region from the outside became more effective than it would be, if the RMC were located inside the target region. This finding has important managerial implications. MNCs that decide to use a springboard intermediate unit will be able to use an indirect way of administering and opening psychically distant heterogeneous markets in a more effective manner.

The paper has certain limitations. To begin with, the single case study methodology proposes the analysis of a peculiar phenomenon that can be unique for the particular inter-regional relationships of Europe – Spain –

Latin America. More countries and industries should be analysed in order to explore how springboard subsidiaries behave in a different set of circumstances in terms of psychic distance. Additionally, we believe that these locations for springboard subsidiaries, or 'springboard countries' (Pla-Barber & Camps, 2012) can be found in other geographical sites. Hence, further research is necessary to clarify the geographical location of potential springboards in other regional areas. Finally, the introduction of an intermediate RMC unit is able to decrease psychic distance unproportionally, which means that the arithmetic calculation of (country A – country B) + (country B – country C) < (country A – country C) is too simplified. This, and the unequal distribution of weight of distinct psychic distant stimuli can alter the results. Therefore, more mathematically sophisticated research should be done to explore this peculiar phenomenon.

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Chapter 4.

Optimising Regional Management Centre locations from a psychic distance perspective

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Abstract

Regional Management Centres (RMC) have a demonstrated efficiency for overcoming psychic distance in the expansion of multinational companies towards distant regions. This study aims to find the optimal location of these units using non-spatial distance as the prevalent factor. By applying an evolutionary computation algorithm, we compute weights for ten dimensions that minimise the composite psychic distance index between the RMC's corporate home country and the target region affiliates, thereby contributing to the international business literature by defining the most pertinent psychic distance dimensions for RMC functions, proposing a location optimisation model, and revealing the optimal location for this organisational unit. We also shed critical light on current regionalisation criteria, pointing out some major intra-regional disparities in the results and the utility of machine learning for the calculation of multidimensional psychic differences between countries.

Keywords: regional management centre, psychic distance, evolutionary computation, differential evolution.

4.1. Introduction

In recent decades, the International Business (IB) literature has paid growing attention to the phenomenon of the regional configuration of multinational corporations (MNCs). Indeed, research on regionalisation dates back to Heenan and Perlmutter (1979), who first identified that MNCs differentiate their strategies into the regional blocks of Europe, North America and Asia. Unable to be truly global (Rugman & Verbeke, 2004; Verbeke & Asmussen, 2016), MNCs increasingly adopt regional strategies by delegating Regional Management Centres (RMCs) to geographically disperse intermediate level organisational units, whose sphere of influence extends over branches located in a certain geographic area (Chakravarty et al., 2014; Dicken, 2003). RMC is a generic term that includes various intermediate organisational units, such as Regional Headquarters (Lasarre, 1996; Yeung et al., 2001), Regional Management Mandates (Alfoldi et al., 2012), sub-Regional Headquarters (Li et al., 2010), and Springboard Subsidiaries (Pla-Barber & Camps., 2012). The primary responsibility of RMCs is to integrate the parent company's activities, such as planning, monitoring, and coordination, bridging the gap between the home country and regional affiliates in a target market that the parent company itself is unable to coordinate effectively because it is located too far away (Chakravarty et al., 2014; Paik & Sohn, 2004). Such a bridging function involves serving the MNC in the target region in two different ways: on the one hand, it involves external representation (liaising with local customers, suppliers and governments, and collecting information about regional market opportunities and changes in the business environment); and on the other, internal representation (building strong relationships with the parent company to exchange information and achieve intrafirm synergies with local units) (Alfoldi et al., 2012; Schütte, 1998; Yeung et al., 2001). RMCs therefore deal with the dual task of mobilising external network connections, understanding local contexts and responding to local needs, while simultaneously advocating corporate priorities and integrating the MNC globally (Prahalad & Doz, 1987; Ambos & Schlegelmilch 2010; Yeung et al., 2001).

The importance and complexity of an RMC's task, as well as the high cost of establishing them, has prompted a growing concern among IB scholars regarding the optimal location of these intermediate level subsidiaries (see e.g., Luiz & Radebe, 2012; Pla-Barber & Camps, 2012; Belderbos, et al., 2017). The incipient exploratory studies in this field propose that the selection criterion for RMC location depends on the minimisation of the distance between the parent company's country and the potential host region, specifically highlighting non-spatial or psychic distance as the prevalent factor when deciding on the location. Various studies have highlighted how local affiliates in a particular region often prefer to collaborate with intermediate subsidiaries that are located in countries that have some ties with their region. For instance, Poon and Thompson (2003) and Pla-Barber & Camps (2012) found that some RMC units tend to be located in countries that have former colonial ties with the specific region. Others observe the concentration of RMCs in so-called "global cities", which may be located in culturally or institutionally distant countries but due to their cosmopolitanism do not share all the traits of the country and are psychically more proximate to the parent company's home country (Belderbos, et al., 2017; 2020). In the light of extant research, it seems clear that one of the decisive factors behind the allocation of RMC units is the reduction in psychic distance.

Indeed, the concept of "distance" has been central to IB research due to its significant importance for between-countries flows and interactions, in terms of economic trade, migration, and diffusion of innovations (Dow & Karunaratna, 2006; Hakanson & Ambos, 2010; Hakanson et al., 2016). The difficulty of knowledge transfer and communication between parent companies and their foreign affiliates in faraway locations has strongly increased transaction costs over time, augmenting the perception of distance. The ambiguity and misunderstandings brought about by large distances between markets make it difficult for parent firms to monitor and control local partners and be able to predict and manage what might happen in distant regions (Anderson & Gatignon, 1986; Zhao et al., 2004). This, in turn, influences their perception of risk and forces them to seek mechanisms that might allow them to compensate for their strategic disadvantage by accessing necessary local market-specific knowledge and eventually reducing risks (Dow et al., 2020; Hennart & Larimo, 1998). One of the mechanisms that have proven useful for internationally dispersed MNCs are RMCs, whose strategic location allows them to reduce non-spatial distance between a parent home country and the target region affiliates.

The research stream that specifically deepens our understanding of how RMCs impact psychic distance to minimise transaction costs, enable interregional communication and boost knowledge transfer within the MNC is surprisingly scarce (Belderbos et al., 2017; Pla-Barber & Camps, 2012; Pla-Barber et al., 2018). Most prominent research endeavour in this direction has been done by Pla-Barber & Camps (2012) on the institutional scenario of RMCs located in Spain and managing affiliates in Latin America. In later studies, Villar et al. (2018) and Pla-Barber et al. (2018) stressed the need to extend the research to other geographical zones, citing non-spatial distance as the major factor for the optimal location of RMCs. To fill this research gap, the first objective of this chapter is to specify the optimal locations for RMCs that would minimise psychic distance between a parent company's home country and a target region elsewhere in the world.

A concerning issue arising implicitly from this first objective is an understanding of the psychic distance construct, considering its multi-dimensional nature and the measures and weights of the dimensions regarding the location of RMCs. The current IB research on psychic distance acknowledges the multidimensionality of the psychic distance construct, but conditions the choice of the different dimensions to the purposes of the research, the nature of tasks performed by the subsidiary that needs to be located (Dinner et al., 2019), or even more, the subjective perceptions of managerial decision-makers (Dow & Karunaratna, 2006). Such an approach is extremely open, so an adequate definition of the most relevant dimensions and their weights that assemble the psychic distance construct is needed.

Moreover, scholars increasingly question the validity and reliability of the actual technique that is applied to measure psychic distance dimensions, sparking the search for alternative methodologies (Maseland et al., 2018). In this regard, Shenkar (2001), in his decade award-winning article, criticised the computation of an unweighted average of various psychic distance dimensions, positing that it will only produce a variable with very little variation between individual countries, as different dimensions of this construct will tend to cancel one another out. In line with this insight, Hutzschenreuter et al. (2014) have not found support for all the analysed distance measures (cultural, administrative, geographic and economic), suggesting that not all dimensions were equally important when firms planned their international expansion. Moreover, the importance of each of

the psychic distance dimensions can change depending on the functions that local subsidiaries perform. This suggests that the weights for different dimensions of RMCs, which tend to perform mainly administrative functions (Villar et al., 2018), may differ greatly from subsidiaries that perform other roles. Therefore, the second objective is to determine the relative weight of each specific psychic distance dimension chosen for the geographic location of an RMC unit where the overall psychic distance is minimised.

In this respect, the recent study by Cuypers et al. (2018) alluded to the utility of machine learning in the calculation of multidimensional cultural differences between countries. One of the research methods within machine learning is evolutionary computation, which is inspired by the way biological evolution created a harmonious diversity of coexisting species as a result of trial-and-error processes (Eiben & Smith, 2003). The algorithms of evolutionary computation can be applied to problems requiring complex solutions that are too difficult, if not impossible, for humans to devise (Davis et al., 2012). Thus far, the application of evolutionary computation to social sciences has been limited, but it has already proven to be a powerful instrument that can be applied to problems that involve searching through a vast array of possibilities for solutions that adapt to the changing environment (Mitchell & Taylor, 1999). The main advantage of evolutionary computation is its ability to discover new relationships that have never been considered before (Nanni & Lumini, 2009). Hence, this method of machine learning is remarkably useful for disentangling the Pandora's Box of psychic distance and specifically identifying the weights for each construct dimension in order to minimise psychic distance between the parent company's home country and local affiliates within a particular region, and thereby finding the optimal location for RMCs.

Our results suggest an RMC location optimisation model that includes 10 different psychic distance dimensions: political, demographic, economic, education, language, religion, culture, geographic distances, and colonial and trade ties, with different weights. The dimensions that relate to formal country characteristics, such as political and economic development, as well as former colonial ties and present trade relationships seem to be significantly more important than other dimensions. On the contrary, the dimensions that relate to informal country factors, such as culture, language and religion, seem to be less important.

These findings prompt some interesting contributions. First, the RMC location optimisation model can provide guidance on the importance of the various psychic distance dimensions to consider when seeking the optimal RMC location. Second, to the best of our knowledge this study is the first attempt to apply a differential evolution algorithm to the IB field, demonstrating its suitability for issues that cannot be calculated by more traditional social science techniques. Third, we contribute to the evaluation of psychic distance dimensions as stable, objective stimuli, rather than being dependent on the individual perceptions of MNC managers. Previous studies have used perceptions as a solution to evaluate the role of psychic distance stimuli in the IB field. We help to objectivise the measurement of psychic distance through the application of machine learning. We believe that this approach is the much sought-after solution by scholars in their attempts to evaluate the role of psychic distance stimuli in the IB field. And finally, the study sheds critical light on the way countries are grouped into regions, building the missing bridge between the regionalisation and psychic distance literature, suggesting that regionalisation criteria need to extend further than mere geographic proximity or shared languages.

The paper proceeds as follows. First, it highlights the state of the art of the literature on the location of RMCs. Second, it presents an overview of psychic distance dimensions. Afterwards, the various methodological steps and the principal results are explained. The article is concluded with discussions and conclusions where the main limitations are outlined and future research lines are proposed.

4.2. Theoretical framework

4.2.1. Location of regional management centres

A critical factor in the decision to locate RMCs is to overcome or at least reduce the spatial transaction costs of cross-national operations, facilitating information and knowledge transfer. For an RMC it is essential to be able to perform the ambidextrous task of local responsiveness and global integration (Ambos & Schlegelmilch, 2010; Enright, 2005; Ghemawat, 2005; Prahalad & Doz, 1987), initiating, facilitating and organising effective knowledge transfer across distance (Goold and Campbell, 1998; Alfoldi et al., 2012; Paik

& Sohn, 2004; Schütte, 1998). Knowledge transmission is not always straightforward and very often requires personal monitoring in the form of on-site demonstrations and face-to-face communication (Bresman et al., 1999). This not only involves travel time and managerial opportunity costs, but also the need to overcome liability of foreignness (Hymer, 1976). Moreover, it often results in partial or complete loss of tacit knowledge, adding to the cost of doing business for an MNC's geographically dispersed activities (Ambos & Hakanson, 2014; Asmussen & Goerzen, 2013; Dellestrand & Kappen, 2012; Boeh & Beamish, 2012; McCann, 2011). Hence, tacit knowledge transfer involves significant transaction costs and managerial effort related to geographical and, especially, non-spatial, or psychic distances (Bresman et al., 1999; Eden & Miller, 2004; Kostova & Roth, 2002).

The question that has arisen among both academics and practitioners is therefore related not so much to the need to organise MNC activities regionally, but rather, where the RMC should be located in order to perform its bridging functions more efficiently, overcoming the barriers related to both spatial and psychic distances (Belderbos et al.,2020; Beugelsdijk et al., 2010; Boeh & Beamish, 2012; Hutzschenreuter et al., 2020; Goerzen et al., 2013). In particular, there is debate as to whether an RMC should be in the immediate vicinity of the target region that it coordinates, or should be easily accessible from the parent company, in whose interests it acts.

On the one hand, RMCs are established to respond to local demands (Dörrenbacher and Gammelgaard, 2010; Kähäri & Piekkari, 2015; Kähäri et al., 2017), which leads to the belief that it is better to locate them within the same host region. RMCs imply a higher level of decision-making functions driven by the need to understand local culture and politics, adapt to local conditions, formulate strategies within the mandated region, and facilitate personal interactions with key local actors in business and government (Lassarre, 1996). Therefore, the regionalisation literature extensively insists on the need for these intermediate units to be in the immediate vicinity of the region they administer.

On the other hand, more recent studies on the exploration of the optimal location of RMCs suggest it is preferable for them to be near the home country, for if the RMC is located too far away, that could somehow inhibit communication and coordination with the parent company. In addition,

because of the costs associated with their establishment, parent offices need to ensure their activities are aligned with the interests of MNCs themselves and that they will maintain close interaction with them (Bouquet and Birkinshaw, 2008; Lunnan and Zhao, 2014). The autonomy that RMCs often require to integrate successfully in the local environment can reduce the parent company's control over it. These scholars therefore highlight that most regional offices are located at specific points that are easily accessible by the parent company in terms of geographic distance (for instance, the availability of direct flight connections), as well as reduced psychic distance due to the specifics of historical background and contemporary economic development. For example, Hong Kong and Singapore are usually the favourite locations for Western MNCs to locate their RMCs in Asia because of their accessibility, in terms of transportation, as well as historical ties as a result of colonial relationships and the positive previous experience of operating in these locations (Belderbos et al., 2017; Poon & Thompson, 2003). Thus, for RMCs to perform their bridging function more effectively they need to be located in specific places that are perceived as more proximate by the parent company.

Moreover, a research line has recently emerged that highlights the establishment of RMCs in a conciliating non-spatial proximity to the parent company and the target region simultaneously. For instance, some scholars analysed Spain as the location for RMCs known as springboard subsidiaries, which coordinate the activities of European companies in Latin America (Pla-Barber & Camps, 2012). Such logic is prompted by the institutional and geographic proximity of Spain to European head offices together with its cultural and linguistic proximity to Latin America, making it an intermediate point of equal proximity both to the parent company's home country and the target region affiliates. Recent studies have shown that such a position allows these subsidiaries to minimise the perceived psychic distance between the European corporate office and the regional subsidiaries in Latin America, enabling communication and facilitating expansion (Magomedova et al., 2017).

All in all, the factors that define the optimal location of RMCs are still under debate. However, all of the arguments seem to view psychic distance as the most important component to be considered when deciding on the location of RMCs, even ahead of geographic distance. Therefore, RMCs

might not be situated in either the home or target region, provided that they minimise psychic distance.

As the concept of psychic distance itself is multidimensional and is viewed as a composite index that includes political, economic, cultural and other measures, the weight of each of the dimensions might differ in importance when deciding where to locate RMCs. The following section sheds light on each of the most studied dimensions of psychic distance in order to determine the optimal location for RMCs.

4.2.2. Dimensions of Psychic Distance

The concept of psychic distance was first introduced by Beckerman (1956), when the economist posited that besides geographic distance, trade flows are also affected by another kind of distance that is more based on individual psychological perceptions. This idea attracted considerable attention from IB scholars after it was reintroduced by the Uppsala School, which defined it as differences in language, culture, political systems, levels of education and industrial development that prevent the flow of information between firms and markets (Johanson & Wiedersheim-Paul, 1975). In particular, psychic distance is considered to contribute to an increase in uncertainty (Grewal et al., 2008), hindering of information flows (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975), knowledge transfer (Pedersen et al., 2003), development of trust (Katsikeas et al., 2009) and performance (Magnusson et al., 2008) in cross-national operations. Therefore, this concept continues to be of major concern to international firms regarding their overseas activities.

The contribution by IB literature to our understanding of the impact of psychic distance on international activities, as well as to the definition of the measurements, or dimensions, that constitute it is overwhelming (see, e.g., House et al., 2004; Hofstede, 1980; Schwartz, 1994). Although there is still no consensus as to how this phenomenon should be measured, academic research is increasingly claiming that reliance on one psychic distance dimension alone is potentially misleading (Kostova et al., 2020), and is highlighting the importance of incorporating various dimensions in empirical studies (Ambos & Håkanson, 2014; Beugelsdijk et al., 2018). In line with this recommendation, important progress has been made in the IB literature,

proposing the multi-dimensionality of psychic distance (see e.g., Berry et al., 2010; Dow & Karunaratna, 2006; Ghemawat, 2001; Håkanson & Ambos, 2010).

The most oft-cited psychic distance dimensions, and which we consider relevant for RMCs due to the nature of their responsibilities, are the differences related to political and economic development, demographic composition, education, culture, religion, and language (Blomkvist & Drogendijk, 2013; Dow & Karunaratna, 2006; Dow & Ferencikova, 2010; Håkanson & Ambos, 2010; Ronen & Shenkar, 2013; Santos et al., 2017). Other factors that also determine psychic distance between countries are the existence of colonial links in the past, and strong relationships in the present day in terms of trade ties and volume of foreign direct investments (Brewer, 2007; Dow & Karunaratna, 2006). The following sections propose reasons for the choice of each of the dimensions included in the composite psychic distance index used to optimise RMC location.

4.2.2.1. Political development

Due to the hybrid nature of RMCs' work (responsiveness to local needs of their regional affiliates, and global integration of the operations of the parent company), their operations are highly dependent on the relationships between the government of the country where they are based and the local governments of their regional affiliates, on the one hand, and the parent home country on the other hand. This implies a high sensitivity of these units towards political distance between (1) their home country and the parent home country and (2) their home country and the countries of regional affiliates administered by the RMC. Indeed, psychic distance literature has long highlighted that countries that differ in terms of their political structures (Berry et al., 2010; Dow & Karunaratna, 2006; Håkanson & Dow, 2012; Whitley, 1992) have greater psychic distance between them, as this has a major impact on the institutional systems within countries as well as on the relationships between countries. Most industries involve a substantial amount of business-government communication, where the latter plays a key role in overseeing business-to-business and business-to-consumer interactions, such as the enforcement of contracts and monitoring of anti-competitive behaviours (Dow & Karunaratna, 2006). Moreover, institutional and political

differences can be detrimental for business processes, when firms from a country with an efficient regulatory environment and transparent governance structures are confronted with poorly developed political and judicial institutions, whose modus operandi may appear corrupt or otherwise immoral (Håkanson & Ambos, 2010). As a result, differences between political systems often raise transaction costs and uncertainty in business communication between distant countries, which can be heightened by the introduction of RMCs at the midway point between an MNC's regional affiliates and its parent company. Thus, the relevance of the political dimension in the composite psychic distance index is suggested.

4.2.2.2. Demography

In order for RMCs to successfully perform their administrative duties it is crucial for them to understand the differences between the consumer markets in the parent home country, their own home country and the local consumers of their regional affiliates (responsiveness and integration role). The greater the demographic differences between countries, the more different consumer behaviours will be, which increases the psychic distance and makes RMCs less able to perform their duties successfully. This explains the choice to include a demographic dimension in the RMC location optimisation model. Indeed, IB scholars have often related demographic factors with patterns of international expansion and corporations' cross-border activities (Caves & Caves, 1996; Huynh et al., 2006). The seminal paper by Berry et al. (2010) showed that demographic distance, expressed as differences between countries' populations, growth and age structure, significantly influences firms' Foreign Direct Investment (FDI) decisions. In particular, the demographic structure of a country has a direct impact on its market composition and consumer type (Zhou & Guillen, 2016). Firms from countries with a similar demographic structure have less need to adapt a product to local markets and are able to understand local needs better. In consequence, the transaction costs associated with international expansion between these countries are lower, which encourages higher trade flows and stronger business relationships. If a firm wishes to reduce transaction costs, it is expected to find a location for its RMC where the demographic distance will be minimised.

4.2.2.3. Economic development

Economic development has long been part of the measurement of psychic distance and has been used to explain trade and FDI flows both from developed (Johanson & Vahlne, 1977) and developing countries (Blomkvist & Drogendijk, 2013). Economic development is likely to influence employment, which impacts the way information is communicated and interpreted (Dow & Karunaratna, 2006). It also often affects societal codes and structure (Håkanson & Ambos, 2010). Dow and Karunaratna (2006) posit that the norms of business-to-business communication and interaction are likely to be heavily influenced by the nature of the economy, and thus the level of economic development. The differences in these norms introduce extra costs and uncertainty to transactions, and subsequently inhibit internationalisation between countries with large differences in terms of economic development. It seems necessary for the economic dimension to be included in the composite psychic distance index that will help seek the optimal RMC location. These units shall fully understand the often unsynchronised economic cycles of both the parent home country and the countries of local subsidiaries in an administered region, as major differences between them cause misunderstanding of the local market needs, false expectations and miscalculations of the possible outcomes.

4.2.2.4. Education

Differences in education levels among countries are frequently identified as another fundamental factor of psychic distance (Cavusgil, 1980; D. Dow & Karunaratna, 2006; Johanson & Vahlne, 1977). Education is known to affect information flows because it influences the way people communicate, prepare and interpret information (Blomkvist & Drogendijk, 2013). In particular, large differences between education levels in different countries can negatively influence the quality of communication between foreign business partners, and consequently increase the risk of misunderstandings and other types of miscommunication (Tierean & Berens, 2017). This occurs because the level of education often relates to the tools for searching, storing and exchanging information, as well as communicating it to others (Blomkvist & Drogendijk, 2013). A higher level of education leads to the use of more sophisticated tools to process the information, which results in difficulties in communication, information exchange and understanding of local markets (Johanson & Vahlne, 1977). The IB literature has demonstrated

that differences in education level are related to lower international trade, inward and outward investments, and cross-border acquisition performance (Blomkvist & Drogendijk, 2013; Dow & Karunaratna, 2006; Santos et al., 2017). In this regard, RMCs deal with a large quantity of data from local subsidiaries in the administered region, and from the parent company, processing, interpreting and analysing it, as well as preparing it for the other part. RMC managers need to ensure that the information is sent in an appropriate form for the receiver and will be understood properly, eliminating the risk of miscommunication. Therefore, it is suggested that the inclusion of education as one of the psychic distance dimensions will be helpful in the search for the optimal location for RMCs.

4.2.2.5. Religion

Because RMCs lie midway between the parent company and the local affiliates, they need to develop a high level of sensitivity to such an important matter as religion. Although less studied than other dimensions of psychic distance, religion is widely acknowledged as a potential stimulus (Berry et al., 2010; Dow & Karunaratna, 2006; Ronen & Shenkar, 2013). Scholars argue that it is the foundation upon which people assess whether certain behaviours are desirable and acceptable because it is closely associated with attitudes and norms (Boyacigiller, 1990). It also influences communication processes as religious metaphors play an important role in them (Dow & Karunaratna, 2006). Because of these factors, differences in religion increase the transaction costs and risk of misunderstandings and tend to reduce the intensity of international trade and investments between countries. That would mean that the subsidiaries located in countries with strong religious differences are in isolation from the network of MNC activities worldwide, which would be negative for RMCs whose primary tasks include integration of an MNC within a specific region. The higher the distance in terms of religion the greater an effect it will have on the choice of RMC location, which explains the inclusion of this dimension in the composite psychic distance index to optimise RMC location.

4.2.2.6. *Language*

The presence of common languages is believed to be "the most important legacy of history for psychic distance perceptions" (Håkanson & Ambos, 2010, p.199). IB research shows that the significance of language similarity

lies not only in the resulting efficiency and clarity of communication (Blomkvist & Drogendijk, 2013; Tushman, 1978) but also in facilitation of access to information about a foreign country that is intended for domestic use, i.e. not translated to any non-local language (Håkanson & Ambos, 2010). Moreover, common language is often associated with deep-rooted historical ties (Brewer, 2007). Several empirical studies evidence that common language explains both FDI and trade flows (Brewer, 2007; Dow & Karunaratna, 2006) and decreases the perception of psychic distance (Håkanson & Ambos, 2010). As language differences create important administrative costs and slow down communication, it is equitable to expect that RMCs should be located in areas where the language barrier is minimised. The IB literature often refers to countries like Spain, Singapore and Hong Kong as appropriate locations for RMCs specifically because of the shared language with specific regions (Belderbos et al., 2017 Villar et al., 2017). Hence, this suggests the relevance of the language dimension for the optimisation of RMC location.

4.2.2.7. Culture

National culture is arguably one of the most incorporated variables in IB research, with Hofstede's study of four cultural dimensions (Hofstede, 1980) being one of the most cited (Boyacigiller, 1990; Dow & Karunaratna, 2006; Sivakumar & Nakata, 2001). Culture is defined as the "mental programming" of a society (Hofstede, 1980) and is recognised to influence a person's behaviour, and the way they communicate and interpret information (Boyacigiller, 1990). This, in turn, leads to an increase in the cost of information flows, escalation of the risks of misinterpretation and, consequently, higher transaction costs of cross-cultural operations (Dow & Karunaratna, 2006), which will intuitively influence managerial decisions regarding market selection and entry mechanisms (Davidson, 1980; Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975; Kogut & Singh, 1988). This dimension is especially relevant to RMCs since their capacity to understand the cultural specificities of local subsidiaries is what adds to their value from the viewpoint of the parent office. However, even if these units perfectly understand the local needs, if they fail to articulate them in such a way that they are understandable by the parent company, it will be useless for the MNC. To be able to fulfil this bridging function they need to be in the cultural vicinity of the parent company as well. MNCs are aware of this and will be looking for a location where the cultural distance is minimised not only from the RMC to the target region, but also from the RMC to the parent company's home country. Therefore, the cultural dimension seems pertinent for the optimisation of RMC location.

4.2.2.8. Colonial ties

The importance of colonial ties in the composite index of psychic distance has been recognised by numerous studies on the matter, because a past presence often has significant influence on a country today (see, e.g. Ambos, et al., 2019; Dow & Karunaratna, 2006; Hakanson & Ambos, 2010). For example, it often determines legal and governance frameworks, constitutes strong historical links and, probably most importantly, implies the use of a common language and religion (Ghemawat, 2001; Henisz, 2000; Whitley, 1992). Colonial ties are often included as predictors of international flows of trade and FDI (Linnemann, 1966; Rauch, 1999) and were used in the seminal work by Johanson & Wiedersheim-Paul (1975) to demonstrate the divergence of geographic and psychic distance. This mix of positive consequences for doing business is especially attractive when companies from developed (and often former coloniser) countries attempt to reach psychically distant (and often former colonised) regions. Having past colonial ties with a target region confers competitive location-specific advantages over other countries with no historical links. Intuitively, companies will be looking for a location for RMCs in these former coloniser countries. Therefore, we include this dimension in the composite psychic distance index to find optimal RMC locations.

4.2.2.9. *Trade ties*

Apart from the dimensions that are most commonly used in IB literature and have been discussed in previous sections, we have also included trade ties as an additional dimension in the model. This is motivated by the findings of the study of springboard subsidiaries by Pla-Barber & Camps (2012) that underlines the importance of their location-specific advantages to perform the role of an RMC. In particular, they highlight that springboard subsidiaries are located in countries that have already developed strong business ties with a target region, which allows them to access certain unique experiential knowledge about the target region that is difficult for other units to transfer and assimilate, including the parent company. Experiential knowledge refers

to all types of knowledge accumulated through international activities and can be estimated as the amount of trade flows between different countries; the larger they are, the larger the accumulated experiential knowledge about each other's country. The importance of this knowledge is crucial, because it allows these intermediate units to recognise the opportunities in the target regions and to engage with those regions more effectively (Villar et al., 2018).

4.2.2.10. Geographic distance

Finally, the RMC location optimisation model includes geographic distance, which refers to the physical separation between two countries. Geographic distance has been argued to negatively affect international business mainly because of the associated transportation and communication costs (Beckerman, 1956; Leamer, 1974). There are studies that show that geographic distance may also add to other frictions, such as the lack of knowledge among managers about geographically distant markets (Gruber & Vernon, 1970). Moreover, it has been shown that monitoring costs increase with geographic distance (Carr et al., 2001; Malhorta et al., 2016). Therefore, geographic distance has an augmenting effect on psychic distance that enlarges proportionally with it (Hutzschenreuter et al., 2014). Although we believe this factor to be of less importance and expect to obtain a low weight for this dimension, we cannot neglect its inclusion in the RMC location optimisation model.

4.2.3. The RMC location optimization model

In order to work out the optimal location for RMCs that minimises psychic distance between the parent company's home country and foreign subsidiaries within a particular region, we propose a model that considers the previous dimensions of psychic distance conceptualised as psychic distance stimuli, which, rather than reflecting the managers' individual perceptions, are meant to convey 'objective' country-level indicators of cultural values or institutional ratings (Blomkvist & Drogendijk, 2013; Dow & Karunaratna, 2006; Eriksson et al, 2000; Magnusson, Schuster, & Taras, 2014). In particular, Dow and Karunaratna (2006) define psychic distance stimuli as the macro-level factors that are characterised by such advantages as stability, objectivity and easiness of measurement in comparison with managers'

individual perceptions of psychic distance. These stimuli can be applied when analysing managerial decisions across a population of firms, i.e., on a national level, rather than at the individual level of a particular firm (Dow & Karunaratna, 2006).

The true challenge for IB scholars is to apply these stimuli while conserving their impartial and stable nature and, at the same time, differentiating their weight in the composite psychic distance index to understand the real impact of each of these dimensions in the context of cross-border business activities. Due to the lack of an alternative methodology, some studies contrast separate stimuli against the perceived psychic distance of firm managers. This yields as a result the fact that the importance of each of the stimuli heavily depends on the personal, subjective perceptions of the people who respond to surveys (see, e.g., Child et al., 2009), which automatically cancels out the stimuli's impartial nature. Other studies apply the technique of unweighted average to these stimuli, following the controversial approach of Kogut and Singh's composite index of cultural distance, and giving the same weight to all of the stimuli without any differentiation of their importance (see, e.g., Dow & Ferencikova, 2010).

Antithetically, this study proposes an alternative solution for finding the optimal weights for each of the psychic distance dimensions, applying the evolutionary computation technique in order to include different weightings of psychic distance stimuli in a more objective manner to find an RMC location optimisation model. Overall, the proposed model includes the political, demographic, economic, education, religion, language, and culture dimensions, as well as colonial and trade ties, and the geographic distance between countries. The following section presents the various steps of the methodology applied in the study in order to weight psychic distance dimensions in a more objective manner.

4.3. Methodology

To work out the optimal location for RMCs, we apply an evolutionary computation algorithm to uncover the weights for each of the psychic distance dimensions. This method was implemented following the steps below.

The first step consisted of creating a database of 25 different variables linked to psychic distance for 125 countries. Annual variables were collected for 12 consecutive years (from 2005 to 2016). The second step involved the reduction of the 25 variables to 10 dimensions: political, demographic, economic, education, religion, language, colonial ties, cultural, geographic distance, and trade ties between countries. The third step was to calculate the distance between countries, using a composite psychic distance index with all the 10 dimensions, and with the equal weight of 1 for each. The fourth step was to develop an algorithm that calculates the composite index of psychic distance between countries. The evolutionary computation algorithm was applied to compute the weights of each of the dimensions that minimise the overall distance between a selected list of countries of origin and regions of destination and show the best location for RMC units. This list is based on studies of springboard subsidiaries (Pla-Barber & Camps, 2012) that have proven to be particularly efficient in their performance of RMC related tasks. Finally, the fifth step consisted of applying the obtained weights to a larger sample of countries and wider institutional and geographic scenarios, in order to find the locations that would minimise psychic distance between a country of origin and a region of destination and would serve as perfect locations for RMC units. The following sections fully describe the process of data collection and analysis employed for the purposes of this study.

4.3.1. Variables and Data collection

Based on the extant literature, we selected variables and collected data on dimensions that have been proven to predict trade and business relationships between countries in various studies (Berry et al., 2010; Dow & Karunaratna, 2006; Håkanson & Ambos, 2010). Previous research has made a major contribution to the definition of variables to measure the dimensions of psychic distance between countries, such as differences in political and economic development, demographic composition, education system, as well as commonalities in religion, language and culture, and the presence or absence of colonial ties in the past. Since this study does not aim to examine the capacity of certain variables to predict psychic distance, but rather builds new knowledge on variables that have already been examined, we selected the best-known ones considered in previous research on psychic distance and that are closely related to the tasks performed by RMCs.

As a result, we included the following 25 variables (see Table 4.1): mean of quality of governance indicators, political regime, 2 variables for quality of democracy (political rights and civil liberties), policy-making uncertainty, life expectancy, population over 65 years old, reversed values for birth rate and population under 14 years old, GDP per capita, energy use and CO2 consumption per capita, literacy rate, percentage of population enrolled in secondary and tertiary education, language, religion, Hofstede's 4 cultural dimensions (power distance, individualism, masculinity and uncertainty avoidance), existence of colonial ties; as an indicator of trade relationships between countries we used the sum of export flows from country i to country j and from country j to country j; and finally latitude and longitude of a country's capital.

Table 4.1. List of variables for psychic distance dimensions

	Indicators/variables	Dimension measured by the variable	Source	References where the variable was previously used
1	Mean of quality of governance indicators	Governance	WGI	Hutzschenreuter et al., 2014
2	Political regime	Political	Polity V data	Dow & Karunaratna, 2006
3	Quality of democracy (political rights)	Political	Freedom house	Berry et al., 2010
4	Quality of democracy (civil liberties)	Political	Freedom house	Berry et al., 2010
5	Policy-making uncertainty	Political	POLCONV	Berry et al., 2010
6	Life expectancy	Demographic	Worldbank	Berry et al., 2010
7	Population over 65 years old	Demographic	Worldbank	Berry et al., 2010
8	Birth rate (taken reverse)	Demographic	Worldbank	Berry et al., 2010
9	Population under 14 years old (taken reverse)	Demographic	Worldbank	Berry et al., 2010
10	GDP per capita	Economic	Worldbank	Dow & Karunaratna, 2006
11	Energy use per capita	Economic	Worldbank	Brown et al., 2011
12	CO2 consumption per capita	Economic	Worldbank	Dow & Karunaratna, 2006

	Indicators/variables	Dimension measured by the variable	Source	References where the variable was previously used
13	Literacy rate	Education	Worldbank	Dow & Karunaratna, 2006
14	% of population enrolled in secondary education	Education	Worldbank	Dow & Karunaratna, 2006
15	% of population enrolled in tertiary education	Education	Worldbank	Dow & Karunaratna, 2006
16	Language	Language	CEPII	Dow & Karunaratna, 2006
17	Religion	Religion	World Religion Database	Dow & Karunaratna, 2006
18	Power distance	Culture	Hofstede	Kogut & Singh, 1988
19	Individualism vs Collectivism	Culture	Hofstede	Kogut & Singh, 1988
20	Masculinity vs Femininity	Culture	Hofstede	Kogut & Singh, 1988
21	Uncertainty avoidance	Culture	Hofstede	Kogut & Singh, 1988
22	Colonial ties	Colonial ties	CEPII	Hakanson & Ambos, 2010
23	Dyadic export relations	Trade ties	COMTRADE	Chen et al., 2004
24	Latitude of the capital location	Geographic	CEPII	Hakanson & Ambos, 2010
25	Longitude of the capital location	Geographic	CEPII	Hakanson & Ambos, 2010

Regarding geographical scope, we collected data variables from 125 countries distributed across different regions. We did not limit the exploration to countries from a particular region, because the assumption is that the intermediate units might be located either within the region of an MNC's country of origin or within the same region of destination, or even outside of both these regions. Therefore, the inclusion of countries from various regions has given us a certain degree of freedom to look for the best RMC location in the whole world. We have also centred on countries of

major importance in each sub-region and eliminated countries with a high amount of missing variables.

As the study deals with a regional organisation, we needed to choose a regionalisation criterion to group countries into regions and sub-regions. The concept of "region" has been extensively studied by the IB and policy-making literature, but its definition is vague and still not well settled (Ghemawat, 2005; Maza & Villaverde, 2011). Some scholars propose the criterion of geographic proximity to define regions (Hirata et al., 2013), whereas others point out the importance of non-geographic dimensions, such as culture or economic development in grouping countries into regions (Nir, 2012). For the purposes of this study, we have chosen to group all the 125 countries into 6 regions and 19 sub-regions, following the regionalisation proposed by the United Nations (see Table 4.2).

Table 4.2. List of countries by region and sub-region

Regions		Sub-r			
Africa	Eastern Africa Ethiopia Kenya Malawi Mozambique Rwanda Sudan Tanzania Uganda Zambia Zimbabwe	Central Africa	Southern Africa Lesotho Namibia South Africa	Western Africa Burkina Faso Cabo Verde Ghana Mali Nigeria Senegal Sierra Leone	
Americas	Central America Costa Rica Dominican Republic El Salvador Guatemala Honduras Jamaica Mexico Nicaragua Panama Puerto Rico Trinidad & Tobago	North America Canada The United States of America	South America Argentina Bolivia Brazil Chile Colombia Ecuador Paraguay Peru Suriname Uruguay Venezuela		
Asia	Central-Western Asia Kazakhstan Turkey Georgia	Eastern Asia	South-Eastern Asia	Southern Asia	

Regions				Sub-r	egions			
Еигоре	Eastern Eu	Belarus Czech Republic Hungary Romania Russia Slovakia Slovenia Ukraine	Northern I	Europe Denmark Estonia Finland Iceland Latvia Lithuania Norway Sweden	Western	Europe Austria Belgium France Germany Ireland Luxembourg The Netherlands Switzerland United Kingdom	Southern	Europe Albania Croatia Greece Italy Malta Portugal Serbia Spain
MENA	Middle Ea	Egypt Iran Iraq Israel Kuwait Lebanon Qatar Saudi Arabia Syria The United Arab Emirates	Maghreb • • •	Algeria Libya Morocco Tunisia		Milguoni		
Oceania	Australia Zealand •	& New Australia New Zealand	Melanesia • •	Fiji Papua New Guinea Solomon Islands				

4.3.2. Dimensions of the RMC location optimization model

The previous IB literature has shown that the variables used to measure country differences prompt different dimensions of the composite index of psychic distance. In this study we have followed this insight and reduced the 25 variables to 10 different dimensions.

In particular, to reduce variables 1 to 15, we conducted exploratory factor analysis (EFA). To implement EFA successfully, we need to have a minimum of observations. Because 125 countries are a somewhat limited number of observations, we collected annual data for 12 years divided into three periods: 2005-2008, 2009-2012 and 2013-2016 (taking the average of four years per period for each variable), thus amplifying our sample from 125 to 375 observations. We applied Varimax rotation, substituting missing variables with a mean, and cutting off coefficients at 0.6 (which is well above the recommended minimum of 0.4). The Kaiser-Meyer-Olkin (KMO) test at 0.860 indicates meritorious adequacy of the sample, and Bartlett's test of sphericity is significant. As a result, we obtained four dimensions that we

named political, demographic, economic and educational, following the previous literature on this topic (see Table 3). Afterwards we confirmed the obtained composite dimensions in a confirmatory factor analysis (CFA). As can be seen, Cronbach's Alpha is above 0.88 in all the four dimensions, which shows a good reliability of each of the factors. We also found that eliminating the variables in the obtained factors does not improve Cronbach's Alpha, and so decided to maintain them all. The list of variables for each dimension, with the extraction of each variable and Cronbach's Alpha for each composite dimension, is presented in Table 4.3.

In order to choose the method of correlation between the four factors, first we conducted Shapiro-Wilk's Test of Normality has shown significant, and therefore the data distribution is not normal, which prompted Kendal's Tau correlation test. As can be seen in the correlation matrix (see Table 4.4), the correlations are generally low.

Table 4.3. Factor analysis (n=375)

	Dimensions	Coding	Desc	ription		Factor analysis		
			Min	Max	Mean	Std Dev	Extraction	Cronbach
								Alpha
1	Political dimension							0.939*
	• WGI	WGI	-1,82	1,86	0,08	0,92	0.851	
	 Polity 	POLITY	-10,00	10,00	5,00	5,80	0.869	
	 Democracy score – political rights 	FHPR	1,00	7,00	4,86	2,03	0.932	
	 Democracy score – civil liberties 	FHCL	1,00	7,00	4,94	1,74	0.933	
	Policy-making uncertainty	POLCONV	0,00	0,89	0,49	0,28	0.697	
2	Demographic dimension							0.884*
	• Life expectancy	LIFEEXP	44,08	81,25	69,45	8,02	0.745	
	 Population over 65 years old 	POP65	0,01	0,26	0,09	0,06	0.836	
	Birth rate	BIRTHR	0,02	0,13	0,06	0,03	0.931	
	 Population under 14 years old 	POP14	0,50	0,89	0,73	0,11	0.941	
3	Economic dimension							0.941*
	GDP per capita	GDPCAP	36,64	108759,00	15964,99	20660,57	0.783	
	Energy use per capita	ENERGYCAP	12,06	18409,24	2672,70	3050,66	0.884	
	CO2 consumption per capita	CO2CAP	0,03	55,40	5,45	6,90	0.863	
4	Education dimension							0.918*
	Literacy rate	EDULIT	0,12	1,00	0,84	0,21	0.793	
	• % of population enrolled in secondary	EDUSEC	0,08	1,00	0,72	0,24	0.874	
	education	EDUTER	0,00	1,00	0,42	0,27	0.761	
	• % of population enrolled in tertiary education							

^{*} Cronbach Alpha based on the standardised form of each variable

Table 4.4. Correlation matrix (n=375)

Correlations - 2-tailed						
		1	2	3	4	
Kendall Tau_b	Political	1,000				
	Demographic	,017	1,000			
	Economic	,191**	,005	1,000		
	Education	,066	,062	,054	1,000	

^{**.} The correlation is significant at the 0,01 level (2-tailed).

After reducing variables 1 to 15 to four different dimensions through EFA, we took variables 16 and 17 as separate dimensions and added them to an aggregated index of psychic distance. In this study we could not ignore Hofstede's cultural dimensions, as they occupy too important a place in the literature on psychic distance. As these variables cannot be grouped via EFA analysis, and the only universally accepted alternative is the composite index proposed by Kogut and Singh (1998), variables 18-21 were taken as a cultural dimension using their calculation. Additionally, variables 22 and 23 were taken as separate dimensions. And finally, variables 24-25 were used to measure geographic distance, as described in the sections below. The final list of variables and dimensions for the RMC location optimisation model is presented in Table 4.5.

Table 4.5. List of variables and dimensions to which they belong.

	Indicators/variables	Dimension measured by the variable	
1	Mean of quality of governance indicators		
2	Political regime		
3	Quality of democracy (political rights)	Political	1
4	Quality of democracy (civil liberties)		
5	Policy-making uncertainty		
6	Life expectancy		
7	Population over 65 years old	— Domographia	2
8	Birth rate (taken reverse)	 Demographic 	4
9	Population under 14 years old (taken reverse)		
10	GDP per capita		
11	Energy use per capita	Economic	3
12	CO2 consumption per capita	_	
13	Literacy rate	Education	4

^{*.} The correlation is significant at the 0,05 level (2-tailed).

	Indicators/variables	Dimension measured by t variable	he
14	% of population enrolled in secondary education		
15	% of population enrolled in tertiary education		
16	Language	Language	5
17	Religion	Religion	6
18	Power distance		
19	Individualism vs Collectivism	Cultura	7
20	Masculinity vs Femininity	Culture	/
21	Uncertainty avoidance		
22	Colonial ties	Colonial ties	8
23	Dyadic export relations	Trade ties	9
24	Latitude of the capital location	C1:-	10
25	Longitude of the capital location	Geographic	10

4.3.3. Calculating distance between countries and sub-regions

Having obtained the ten dimensions for the RMC location optimisation model, the next step consisted of calculating a composite index of psychic distance between countries. The first four dimensions (political, demographic, economic and education), were calculated using Euclidian distance. Cultural distance, based on Hofstede's four dimensions, was obtained using the aggregate method proposed by Kogut and Singh (1988). Afterwards, we added language and religion distances, following Dow and Karunaratna (2006) and calculated geographic distance using the Geosphere package in R. We then added colonial ties distance, as 0 if the pair of countries had a colonial relationship, and 1 if they did not. Finally, to identify what share of the country's economy is being exported from country i to country j, we included the inverted export dyadic relationships between countries, as a percentage of GDP of the country of origin. The formula for the composite index of distance between country i and country j is:

$$w1 * politdist_{i,j} + w2 * demogdist_{i,j} + w3 * econdist_{i,j} +$$
 $+ w4 * educdist_{i,j} + w5 * langdist_{i,j} + w6 * reldist_{i,j} +$
 $+ w7 * cultdist_{i,j} + w8 * coldist_{i,j} + w9 * tradedist_{i,j} +$
 $+ w10 * geodist_{i,j} = psychicdist_{i,j}$

Based on the composite index of distance between countries, we developed an algorithm to find distances between a country and a sub-region. In order to do so, we used the median of the distances of countries located in

sub-region j as the distance value for the whole sub-region and obtained the difference between country i and the resulting sub-region's value.

Once we had found the distance between country i and sub-region j, we could start the calculation of an optimal RMC location between a country and a sub-region that would minimise the distance between the two. In particular, the algorithm was looking for the best 10 countries that would minimise the triangular distance of *country of origin* – *RMC location* – *sub-region of destination*, including the possibility of the RMC location being the same as the country of origin. At this point, all the dimensions were given weights equal to 1, with the resulting RMC locations presented in Table 4.6. Afterwards, we began the psychic distance minimisation process, aiming to optimise the weight for each psychic distance, which led to the next step – computation of optimal weights for each of the dimensions.

Table 4.6. Resulting RMC locations without computed weights (weights equal to 1)

Country of origin	Top three RMC location	Sub- regions of destination	Country of origin	Top three RMC location	Sub- regions of destination
Germany	Bolivia, Belgium, Germany	South America	The United Kingdom	Nicaragua, Tunisia, Bolivia	Central America
France	France, Bolivia, Spain	South America	The Netherlands	Bolivia, Paraguay, Tunisia	South America
The United Kingdom	Bolivia, Paraguay, Tunisia	South America	The Netherlands	Bolivia, Paraguay, Tunisia	Central America
Germany	Nicaragua, Tunisia, Bolivia	Central America	Mexico	Solomon Islands, Papua New Guinea, Tunisia	Western Europe
France	Tunisia, Nicaragua, Spain	Central America	Argentina	Bolivia, Paraguay, Argentina	Western Europe

4.3.4. Evolutionary computation

To identify the optimal common weights for each of the ten dimensions that would help to find the optimal RMC locations, we draw on previous IB literature that has empirically identified the existence of ideal locations for RMC that reduce psychic distance between a country of origin and a region of destination.

For this purpose, we chose one of the evolutionary computation techniques called differential evolution (DE), a population-based stochastic method for global optimisation. Like other evolutionary algorithms, it uses biology-inspired operations of selection, mutation and crossover of a population in order to minimise an objective function over the course of successive generations (Holland, 1975). DE solves optimisation problems by evolving a population of candidate solutions using alteration and selection operators. In contrast to classic genetic algorithms, DE uses floating-point instead of bit-string encoding of population members and arithmetic operations rather than logical operations in mutation, which makes it particularly well-suited to finding the global optimum real-valued function of real-valued parameters.

As a preliminary stage, we produced a battery of fitness tests according to the existing studies on springboard subsidiaries (see e.g., Pla-Barber and Camps, 2012; Villar et al., 2017) that included 10 tests of different *country of origin – RMC location – sub-region of destination* triangles (see Table 4.6). The function of this battery is to represent the requirements to adapt to: for example, in the relationship Germany – South America, the RMC location should be Spain. The battery forms the basis for selection, and defines what improvement means, and how the weights should mutate in order to achieve optimisation. The task consisted of choosing the best weights to fit all 10 tests in the battery, meaning that the algorithm should compute weights according to which RMC location from Table 4.7 will be appearing in the top position. We also allowed a margin of error of 5 (which means that the RMC location should appear in the first 5 results of the calculation). After some tests, we narrowed the margin to 3.

Table 4.7. Battery of fitness tests

Country of origin	RMC location	Sub-regions of destination	Country of origin	RMC location	Sub-regions of destination	
Germany	Spain	South America	The United	Spain	Central America	
			Kingdom	Spain	Central America	
France	Cnoin	South America	The	Cnoin	South America	
France	Spain	South America	Netherlands	Spain	South America	
The United	Cnoin	South America	The	Cnoin	South America	
Kingdom	Spain	South America	Netherlands	Spain	South America	
Commony	Cnoin	Central	Mexico	Spain	Western Europe	
Germany	Spain	America				
France	Cnoin	Central	Argontino	Cnoin	Wastern Europa	
France	Spain	America	Argentina	Spain	Western Europe	

Source: Proper elaboration based on Magomedova et al., 2017; Pla-Barber & Camps, 2011; Pla-Barber, Villar, & Madhok, 2017; C. Villar, Pla-Barber, Domingo, & Madhok, 2017; Cristina Villar et al., 2017.

After that, we performed the computation using the DEoptim package in R, and set the value of 0 for the lower boundary and the value of 1 for the upper boundary for each of the dimension weights, thus allowing the algorithm to randomly assign values to population candidates between upper and lower bounds. We also set NP (number of population members) at 100, as recommended by Ardia et al. (2011), who state that NP should be 10 times higher than the number of parameters (which in our case is 10). Furthermore, we set itermax (the maximum number of iterations, or populations generated) at 100. However, the program was set to stop if the algorithm reached 100% of the battery of fitness tests and/or no substantial changes in the computed populations were observed during the subsequent 10 generations. This is because the closer the population gets to the global optimum, the more the distribution will shrink and therefore reinforce the generation of a small difference vector, and eventually the difference will be unobserved, and no further iterations will be needed. Once the weights were obtained, we applied them to a bigger sample that included countries neighbouring the tested ones, and checked to see whether the obtained results were in any way similar.

With the margin of error fixed at 3, each iteration lasted about 55 minutes. The algorithm converged after 35 iterations, explaining all the 10 fitness tests in the battery. Beginning from iteration 38, the population values started to repeat, meaning that the algorithm achieved the global optimum. We stopped

calculations after 48 iterations and almost 2 days of non-stop running of the program.

4.4. Results

The obtained results shed vivid light on the importance of each of the dimensions compared to the others, as well as the composite psychic distance dimensions compared to the geographic distance. The following sections present an in-depth overview of the evolutionary computation output.

4.4.1. The resulting weights for RMC location optimization model

The values obtained for each of the dimensions after 48 iterations are shown in Table 4.8. As can be perceived, the most dominant dimensions, as adjusted to their corresponding mean, are colonial ties (with a computed weight value of 0.98), political development (0.93), economic factors (0.88) and trade ties (0.64). These results align with the findings in the literature that historical, political and economic proximity encourage trade flows. However, their prevailing importance compared to other dimensions (that are discussed below) can also be related to the nature of RMCs themselves. Because they often act as Regional Headquarters, performing administrative and political functions and dealing with foreign investment and fiscal issues, the political and economic factors can be of special importance for their location.

On the contrary, language surprisingly occupies the least important position (with a weight of 0.02), being followed by the demographic dimension (0.23) and religion (0.23). The lower importance of the demographic dimension can be explained by the fact that the variables used to measure it reflect the demographic structure of a country, but not its market size or the quality of its workforce. As for language and religion differences, these are compensated by the major role of colonial ties, which implicitly presupposes the use of the coloniser language and religion in former colonies. It also implies that the coincidence of a language does not guarantee the minimisation of overall distance on both sides of the triangular relationship of *parent company's home country* – *RMC location* – *target region*. Interestingly, although the geographic dimension maintains its relevance (0.09), it is only of modest importance for minimisation of distance, this

result to some extent aligning with the findings for springboard subsidiaries, which reject the importance of geographic proximity of RMC units to the target region.

Table 4.8. Computed weights of the dimensions for RMC location optimization model

	Dimensions	Computed value of weight	Mean value of dimension
1	Political	0.932879	0.714
2	Demographic	0.229373	0.788
3	Economic	0.879536	0.780
4	Education	0.454029	0.914
5	Religion	0.233577	1.261
6	Language	0.023796	2.784
7	Colonial ties	0.984173	0.982
8	Culture	0.079948	5.994
9	Geographic distance	0.087628	6.837
10	Trade ties	0.649872	0.993

4.4.2. Optimal RMC locations

To find out how these weights are applied to different institutional scenarios, we applied the obtained weights to a broader range of the *country* of origin – RMC location – sub-region of destination triangles, and run the function of calculating distances weighted by the computed values. In particular, we amplified the sample of only 10 cases taken from the previous battery of fitness tests (Table 4.6) to all the studied countries included in the sub-regions of Western, Northern, Eastern and Southern Europe, to find the optimal country for playing the role of a bridge between the countries located in these areas and the sub-regions of South and Central America. In order not to obtain misleading results, the algorithm was programed to show the ten most optimal locations out of the 125 analysed countries (instead of only 1). The preliminary results are highly consistent, which is why we decided to toughen the task of searching for an optimal RMC location by narrowing it to the top 5 countries out of the 125. We repeated the same process several times, testing all the directions within the analysed regions. In order to handle the final results, we took the mean distance for each country and summarised them in sections below.

4.4.2.1. Optimal RMC locations for distance minimization between Europe and South America

As can be seen in Table 4.8, Spain was among the locations for RMC units between the countries of Western, Northern, Eastern and Southern Europe and the South American sub-region, occupying the top position in all four scenarios due to a shorter distance. Spain appears among the best 10 bridging countries for locating an RMC between a European country and the South American region for 31 out of 34 cases, and with a mean distance of 10.54¹¹ (see Appendix, Table A.1). The second best country is Brazil, though at a considerable distance from Spain, with only 21 out of 34 cases. When reducing to the top 5 bridging countries, Spain's leadership becomes even more evident, being present in 28 out of 34 cases, with Brazil present in only 16. Although 4 out of 34 European countries were in the battery of fitness tests, they can only explain the resulting leadership of Spain between Western Europe and South America, but not the rest of the European subregions. Therefore, according to the computed weights for each of the dimensions, Spain can be considered the best location for an RMC to perform the function of a bridge between a European HQ and local affiliates in South America as such a location will minimise the distance between them.

Similar results are obtained in the opposite direction - from countries in South America to the Western, Northern, Eastern and Southern European sub-regions. In particular, when calculating the 10 best bridging countries from 11 South American countries to the 4 European sub-regions, Spain was the outstanding leader with 100% coincidence, with Portugal some way behind in second. When reducing to the best 5 countries, Spain appeared in 43 out of 44 cases (Table 4.9). Spain's leadership as the best location for RMC units between South American countries and Europe is indisputable, given the fact that it accounted for all but one of the 44 scenarios in this region that was included in the battery of fitness tests, specifically the one from Argentina to Western Europe. This makes us conclude that Spain might become an obvious and favourable choice for the location of intermediate units for companies operating in these regional scenarios.

¹¹ The minimum possible value is 0, and the lower the distance the better.

Table 4.9. Optimal RMC locations for distance minimization from Europe to South America

List of the best RMC locations	Number of coincidence of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination						
From countries of Western Europe to South American sub-region								
Spain	8/9	9.95						
France	6/9	11.62						
Brazil	4/9	10.88						
Belgium	4/9	12.19						
Germany	3/9	12.58						
From cou	ntries of Northern Europe to South A	American sub-region						
Spain	6/8	11.12						
Czech Republic	4/8	12.36						
France	4/8	13.18						
Estonia	3/8	11.90						
Slovenia	3/8	11.93						
From cou	ntries of Eastern Europe to South A	merican sub-region						
Spain	6/9	9.95						
Brazil	5/9	10.92						
Croatia	4/9	10.93						
Czech Republic	3/9	10.34						
Portugal	3/9	10.63						
	From Southern Europe to South A	America						
Spain	7/11	10.15						
Tunisia	6/11	11.33						
Croatia	4/11	10.56						
Dominican Republic	4/11	10.69						
Bolivia	3/11	10.26						

Table 4.10. Optimal RMC locations for distance minimization from South America to Europe

List of the best	Number of coincidences of the	Mean distance between the
RMC locations	same RMC location in the top	country in the region of
	5 of the best locations	origin + RMC location + the
	CG 1 A TY	region of destination
	ountries of South America to Westerr	<u> </u>
Spain	11/11	10.34
France	9/11	10.87
Portugal	4/11	10.92
Bolivia	4/11	11.74
Brazil	3/11	10.53
From co	ountries of South America to Northern	n European sub-region
Spain	8/11	12.27
Czech Republic	8/11	12.54
France	6/11	12.71
Latvia	4/11	11.83
Portugal	3/11	13.03
From c	ountries of South America to Eastern	European sub-region
Spain	10/11	10.74
Paraguay	6/11	10.71
Bolivia	6/11	10.90
Brazil	5/11	10.56
Portugal	4/11	10.69
From countries of South America to Southern European sub-region		
Spain	11/11	9.51
Portugal	6/11	9.88
Brazil	6/11	9.89
Bolivia	5/11	10.26
Paraguay	4/11	9.92

Summing up the results of the institutional scenarios discussed above (from Europe to South America and from South America to Europe), we can conclude that computed weights confirm the findings in the IB literature on springboard subsidiaries that assume that these RMC units reduce psychic distance between a parent company and a target region's affiliates due to their location-specific advantages. The weights of each of the dimensions were computed on the basis of only four different trajectories but have shown similar results when extended to 78 different directions in total. Therefore, the location of these RMC units in Spain guarantees the minimisation of psychic distance between Europe and South America. The weights obtained as the result of evolutionary computation can help scholars understand the importance of each of the dimensions of psychic distance in the decision to

locate RMCs. They can also be used for better assessment of stable psychic distance dimensions on both a national and a firm level within the analysed regions.

4.4.2.2. Optimal RMC locations for distance minimization between Europe – Central America

The results observed in the direction from European countries to the Central American region are somewhat similar to the scenarios discussed above. As in the previous cases, Spain appears among the best 10 RMC locations in the majority of cases – 27 out 34. When reducing the margin to the top 5 countries, Spain was almost in the same position, appearing in 26 out of 34 countries. Compared to the direction of *Europe – South America*, Spain's leadership is somewhat lesser. For example, in the direction from Eastern Europe to Central America, Spain gives up the leadership to Croatia. Moreover, Spain's mean distance was generally longer than that *from Europe to South American* sub-regions (11.20 vs. 10.08), which might suggest more complex institutional scenarios in Central America, in comparison with its Southern neighbour.

Table 4.11. Optimal RMC locations for distance minimization from Europe to Central America

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best	Mean distance between the country in the region of origin + RMC location
	locations	+ the region of destination
From countries	es of Western Europe to Central A	American sub-region
Spain	8/9	10.94
France	5/9	11.34
Germany	4/9	12.72
Belgium	3/9	12.81
Dominican Republic	3/9	11.30
From countries of Northern Europe to Central American sub-region		American sub-region
Spain	6/8	12.25
Latvia	3/8	11.94
Czech Republic	3/8	12.66
Estonia	3/8	12.01
Germany	2/8	13.66
From countri	es of Eastern Europe to Central A	American sub-region
Croatia	7/9	11.46

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
Spain	5/9	10.95
Tunisia	4/9	11.67
Slovenia	3/9	10.71
Czech Republic	3/9	10.78
From countries of Southern Europe to Central America sub-region		America sub-region
Spain	7/11	10.15
Tunisia	6/11	11.33
Croatia	4/11	10.56
Dominican Republic	4/11	10.69
Bolivia	3/11	10.26

Analysing the opposite direction (see Table 4.12), from Central America to Europe, Spain was among the 10 leading RMC locations in 33 out of 44 cases, this result dropping to 27 when the margin was reduced to the top 5. However, some triangles produced dubious results. For example, the best RMC location between Central America and Northern Europe surprisingly appears to be the Czech Republic in terms of the results for the top 10 locations for RMC. However, when we search for the best RMC location among the top 5 countries, Spain comes out top, with the mean distance of 12.27 vs its Czech counterpart's distance of 12.54, in which case both countries serve as RMC locations for 8 countries out of 11 in the region. However, if we have a closer look at the data, the countries for which Spain does not appear among the best 5 bridging countries are Guatemala, Jamaica and Trinidad and Tobago, which do not have sufficient economic weight in comparison with their counterparts in this region to question the importance of Spain as an RMC location for Northern Europe. This also sheds light on the fact that Central America is much less homogeneous market than South America. Countries like Jamaica and Costa Rica differ significantly in the political, economic, education, cultural and language dimensions from their neighbouring countries, and their inclusion in the same region is based on mere geographical proximity.

A similar result is observed in the direction from Central American countries to Eastern Europe, where the best RMC location with a margin of 10 is Croatia, which changes to Spain when we set the margin of error to 5. In the opposite direction, from Eastern European countries to Central America, we also observe Croatia to be the best RMC location, which leads

us to believe that it could be an interesting intermediate point between these two regions. Indeed, as both regions are emerging, using a country like Croatia might prove useful because it is very similar in terms of its economic and political cycle. The proximity in terms of language, religion and colonial ties that connect its main rival Spain with this region might not be enough to compensate for economic and political disparity.

All in all, the Central American region seems to be more complex than South America and the intra-regional heterogeneity between countries should be taken into full consideration by MNC management.

Table 4.12. Optimal RMC locations for distance minimization from Central America to Europe

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
	ies of Central America to Western I	<u> </u>
Spain	7/11	10.88
France	7/11	11.46
Czech Republic	4/11	10.94
Belgium	4/11	11.93
Puerto Rico	3/11	11.20
From countri	ies of Central America to Northern l	European sub-region
Spain	8/11	12.27
Czech Republic	8/11	12.54
France	6/11	12.71
Latvia	4/11	11.83
Portugal	3/11	13.03
From countr	ries of Central America to Eastern E	European sub-region
Spain	6/11	11.20
Dominican Republic	5/11	11.10
Croatia	5/11	11.62
Bolivia	5/11	12.04
Tunisia	6/11	11.45
From countries of Central America to Southern European sub-region		
Spain	6/11	9.85
Croatia	6/11	10.13
Dominican Republic	4/11	10.35
Panama	4/11	10.89
Mexico	3/11	8.04

4.4.2.3. Optimal RMC locations for distance minimization between Europe and Maghreb

We applied the computed weights to other geographic scenarios (Table 4.13) to check the extent to which they might offer some insights into RMC location in different institutional areas.

In the trajectory from Western and Northern European countries to the Maghreb sub-region, France was a clear leader among the best 10 countries (17 out of 17 cases) and among the best 5 countries (16 out of 17 cases), with Tunisia being the best alternative within the sub-region of destination (appearing in 14 out of 17 cases among the best 10 and 5 countries). As for Southern and Eastern Europe, Tunisia has become the most important country for RMC location (appearing among the top 5 locations in 14 out of 16 cases), with France disappearing from the top 5 countries. This might be explained by the fact that some countries in Southern and Eastern Europe are to some extant similar to those of the Maghreb sub-region (for instance, Albania, Serbia or Hungary) in terms of political and economic development, as well as culture. This similarity makes Tunisia seem to be a logical location as, to some extent, it smoothens the differences and allows RMCs located there to perform their bridging function better.

Table 4.13. Optimal RMC locations for distance minimization from Europe to Maghreb

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From cour	ntries of Western Europe to Magl	areb sub-region
Tunisia	8/9	7.32
France	8/9	7.35
Czech Republic	4/9	7.28
Spain	4/9	7.77
Italy	3/9	7.77
From cour	tries of Northern Europe to Mag	hreb sub-region
France	8/8	9.44
Tunisia	6/8	7.67
Czech Republic	4/8	8.41
Estonia	3/8	7.85
Denmark	3/8	11.16

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From coun	tries of Southern Europe to Mag	hreb sub-region
Tunisia	8/8	5.77
Bulgaria	4/8	6.50
Croatia	3/8	5.98
Spain	3/8	6.45
Algeria	3/8	6.58
From cou	ntries of Eastern Europe to Magh	reb sub-region
Tunisia	6/8	6.00
Croatia	4/8	6.97
Hungary	3/8	5.97
Bulgaria	3/8	6.67
Turkey	3/8	7.00

In the opposite direction (Table 4.14), Tunisia was a clear leader for all four Maghreb countries, with a mean distance of 7.64. However, if we do not include Libya in the Maghreb region, France becomes the outstanding leader, the distance shortening by more than 1 point in both cases: from Maghreb to Western Europe and from Maghreb to Northern Europe. It is important for companies from Tunisia, Algeria and Morocco to take this into account, as France for them seems to be a better location for RMCs that administer activities in Western and Northern European countries. In the cases of Eastern and Southern European countries, Tunisia is the indispensable leader in both directions: from Eastern or Southern Europe to Maghreb and from Maghreb to Eastern or Southern Europe, being almost 1 point ahead of its rival in second place in all four cases.

Table 4.14. Optimal RMC locations for distance minimization from Maghreb to Europe

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From countries of Maghreb to Western European sub-region		
Tunisia	4/4	7.58
Italy	4/4	8.27
Czech Republic	4/4	8.57
France	3/4 (except Libya)	6.48
Algeria	2/4	8.56

List of the best	Number of coincidences of the	Mean distance between	
RMC locations	same RMC location in the top	the country in the region	
	5 of the best locations	of origin + RMC location	
		+ the region of destination	
From co	ountries of Maghreb to Northern Euro	opean sub-region	
Tunisia	4/4	8.30	
Czech Republic	4/4	9.16	
France	3/4 (except Libya)	7.82	
Latvia	2/4	7.68	
Italy	2/4	8.15	
From	From countries of Maghreb to Eastern European sub-region		
Tunisia	4/4	6.49	
Bulgaria	3/4	7.13	
Algeria	3/4	7.34	
Hungary	2/4	6.13	
Croatia	2/4	6.68	
From co	From countries of Maghreb to Southern European sub-region		
Tunisia	4/4	6.09	
Croatia	3/4	6.46	
Algeria	3/4	6.70	
Bulgaria	3/4	7.57	
Morocco	2/4	6.18	

Thus, we can conclude that when dealing with the Europe – Maghreb scenario, it is important to differentiate between Western and Northern Europe on the one hand, and Eastern and Southern Europe on the other. In the former case, the use of France as a country for RMC location is recommended, but in the latter Tunisia seems to be a more appropriate location. The results also show that although the institutional scenarios of Europe – Maghreb are substantially different from those of Europe – Latin America, the computed weights for each of the psychic distance dimensions can be applied to these regions, as they can be used to obtain quite convincing and congruent results.

4.4.2.4. Optimal RMC locations for distance minimization between Europe and Middle East

We further explored the institutional scenarios of the Middle East subregion and its interaction with Europe. In the Europe – Middle East scenario, the prominent leaders were Turkey and Lebanon, both showing very similar results (Table 4.15).

Table 4.15. Optimal RMC locations for distance minimization from Europe to Middle East

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From countries	of Western Europe to Middle	
Lebanon	8/9	11.89
Turkey	8/9	12.26
Tunisia	8/9	12.40
Algeria	6/9	12.75
Czech Republic	4/9	14.89
From countries	of Northern Europe to Middle	East sub-region
Turkey	6/8	11.09
Lebanon	6/8	11.52
Georgia	6/8	11.12
Estonia	5/8	14.78
Jordan	4/8	11.60
From countries	of Southern Europe to Middle	East sub-region
Lebanon	8/8	9.41
Turkey	7/8	9.04
Jordan	6/8	9.80
Tunisia	4/8	11.16
Romania	3/8	10.54
From countries of Eastern Europe to Middle East sub-region		
Turkey	8/9	8.68
Lebanon	7/9	9.02
Romania	5/9	9.09
Jordan	4/9	9.53
Iraq	3/9	10.39

These locations seem plausible, as both countries have strong ties with the European region. However, the recent political crisis in Turkey, due to Erdogan's interior and exterior politics, and the 2018 unrests in Tunisia over issues related with tax and the cost of living, mean there may be some doubt about both of these countries' capacity to serve as perfect locations for the RMC units of European MNCs. In the opposite direction – from the Middle East to the European region, no strong leader can be discerned, which may be related to strong dissimilarities between the countries in this region. Indeed, the likes of Iran, Iraq, Israel, Saudi Arabia and Qatar, among others, are characterised by major political and social heterogeneity, and any attempt to coordinate a company's activities in all these countries from a single unit might lead to negative results.

4.4.2.5. Optimal RMC locations for distance minimization from Western, Northern and Southern Europe, to Eastern Europe

Finally, we applied the weights to the scenarios within Europe: from Western, Northern and Southern European countries to Eastern Europe (Table 4.16). In the case of Western Europe – Eastern Europe, the best RMC location appears to be the Czech Republic. This country occupies an outstanding position, covering the majority of countries in both directions and having the minimum mean distance in these scenarios. As for the Northern European countries, an alternative to the Czech Republic might be Estonia, a country that has had close institutional relationships with the Eastern European region, but at the same time is culturally and economically very close to the Nordic countries. In the case of Southern Europe – Eastern Europe, Croatia appears to be a good location for RMC. This country has already appeared as an RMC location in earlier results of this study and seems to warrant greater attention from researchers.

Table 4.16. Optimal RMC locations for distance minimization from Europe to Eastern Europe

List of the best RMC locations	Number of coincidences of the same RMC location in the top 10 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From countries of	Western Europe to Eastern Eu	uropean sub-region
Czech Republic	9/9	6.30
Italy	5/9	6.38
Slovenia	4/9	6.17
France	4/9	6.36
Austria	3/9	5.14
From countries of	Northern Europe to Eastern E	uropean sub-region
Czech Republic	7/8	7.34
Estonia	6/8	7.70
Latvia	5/8	5.68
Finland	4/8	8.64
Germany	4/8	9.42
From countries of	Southern Europe to Eastern E	uropean sub-region
Croatia	7/8	5.04
Slovenia	6/8	5.55
Bulgaria	4/8	5.26

List of the best RMC locations	Number of coincidences of the same RMC location in the top 10 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
Czech Republic	4/8	6.15
Hungary	3/8	4.79

4.4.2.6. Optimal RMC locations for distance minimization between Europe and Asia

Interestingly, the computed weights applied to the institutional scenarios of Europe – Asia did not produce any congruent results, as can be seen in Table 4.17. In particular, we have not detected any particular country that persistently appears in the top results for the location of an RMC between the countries of Europe and the Asian region. Moreover, such countries as Singapore and Hong Kong, vastly cited in the IB literature as the most popular locations for RMCs to coordinate the activities of European MNCs in Asia, barely appeared in in the top 5 locations for any of the trajectories. The possible explanation might be the incongruence of the Asian region itself. The countries included in the sub-regions of this geographic area are so diverse that analysing them as a single unit gives very little idea of the true nature of the region, so there is a clear need to approach these institutional scenarios separately.

Table 4.17. Optimal RMC locations for distance minimization from Europe to Asia

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
From countries	of Western Europe to Eastern and So	
Austria	3/9	11.44
Tunisia	3/9	12.25
Germany	3/9	13.66
Belgium	3/9	14.09
Estonia	3/9	15.25
From countries of Northern Europe to Eastern and South-Eastern Asian region		
Latvia	5/8	10.90
Estonia	5/8	11.02
Georgia	5/8	12.66

List of the best RMC locations	Number of coincidences of the same RMC location in the top 5 of the best locations	Mean distance between the country in the region of origin + RMC location + the region of destination
Finland	4/8	14.11
South Korea	4/8	14.24

4.5. Discussion and conclusions

The IB literature shows that strategically located RMCs can increase the internationalisation processes and of facilitate coordination of geographically dispersed activities. However, the optimal location of these RMCs has yet to be fully elucidated. In particular, scholars direct their research interest towards the importance of non-spatial psychic distance for locating RMCs, pointing out that the choice of location must be determined by the optimisation of psychic distance between the parent home country and the target region. Even fewer studies have suggested where these locations might be. The issue is further obscured by the multidimensionality of the psychic distance construct, with virtually no studies making it clear which dimensions should be included in the psychic distance composite index. Following the publication of the seminal paper by Kogut and Singh (1988) that created a composite index of Hofstede's four cultural dimensions (Hofstede, 1980), much IB research has related psychic distance with cultural distance, which was supported by Kogut and Singh's claim that "cultural distance is, in most respects, similar to the "psychic distance" used by the Uppsala School" (Kogut & Singh, 1988, p.430). For many years, The Kogut and Singh index was "the paradigmatic operationalisation" of psychic distance in IB research (Hakanson & Ambos, 2010:197). Recently, however, IB researchers have broadened psychic distance beyond Hofstede's cultural dimensions to include political, economic, demographic, language and other dimensions (Berry et al. 2010; Dow & Karunaratna, 2006). On top of that, there is strong criticism of the calculation of the psychic distance composite index as an unweighted average of various dimensions. This study is an attempt to address the abovementioned issues, and thus contribute to our understanding of the psychic distance phenomenon and its importance for optimal RMC location.

In the present research we have employed methodological techniques that have not previously been used for this purpose. Specifically, we applied the evolutionary computation algorithm to the calculation of weights for each of the psychic distance dimensions, in order to work out the optimal location for RMCs that minimise psychic distance between the parent company's home country and local subsidiaries within a particular region. We used so-called springboard subsidiaries as a type of RMC unit located in the intermediate psychic vicinity between their parent company and an administered target region that are capable of reducing psychic distance. A set of specific countries for the location of springboards acknowledged in the IB literature was used in the battery of fitness tests to give each of the distance dimensions a weight that would rank the identified RMC locations in their corresponding position. As a result, the study prompts several findings.

To begin with, we created an RMC location optimisation model that includes ten dimensions of psychic distance (political, demographic, economic, education, language, religion, culture, colonial ties, trade ties and geographic) that are all of relative importance when locating RMCs. Interestingly, all ten dimensions obtained weights different from 0, which means that they are all relevant to a certain degree for finding the optimal RMC location.

Furthermore, the different weightings of dimensions suggest the prevalence of the importance of formal country characteristics, such as political and economic development, and former colonial and trade ties over other dimensions. The nature of RMCs as mainly administrative centres might contribute to such results, as political and economic proximity of the country to both the parent company's home country and the target region can prevail in the choice of their location. On the contrary, such informal factors as culture, which affects managerial behaviours, and shared language and religion, which define communication characteristics, are of less importance for the location of RMCs. This might be prompted by the prevalence of a lingua franca (like English) over the shared local languages, which has previously been identified in the IB literature as more influential and meaningful for IB management. This result goes against the findings of some IB scholars who insist on the prevalence of informal barriers, related to individual managers' behaviours, culture, and communication, in the international activities of firms (see, e.g. Abdi & Aulakh, 2012; Dyer, 1996; Nielsen & Nielsen, 2013; Xin & Pearce, 1996). In particular, despite the important entrepreneurial function of RMCs for opening new distant markets

(Caicedo-Marulanda et al., 2017), their basic activities are centred on administering and controlling target region affiliates, and therefore formal "rules of the game" (North, 1990) might indeed be more decisive to successfully fulfil this responsibility. Moreover, the findings on springboard subsidiaries suggest that RMCs delegate a high level of autonomy to local affiliates in the target region (Pla-Barber et al., 2018), which means that these units pass the role of local responsiveness on a country level to their subordinate affiliates, and instead serve the function of integrating the regional activities. In other words, their function of local responsiveness becomes regional rather than local, and the prioritisation of formal barriers and institutions helps them to see the bigger picture on a regional scale. Further studies should look in greater depth at this idea and find empirical evidence for the prevalence of formal factors over informal ones regarding psychic distance constructs.

Additionally, the RMC location optimisation model has helped to identify some countries in distinct institutional regions that minimise psychic distance when locating RMCs. Spain has been identified as the indisputable leader in the scenarios of Europe – South America and Europe – Central America, occupying the top position in the directions from and to Europe in both directions. As we have mentioned above, only 10 cases in these scenarios were included in the battery of fitness tests, but the calculations with the obtained weights produced the same result in 111 different trajectories. This suggests that despite intra-regional conflicts and differences in both, Europe and Latin America are largely homogeneous and well-integrated from the viewpoint of business activities, with very few exceptions. The same can be said of the institutional scenarios of Europe – Maghreb, where the top positions have been taken by France and Tunisia. Another interesting finding is the recurrence of Croatia among the top RMC locations between the regions of Southern and Eastern Europe. These findings could be useful for MNC managers that operate in these areas and are looking to integrate their activities in these regions in a more effective way. They also prompt IB scholars to investigate the effectiveness of RMC units located in these countries, their capabilities, and the impact they have on the cross-national activities of their MNCs.

4.5.1. Contributions and implications

The study makes several contributions to the IB literature. First, according to our knowledge, this study is the first attempt to apply differential evolution algorithm to the IB field. It shows that the application of machine learning to social sciences can give some interesting insights on issues that cannot be calculated or evaluated by more traditional in social sciences techniques. In particular, the capacity of evolutionary computation to solve a problems requiring complex solutions that are difficult for humans to devise (Davis et al., 2012) has demonstrated its remarkable usefulness to the identification of the weights for each psychic distance dimension, and find out the optimal location for RMCs. We strongly believe that the IB research can benefit from the use of the evolutionary computation for solving complex computational problems that have long been unresolved, and invite more IB scholars to engage with this new methodology.

Second, we have proposed a model of RMC location optimization from the viewpoint of multi-dimensional psychic distance construct. This model includes 10 various dimensions, all of which have confirmed to be inherent for the RMC optimal location and the function that this intermediate level unit performs. In particular, RMCs are control centres over specific extant regions that serve as bridges between the parent company and regional affiliates. For them it is important to fulfil some entrepreneurial tasks as regional expansion, and at the same time some administrative tasks as control and oversight of the regional activities. Moreover, they serve as messengers that convey the information from the head office and align the regional objectives with the strategic objectives of the MNC globally. All that results in a whole bouquet of diverse and sometimes contradicting missions (local responsiveness vs global integration) performed by a single organizational unit, which complicates the choice of its location and demands for a sophisticated tool that could help optimize its venue. We believe that the RMC location optimization model is one of such tools, which prompts an important contribution to the IB literature.

Third, this study contributes to the scarce research on the differential importance of each of psychic distance dimensions and proposes weights through machine learning independently of the individual managerial perception and thus, preserving the stimuli's stable and objective nature. We believe that such an approach is the most suitable to treat country-level

psychic distance dimensions, as they may not be weighted by the individual perception of firm managers. Therefore, the proposed weights can be applied in further research when calculating the composite index of psychic distance stimuli in order to assess better the impact of psychic distance on crossnational activities.

Finally, the study sheds critical light on the approach to grouping countries into regions. Specifically, in some cases, as Middle East or Central America, there were detected quite substantial differences intra-regionally, which prompts scepticism to the traditional regionalization criterion of geographic or even linguistic proximity. Thus, grouping countries into Central American region just due to their immediate geographic proximity, or identifying Middle East as a region, following the two criteria (language and proximity) seems to be deeply equivocal, as it does not reflect the whole reality that the countries in these regions experience. Moreover, the results obtained in the trajectory of Europe – Asia show the limitation of the computed weights when applying to very different institutional settings, and a strong necessity to compute weights for each of the psychic distance dimensions individually for these geographic areas.

Although the study has been designed to make academic contribution to the existing IB literature, its managerial implication is also substantial. Handling regional integration of MNC represents a great challenge for the parent company and the RMC unit. In this sense, the study can hint the MNC managers to take into account the importance of each of the weights, lose fear towards the linguistic differences, and pay more attention to the political and economic development, deeply explore business opportunities in countries with which the home country has former colonial ties, as well as take into account trade ties as more important than informal barriers, such as culture and communication style. In fact, to disseminate these results and facilitate the access of the optimization model, we have started the development of a webpage that allows managers to choose a country of origin and a sub-region of destination according to the ten psychic distance dimensions. It also allows choosing those dimensions that are understood as the most important by managers, thus introducing the component of the subjective perception of psychic distance. This is aligned with the IB literature that poses that only the combination of the stable impartial dimensions of psychic distance or stimuli along with the individual perception of MNC managers can give

sound ground to a strategy of international expansion (see e.g., Dow and Karunaratna, 2006)

4.5.2. Limitations and future research lines

The following limitations of this research should be acknowledged.

In this study we propose a model that addresses the issue of RMC location optimization exclusively from the viewpoint of psychic distance. Although this factor is one of the most influential for the IB, we are aware that this model has limitations and needs to be extended to other issues not related to psychic distance, such as subsidiary-specific own competencies and specific managerial skills. These issues are out of the scope of this study, but we believe that the future research that would include these factors into the RMC location optimization model will give more accurate results.

On a methodological level, there are several limitations that should be considered. First, when computing a composite index of weighted psychic distance dimensions and searching an optimal RMC location, all the missing variables were substituted by the corresponding means. This might have distorted the computation results, especially in regions with a considerable number of missing variables. Therefore, the necessity of more accurate data and sophisticated methods of treating missing variables is urgent. Second, for the reasons of analytical manageability we have incorporated culture distance using the aggregate method of Kogut and Singh (1988), which attributes the same weight to the four Hofstede's dimensions. While we are confident that the overall weight for the composite index partially accommodates to the heterogeneity among the dimensions, further studies may search for finer grained insights by weighting each cultural dimension on its own. Third, some variables that might be useful to perfect the computation results are not included in the study. For instance, including the level of the English language, as a lingua franca for IB practitioners, also seems adequate. Further studies that include this variable can explore the effect of the English language on the optimization of RMC location. Finally, the study has shown that despite the generalizability of the computed weights in the settings discussed above, there are considerable limitations when applying these weights to dissimilar inter-regional trajectories. Thus, for instance, it was not possible to establish an optimal RMC location in the settings of Europe –

Asia. Moreover, the factor related to current peace / war situation must be considered, and probably the same region must be divided into sub-regions with peaceful and unrest status, as in the case of Middle East. Not including this status might give objectively suitable results from the viewpoint of theory, but in practice these results might not reflect the reality.

Overall, we believe that this study has done a modest but important step in what might become a trend in the IB literature, which is the application of the machine learning for the understanding of the impact of psychic distance on internationalization processes. The evolutionary computation technique can become a methodological tool so much sought by the psychic distance researchers for decades, as it contains the element of stability and impartiality of psychic distance that is missing in a great portion of the academic studies.

4.6. References

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Chapter 5.

Thesis conclusions

5.1. Main findings of this dissertation

The origin of this dissertation is in the observation of the growing interest of the academic community in the regional configuration of MNCs, the main factors that contribute to RMC role development and the role of psychic distance in the regional configurations of MNCs.

The aim of this research has been to advance the understanding of RMC units, especially springboard subsidiaries, by identifying factors that contribute to the development of an ordinary subsidiary into a springboard, scrutinizing its impact on psychic distance between a corporate home country and a target region, and finding the optimal location for RMCs from the perspective of psychic distance. Table 5.1. illustrates how the objectives put forth in the introduction have been addressed and summarizes the main findings of each of the research endeavours undertaken in this thesis.

Table 5.1. Initial objectives and how they have been responded

Objectives

Findings

Chapter 2: The nascence of a springboard subsidiary: drivers of a subsidiary's role development

1. Explore the antecedents of the evolution of an ordinary subsidiary into the intermediate organizational unit of a springboard.

The delegation of the RMC role of springboard to an ordinary subsidiary seems to be beyond the MNC's initial strategic intent, and is the result of a specific set of interrelated factors and events that create necessary conditions for a subsidiary to become a springboard. Thus, it is an emergent strategy rather than a deliberate one.

1.1. Evaluate drivers related to the external environment.

Springboard role evolution depends on a confluence of two factors related to the external environment that pushes its management to look for new opportunities: favourable economic change in the target region, and unfavourable economic change in the springboard subsidiary's home market, thus making these subsidiaries somewhat unique.

1.2. Analyse subsidiary specific advantages that lead to subsidiary role evolution

HQ must find itself highly dependent on location-specific resources available to a certain subsidiary to delegate it the role of springboard, due to their tacitness and the difficulty of copying or transfering, which distinguishes these RMCs from the rest of their peers.

1.3. Scrutinize the role of micropolitical negotiation processes between a subsidiary and its parent company Active initiative taking and issue selling are crucial for a subsidiary to win a springboard role, but the delegation of a springboard role is only possible when both, factors play in the subsidiary's favour simultaneously

Chapter 3: Reducing psychic distance through springboard subsidiaries: an exploratory case study

Objectives

Findings

 Explore how springboard subsidiaries as RMCs affect psychic distance between their parent company and the target region affiliates. Using springboard subsidiaries as RMCs reduces the overall psychic distance between a parent company and target region affiliates, and as a consequence, contributes to a better understanding of the MNCs strategic goals in the target region and helps these units balance the interests of HQs with the necessities of local affiliates.

2.1. Analyse the impact of the intermediate position in terms of the psychic distance of these RMCs on the overall psychic distance between a parent home company and target regional affiliates

The intermediate proximity of a springboard subsidiary to the parent home country and the target region affiliates smooths the differences and shortens psychic distance.

2.2. Analyse the impact of their out-of-the-region location on their capacity to manage psychically distant regions

The location of a springboard subsidiary outside the target region puts it into a position of impartiality and un-involvement in intra-regional conflicts, often found in the neighbouring countries, which contributes to its capacity to manage the region more successfully.

Chapter 4: Optimizing Regional Management Centre locations from a psychic distance perspective: an evolutionary computation approach

3. Find an optimal location for RMCs from the perspective of psychic distance

RMC location depends on the analysed geographic settings, making Spain the leading country between Europe and Latin America (far beyond those already analysed in the IB literature cases); France and Tunisia between Europe and Maghreb; and Croatia between Southern Europe and the rest of the European countries.

3.1. Propose an RMC location optimization model that includes ten psychic distance dimensions

The RMC location optimization model includes ten psychic distance dimensions, none of which has obtained the weight of zero, which means that all the included dimensions are important for an RMC

Objectives	Findings
	location to a certain degree. The dimensions are political, economic, education, demographic, culture, language, religion, colonial and trade ties, and geographic distance.
3.2. Compute weights for each of the dimensions of psychic distance in the model that optimise the overall distance	The computed weights show that the importance of formal country characteristics, such as political and economic development, former colonial links and present trade ties prevail over other dimensions related to informal country characteristics (culture, language, religion), which might be due to specific administrative tasks of RMCs.
3.3. Apply the computed weights to different trajectories of international expansion of hypothetical MNCs to find the optimal RMC location where the psychic distance between the parent company and target region affiliates is minimized	The computed weights have shown their relevance for very diverse geographic settings, but have also shown some limitations. First, their application in some locations has shown that the results are remarkably different for countries located in the same region, which prompts an inadequate regionalization criterion that is commonly based on geographic proximity, or shared language. Moreover, geographic settings of Asia require further investigation because the application of computed weights has not revealed congruent results.

Below we summarize the main conclusions of each chapter.

5.1.1. Chapter 2 summary and conclusions

The objective of Chapter 2 was to explore the drivers that boost the development of a subsidiary's strategic role from an ordinary one to an RMC type of springboard within an MNC. The results reveal that the development of a springboard subsidiary role is a confluence of the following factors: (1)

simultaneous positive change in a target region of expansion and negative change in a subsidiary's home country that pushes its management to look for new opportunities; (2) location-specific advantages of a subsidiary that allow the development of unique subsidiary-specific capabilities; and (3) micro-political HQ-subsidiary negotiation processes as a result of a subsidiary's management strong initiative taking, peculiarities of a MNC structure, and strong dependency of HQ on resources available to the subsidiary.

The study contributes to the IB literature, proposing that the delegation of a role of springboard is not an intended top-down strategy formulated by the HQ, but rather an emergent one, provoked by an ensemble of factors, some of which are within the reach of a subsidiary's management influence, and some out of its reach.

The implications for managers are twofold. First, HQ management should reconsider its hegemony within the MNC and humbly recognize the entrepreneurial capabilities and available location-specific resources of their geographically dispersed subsidiaries, giving them more autonomy and delegating them strategically important roles. Second, if a subsidiary's management decides to advance its strategic role within the MNC, it should exploit their locations-specific advantages that sometimes are outside their specific country or region and convince HQ of their indispensability for pursuing new market opportunities.

The study employs the qualitative methodology of a case study, which is appropriate for the research objective set forth, but it limits the generalizability of its results. Therefore, future research should confirm the framework set forward in this thesis in quantitative studies with a larger sample of MNCs. Quantitative multi-level analysis that involves responses from HQ and the subsidiary's management is of special interest for further investigation.

5.1.2. Chapter 3 summary and conclusions

The objective of Chapter 3 was to explore how springboard subsidiaries affect psychic distance between the parent company and the target region affiliates. The findings suggest that the usage of springboard subsidiaries as RMCs results in a reduction of psychic distance between the parent company

and target region affiliates due to (1) their intermediate psychic proximity to both the parent home country and the target region; and (2) their location outside the target region, which makes them uninvolved in intra-regional conflicts that often take place in neighbouring countries.

The study contributes to the understanding of psychic distance as a non-continuous distance, and proposes a conceptual model that posits: if a parent home country is point A, a springboard subsidiary is point B, and a target region is point C, the distance between a parent home country A and a target region C is bigger than the sum of distances AB (from the parent home country to a springboard subsidiary country) and BC (from the springboard subsidiary country to the target region).

The managerial implications suggest that MNCs should revise their regional configuration, looking at the integrated network of their subsidiaries as a whole, instead of dividing it into regions based on geographic proximity, because the location of an RMC outside the geographic region can actually be more beneficial and may result in the reduction of psychic distance.

The main limitation of this study is the methodological one. Although the choice of a single case study methodology is justified by the purpose of this study (the choice of a revelatory and exemplar case that allows for new theory building), there have been concerns about whether this case is unique or exemplar. The study suggests further investigation to see whether the findings can be confirmed in other geographic settings.

5.1.3. Chapter 4 summary and conclusions

The objective of Chapter 4 was to find optimal locations for RMCs that would minimize psychic distance between a corporate home country and a target region. Based on the dataset of 125 countries, with the variables taken from 12 consecutive years, the study suggests that Spain is the optimal RMC location between the European countries and the Latin American region, whereas France and Tunisia are the optimal RMC locations between Europe and the Maghreb region. The optimal location for RMCs between Southern and Eastern Europe would be Croatia, whereas Turkey would optimise the distance between Europe and Middle East. No congruent results have been found for Asian region, which hints to the limitations of the proposed model.

The research contributions of Chapter 4 are several. First, this study proposes an RMC location optimization model that includes ten psychic distance dimensions, chosen according to their relevance to RMC administrative tasks. Second, it applies evolutionary computation algorithm to compute differential weights for each of the dimensions. This endeavour has not been undertaken in the IB literature according to the best of our knowledge. Third, the applied weights suggest that the importance of formal institutions, such as political and economic development, as well as the presence of colonial links are more important than informal institutions, like culture, or even language and religion. Finally, it sheds critical light on the regionalization criteria based on geographic proximity and shared language, calling for more adequate regionalization clustering for the IB practitioners.

The managerial implications of this study suggest that MNC management should address the distance at a multidimensional level and give priority to only those dimensions that are of most relevance to the specific task put forth by the MNC or its subsidiary. Language should not be considered a barrier for the RMC location, whereas former colonial links and present trade ties are the factors which should be fully exploited by RMC management.

The study is limited in the sense, that it only considers psychic distance in the RMC location optimization model, without regarding subsidiary-specific capabilities and specific managerial skills, which limits its application. Methodological limitations are related to the treatment of missing variables (substituting them with the corresponding mean) and the use of Kogut and Singh's composite index on Hofstede's dimensions. Moreover, some current political and social hazards, such as war, political unrests, and pandemics, were not considered. Further research is required to perfect the RMC location optimization model resulting from this chapter.

5.2. Thesis contributions to the academic research

This thesis addresses three critical issues of the IB literature – subsidiary management, regional configurations of MNCs and psychic distance. Each of these issues has a crucial importance for the academic literature, since the studies on these topics are prolific, and the research implications are immense. Accordingly, IB scholars continuously review the academic contributions in these fields, so as to recap new findings and ensure that the research is heading in the right direction. In that sense, recent review papers

have raised concern about some trends in the last decades regarding these IB issues (e.g., Kostova et al., 2020; Meyer et al., 2020; Hutschenreuter et al., 2020). In the following sections we will point out some of these concerns and reflect on how the findings of this thesis address them by aiming to push the boundaries of existing knowledge in IB research.

5.2.1. Contributions to subsidiary management research

The first issue of the IB literature that this thesis addresses is the research on subsidiary management. The IB scholarship has long argued that MNC subsidiaries find themselves at the forefront of the unique challenges that MNCs face in their international activities (Rugman & Verbeke, 1992; Rugman et al., 2011). As a consequence, subsidiary management represents not only a major challenge but also provides an opportunity for MNC evolution (Meyer et al., 2020). The academic research on subsidiary management and subsidiary role evolution has been particularly fertile in recent decades and has made important progress in the understanding of MNC strategies.

In the recent review article by Meyer et al., (2020), the scholars analysed the contributions on subsidiary management and role evolution in the recent years. Their analysis of more than 600 articles on subsidiary management published in the leading academic journals reveals subsidiary role change as one of the central topics that has been discussed from the viewpoint of various theoretical perspectives, such as the Uppsala model (Johanson & Vahlne, 1977; 2009), the agency perspective (Björkman et al., 2004; Filatotchev & Wright, 2011; Kostova et al., 2016), and resource dependence perspective, among others (Hillman et al., 2009; Pfeffer & Salancik, 1978). However, they pointed out that the research on subsidiary management and its role evolution is fragmented; and only comparatively few papers focus on a subsidiary as a unit of analysis, instead viewing all MNC changes from the perspective of HQ. Moreover, the scholars have set forth the research agenda for IB scholarship, inviting the academic community to contribute to the exploration of some pertinent issues that until now have received scarce attention.

One of their concerns is surprisingly scarce research linking individual managerial activities, such as initiative taking, negotiation processes and issue-selling, to the changing of a subsidiary role. They underline that "subsidiary mandates should not be regarded as top-down imposed by HQ, but as an outcome of unique subsidiary resources and actions by individuals in the subsidiary" (Meyer et al. 2020, p.559). Nevertheless, relatively few studies investigate the activities of individual subsidiary leaders that have resulted in the change of a subsidiary mandate (Schmid et al., 2014), which is why Meyer and colleagues (2020) propose addressing this research gap with qualitative methods, that allows deep diving into the understanding of an MNC's subsidiary, and the activities of its managers that lead to the subsidiary change in scope and mandate.

In response to this call, this thesis contributes to the understanding of the role of the actions of individual subsidiary managers that affect the HQ decision to change the subsidiary role. Following the recommendations of the scholars, we applied the qualitative methodology of a multiple case study to analyse subsidiary management activities that led to the change of the subsidiary role (Chapter 2). This thesis revealed a specific situation in which the subsidiary role development into that of a springboard was a contradiction to the initial MNC strategic intent, and instead was what Mintzberg and Waters (1985) called an emergent strategy. The active initiative-taking of the subsidiaries' top management, who took advantage of the overall organizational transformation of the MNC allowed them to gain enough bargaining power in the negotiation for the enhancement of their strategic role. Delegating the role of an RMC to the Spanish subsidiaries to administer the Latin American region was initially perceived by the MNC as illogical and useless. However, the personal implications of the subsidiaries' top managers, their constant pursuit of possible loopholes in the MNC's distribution of the decision-making power, their voluntary involvement into international activities in the target region, their continuous demonstration of their subsidiary specific capabilities, and the access to some unique location-specific advantages did not leave the HQs any other option but to delegate these subsidiaries the RMC mandate. In this regard, Dörrenbächer and Gammelgaard (2006), whose framework we have used to analyse the development of a subsidiary role, pointed at the lack of studies on the shaping of an MNC's strategy in the cases where HQ is highly dependent on its subsidiary's resources. This study precisely exemplifies this situation and shows how it helps the subsidiaries to win a strategically important role.

Another concern expressed by Meyer et al., (2020) is related to the influence of the external environment on the change of a subsidiary strategic role within the MNC. In particular, the global environment in which MNCs operate is constantly changing, providing geographically dispersed subsidiaries with new challenges. One of the major challenges is the dynamics in the subsidiaries' dual environment: the one related to MNC home countries and the other linked to host countries where subsidiaries are located (Buckley et al., 2017; Witt, 2019). However, the IB research on these dual dynamic changes is still scarce and the understanding of how it impacts the change of a subsidiary role is yet to be reached (Meyer et al., 2020).

In the case of springboard subsidiaries, this issue is of an even greater concern, because these RMCs find themselves not in a dual, but a triple environment. They are influenced first, by the market conditions in the corporate home country; second, by the market conditions in the target region, whose activities they administer, and third, they are also affected by the conditions in their domestic market, which are different from those of the target region, because they are located outside of it. Furthermore, unlike their peer subsidiaries, unfavourable situations in their domestic market (such as negative business climate, economic stagnation, or a simple market saturation that limits their possibility for domestic growth) can be used as an opportunity by subsidiaries that aspire to become springboard. This was the case for the subsidiaries analysed in Chapter 2. In all the three cases scrutinised, Spanish subsidiary managers complained about limited possibilities that their domestic market was proposing them to improve their position within the MNC. They were actively looking for new opportunities outside their domestic market and found them in the growing Latin American economy. The proactive entrepreneurial attitude of these subsidiaries' managers helped to see these new opportunities coming from the outside ahead of the HQ's realization, and when the market was ready and the intraorganizational negotiations were won, they were fully prepared to take responsibility for this target region. Such confluence of environmental conditions (the subsidiary's domestic market and the positive change in the outside target region) is unique for springboard subsidiaries, so the analysis of the influence of external environment in their behaviours is of a special interest for advancing the subsidiary management research.

5.2.2. Contributions to regionalization strategy research

The second important issue of the IB literature that has been the focus of this thesis is the research on regionalization management. Regionalization strategy was first introduced in the late 70s, but it was not until the publication of Rugman and Verbeke's (2004) article on regional vs. global strategies of MNCs that triggered a prolific research on regional configuration of MNCs. In their seminal paper, the scholars criticized a common perception of both IB scholars and practitioners that MNCs should almost exclusively pursue global strategies and deploy their firm specific advantages to respond to local business opportunities. They also strengthened the concept of semi-globalization (Ghemawat, 2003), stating that MNCs differentiate their strategies and structures by regional blocks of Europe, Asia and North America, which supports the findings from previous research (see, e.g., Lasserre 1996; Yeung et al., 2001). The regionalization theory has been vastly extended since then, although scholars still point to the scarcity of research on regional structures of MNCs (Alfoldi et al., 2012; Alfoldi et al., 2017; Chakravarty et al., 2017). Hence, this dissertation is an attempt to contribute to this issue, highlighting the interest in springboard subsidiaries as an efficient RMC of the MNC regional configuration.

Until now, the debate on RMCs and their role in the decrease in transaction costs and the increase in the internationalization processes efficiency has primarily been about the traditional Regional Headquarters (RHQ) role and the more recent assignment called Regional Management Mandates (RMM).

The first unit, the RHQ, is the most commonly used RMC to manage MNC's regional structures. It consists of the establishment of an administrative centre that controls and coordinates target market affiliates within a region implementing MNC's corporate strategy there (Enright, 2005). The research on these organizational units is exhaustive (for the review, see Kahari, 2014). These units are supposed to bridge parent company with the target region through a simultaneous persecution of the interests of both parties. In particular, they are normally located within the target region, which is meant to help them understand and respond to local demands more effectively, and at the same time are strongly connected to and communicate directly with the parent company, which should result in a better understanding of global MNC's objectives. Through this, RHQs are supposed to decrease transaction costs associated with psychic distance,

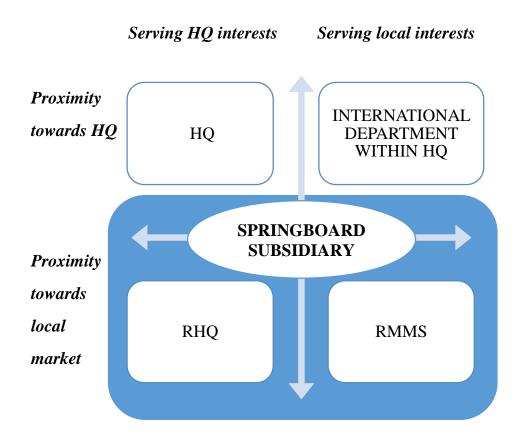
because they are in the immediate proximity towards the target region (in terms of culture, geography, economic development, etc.), but at the same time, rigidly follow the MNC's global strategy. However, in the reality, scholars have observed that in the pursuit of legitimacy from the parent company, RHQs tilt to satisfying its interests and often neglect the needs of target market affiliates, which converts them into watchdogs of the HQ in the target region. This helps boost centralized decision making, and therefore global integration of an MNC, but to some extent misses out local responsiveness. This raises a big paradox for the MNC regional approach, since the use of RHQs does not always address efficiently the issue of balancing global integration and local responsiveness. On top of that, strong psychic distance between parent company and the RHQ can create some misunderstanding due to differences in communication style, economic development and administrative issues, which might increase the transaction costs associated with psychic distance even more.

Moreover, extant literature has detected the appearance of other type of RMC in between RHQ and local affiliates. The incipient studies referred to them as sub-regional HQs (Li et al., 2010), but they were later conceptualized as Regional Management Mandates (RMM) in the study of Alfoldi et al. (2012). These assignments are described as short-term solutions, oriented to solve a specific task, of delegating to an already existing operating subsidiary a limited management mandate and act as local implementers, not necessarily formalized in contracts (Alfoldi et al., 2012; Schotter et al., 2017). RMMs are not intended to reduce transaction costs associated with psychic distance, nor balance global integration and local responsiveness; rather their use is intended to help RHQs cope with these issues better. In particular, RMMs' main objective is to help pursue local opportunities to its subordinate affiliates and therefore to respond better to local needs, taking into account global MNC's objectives. Thus, in combination with RHQ, the balance of global integration and local responsiveness is supposed to be achieved. Such strategy of using both RHQ and RMMs was proposed by Chakravarty et al. (2017) for the MNCs that follow a transnational strategy, in order to pursue both pressures, responsiveness and integration, simultaneously and equally urgent. However, this kind of RMCs face even deeper problems. First, they often lack legitimacy in the eyes of their subordinate affiliates, and therefore are not recognized as superior organizational units (Alfoldi et al., 2012). Second, their introduction as one more intermediary in the pyramid of parent

company – RHQ – target regional affiliates makes it even more confusing to recognize the locus of the decision making (Alfoldi et al., 2017). Finally, the nature of RMMs as a short-term solution for specific tasks can have a negative long-term impact on RMM managers. Although the scholars pointed to the temporary nature of these units (Alfoldi et al., 2017), they did not go into further details on its long-term effect, but some studies did notice their lower performance, lower R&D density and less resources from a parent company, in comparison with more stable RHQs (Chakravarty et al., 2017).

In contrast with the problems associated with the use of RHQs and RMMs in the MNC regional configuration, springboard subsidiaries may in some way solve them (see Figure 5.1.). What defines springboard location is not the geographic proximity towards the target region, but their intermediate psychic proximity towards both the HQ and the target region. Their shortening effect on psychic distance, demonstrated in Chapter 3, has shown to be particularly beneficial for MNC's remote activities, which adds a unique value to this particular type of RMC. Based on these findings, the thesis postulates that the perspective of psychic distance is indigenous for the academic discussion on regional configuration of MNCs, and above all, the RMC locations. This contribution is expected to ignite further debate on the integration of two important IB topics – regionalization and psychic distance, and its managerial implications. Figure 5.1 illustrates the place of springboard subsidiary in the debate of RMCs (a debate around the units located in the blue shaded zone).

Figure 5.1. The place of a springboard subsidiary in the debate on Regional Management Centres



Moreover, since springboard subsidiaries are located outside the administered region, it can solve another classical MNC's dilemma, the one related to subsidiaries' centralization vs. autonomy: high control over subsidiaries ensures global integration, while giving autonomy to subsidiaries enables them to pursue locally engrained opportunities. For HQ management it is reasonable to expect that RMCs act in the interests of the corporate office, but then, how can MNCs expect to tap into the local resources that have proven to contribute to the corporate innovation capability? In this sense, giving autonomy to these RMCs that administer local affiliates to explore and exploit local opportunities is of the greatest importance. But then, how can an MNC protect itself from the agency behaviours of these RMCs, which can use their position in their own purposes postponing the interests of the parent company? The answer to this dilemma

may be solved using springboard subsidiaries. Their location outside the target region, their consequent impartiality, their double psychic proximity rather than geographic, towards the HQ and the target region, make it a perfect RMC between the HQ and the local affiliates. They have no interest to act against the welfare of the MNC; quite the opposite, they should continuously demonstrate the added value of administering the target region from their position in order to keep their intermediary role. In this sense, this thesis has shown that administering a target region from the outside was originally perceived as pointless by HQ management, which is why springboard subsidiaries would not be in the initial strategic intent of the MNC.

Finally, this study contributes to the debate on what we call a region itself. The findings of this thesis indicate some strong intra-regional differences that make the inclusion of a set of certain countries into the same region inconsistent. Traditionally, the grouping of countries into regions is based on the criterion of their geographic proximity, or, at very best, the shared language and similar culture. However, as shown in this thesis, geographic distance should be viewed as of a secondary importance. Instead, psychic distance should come into spotlight of both the IB research and practitioners. Likewise, the issue of language should decrease its centrality, because what matters is the command of English as the lingua franca of the IB community (Hejazi & Ma, 2011; Kankaanranta & Lu, 2013; Yao & Du-Babcock; 2020).

5.2.3. Contributions to the research on psychic distance

The third, and last important issue that this thesis contributes to is the research on psychic distance. This metaphoric concept (Ambos & Hakanson, 2014) has been central in the IB literature for decades and its importance has been underlined overwhelmingly by IB scholars (e.g., Beugelsdijk et al., 2018; Hutzchenreuter et al., 2016; Kostova et al., 2020). Considering that cross-border activities are an inherent characteristic to MNCs, some scholars have even concluded that "essentially, international management *is* the management of distance" (Zaheer et al., 2012:19). Its centrality is explained by the fact that distance between countries, in terms of geography, culture, language, economic development, and other dimensions has a critical impact on such aspects as country and entry mode choice (Harzing, 2004),

negotiation tactics (Rao & Schmidt, 1998), knowledge transfer practices (Simonin, 1999; Minbaeva et al., 2003), among others. Despite remarkable advancements since Beckerman (1956) coined the term and the Uppsala School consolidated the concept (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975), some scholars increasingly raise concerns whether the academic research on psychic distance is on the right track (Hutzschenreuter et al., 2016; Kostova et al., 2020; Shenkar 2012; Zaheer et al., 2012). Indeed, Kostova and colleagues (2020) have recently published a review article in the *Journal of International Business Studies* where they express major concerns about the present research on distance and set up agenda for future research. In the following paragraphs we will attempt to explain how the findings of this thesis address some of these concerns.

To begin with, they express their concern about a simplistic view on the impact of distance affecting all phenomena of cross-border nature in a similar and negative way (Kostova et al., 2020). Specifically, there is a general assumption that differences between a foreign environment and a corporate home country always cause expected and actual uncertainties and difficulties of doing business (Hakanson & Ambos, 2010). These difficulties translate into higher transaction costs (Buckley & Casson, 1976), associated with coordination, integration, and monitoring of the cross-border activities (Tan & Mahoney, 2006). This is especially detrimental for management of complex geographically dispersed MNCs that manage their remote activities through RMCs (Hutzschenreuter & Voll, 2008). Accordingly, Chapter 4 of this dissertation proposes a model to find out the optimal location of the RMCs that minimizes distance between the parent country and the target region. The challenge is to find these ideal locations, and the RMC location optimization model can help in this endeavour.

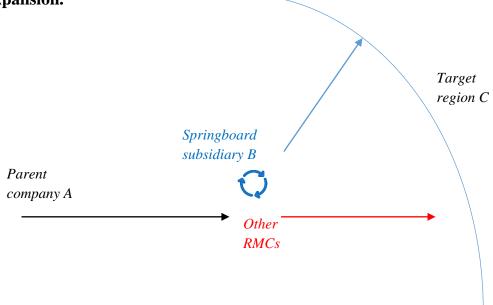
Moreover, Kostova and colleagues (2020) are concerned that some papers that treat distance as a multidimensional index, fail to develop arguments for the differential effects of its dimensions, assuming a generic effect of distance. They call for a more disciplined approach to the phenomenon of distance, underlining a necessity of a careful choice of theoretical arguments that are appropriate for each unique case under study and particular research questions asked. Accordingly, the research and results obtained in Chapter 4, are totally aligned with this line of thinking. We first selected a series of psychic distance dimensions, having in mind particular responsibilities of

RMCs. The importance of each dimension has been determined objectively by the differential evolution algorithm, rather than scholars or managerial subjective perception. Through the application of differential evolution, we have computed weights for each and every psychic distance dimension separately, showing their differential importance for the RMC location. The weights proposed in this study seem correct when applied to RMCs, but we also believe that they are not universal, and might change depending on the type of organization unit or even the research question put forth. Thus, this technique can be applied for other purposes of psychic distance research, far beyond the RMC location optimization. So, the application of this technique (which, to the best of our knowledge has not been done before) is in itself a methodological contribution. The IB scholars have long searched a methodological approach that would allow to treat psychic distance as an impartial, objective and rather stable construct, but traditional methods in social sciences limited the possibility to achieve this objective valuation of psychic distance. We believe that this thesis might have opened a new methodological opportunity and should be further explored by the IB community.

Finally, the present dissertation adds to a deeper understanding of psychic distance as a distinct phenomenon to geographic distance. One of the features that differentiates psychic from geographic distance, is its non-continuity due to the border effects on it (Beugelsdijk & Mudambi, 2013). In chapter 3 we propose exactly this: the distance between a parent home country A and a target region C is bigger than the sum of distances AB (from parent home country to a springboard subsidiary country) and BC (from springboard subsidiary country to the target region). This evidence supports the suggestion that psychic distance should be treated differently from geographic distance phenomenon, with its own characteristics and "laws". In this sense, some IB scholars have already postulated that psychic distance is not really a distance, but rather a friction that obstructs and slows down internationalization (Shenkar et al., 2008). Specifically, they insinuated the fact that psychic distance has properties found in mechanics, comparing its effect on internationalization with resistance (Shenkar et al., 2008). If we extend this metaphor and apply it to the findings from chapter 3 and 4, we might come to an understanding of why springboard subsidiaries have this peculiar impact on psychic distance. The opposite effect of friction on a moving object is that of acceleration. What can accelerate the speed of this

moving object is the change of its direction, which is also well known in mechanics (Eyert, 1996). Thus, the acceleration of the internationalization between a parent company's home country and a target region can be achieved by changing the direction of the internationalization path. Instead of following a straight line forward, a change in the trajectory will allow to reach the target region faster (Figure 5.2.).

Figure 5.2. The effect of springboard subsidiaries on the MNC expansion.



In this sense, springboard subsidiaries located in a strategically chosen third country, might do exactly this – change the direction of internationalization and cause its acceleration in comparison to other RMCs. (Figure 5.3.)

Internationalization

Expansion through Springboard subsidiary

Expansion through other RMCs

Time

Figure 5.3. Comparison of the expansion through springboard subsidiaries and other RMCs.

5.3. Managerial implications

The concepts discussed in this dissertation with the objective to advance academic knowledge on MNCs are not abstract theoretical notions, but real issues that are present in the daily practices of MNC managers. They face internal and external challenges, and it is their mission and hardship to look for effective ways to manage MNC activities globally. Thus, what advice can they take away from this dissertation? What are the managerial implications of our findings?

From the corporate management perspective, the MNC strategy makers should strengthen the idea of their company as an interconnected structure, where different parts respond for different tasks, but together they form a wholesome organism, where each part's contribution is equally important. However, some corporate executives tend to avoid the inclusion of its geographically dispersed affiliates into the decision-making and strategy-formulation processes. They fear possible agency-driven behaviours, instead of trusting their local stewards and benefiting from the diversity of the resources and capabilities available to them through their subsidiaries. The findings of this thesis illustrate that when autonomy is granted, subsidiaries can bring unique value to their MNCs, and this value can be thoroughly exploited.

Additionally, the MNC top management have to stop slicing its geographically dispersed operations on predetermined static regions, but rather open their mind, looking beyond and across borders to see whether the regional configuration could be tuned up better. In this regard, the lessons from springboard subsidiaries located outside the administered region can be of a special value. Their outside position benefits their relationships with the regional affiliates, because they are not involved in intra-regional conflicts and prejudices, they are not perceived as rivalling peers and therefore the intra-regional management becomes smoother. Even more so, managing a region from the outside reduces the probability of agency behaviours from RMCs, because there is less probability that they will act selfishly as they do not have direct interest in the target region, occupying a more neutral position.

Furthermore, the notion of a region should be taken with a special caution. Geographic proximity might step aside as the primary criterion for slicing global operation into regions, and regionalization is proposed to be thoroughly revised. With the existing advancements of communication and transportation geographical distance decreases its role, giving way to other issues, such as political and economic development, existing business ties and even former colonial links that affect various spheres of the country's activities. Therefore, when configuring their regional structure, corporate managers may put forth the following questions: Which regionalization criteria should we choose to group our geographically dispersed affiliates? Which regional configuration of the MNC makes sense for our business? Which of the units has the most appropriate specific capabilities and locationspecific advantages to manage a particular region? The conceptual models proposed in this thesis could help corporate managers to answer these questions and choose the best design for their MNC. Moreover, the model obtained that optimizes the distance between a corporate home country and a target region can become a practical tool to assist MNCs in their regional reconfiguration and optimization of their RMC locations.

From the subsidiary management perspective, those subsidiaries that are located in countries that have little to offer in terms of market expansion, should start looking outside, because new opportunities can be anywhere in an MNC with global presence. Even for the subsidiaries whose location specific advantages are not that obvious as in the case of Spain for Latin

America or France for Maghreb, it can be interesting to try how they can add value to the MNC creating linkages with affiliates within a specific region. Then, it is up to the subsidiary's management entrepreneurial capabilities to convince the corporate management in their indispensability to conquer a region that makes little sense geographically but makes plenty of sense from a managerial viewpoint.

Subsidiary managers may take a closer look at what their location can offer them, what links with other countries and regions it already has, and what new relationships the subsidiary managers can develop. The affiliate that achieves more connections in the integrated MNC network will occupy the most visible position for the corporate management. Accordingly, they need to look for the opportunity to increase their centrality in this network, by building new connections and enforcing the existing ones. Therefore, when considering the opportunities for the development of their subsidiary role, managers should reflect on the following issues: What location-specific advantages does my country offer? What resources are available to us? What subsidiary-specific capabilities have we already developed? capabilities can be developed? What is my subsidiary's position within the network of the MNC? How can it be improved? How can we develop new ties with other MNC units and gain centrality of our position so that to be more visible to the corporate management? The conceptual models proposed in this thesis and the adopted framework of a subsidiary role development could help subsidiary managers in their search of the answers to these questions.

Finally, we would like to pause on the policy-makers' implications of this dissertation. It is rather universally accepted that the location of corporate offices or RMCs in a specific country and/or city almost always benefits the business environment of their location (i.e., concentrating final decision-making power). Therefore, policy-makers might look for the possibilities to attract these organizational units. In fact, in this study we have found that formal institutions play an important role in the optimization of RMC location. If so, governments and other local administrations need to create a favourable political climate, reducing any political hazards and unrests, and exploiting past and present links to other countries and regions. Just as subsidiary managers have to pursue the centrality of their position, the governments could see how they can increase the centrality of their country

or city in the global political and economic arena. This is especially important nowadays since in the dynamic environment the gravity centre of the international trade is constantly changing its location, moving to new emerging markets.

Therefore, we invite policy-makers to reflect on the following issues: What is the place of our country/city in the global economic network? Where are the biggest market opportunities located? How can we create bridges with these markets? How can we improve formal institutions to consolidate international relationships? The findings of this thesis could help policy-makers to implement changes that would help attract RMCs in their location.

All in all, although this dissertation has been accomplished with an academic inquiry in mind, we expected that the suggested findings will be of a particular value for practitioners. In this sense, we are convinced, that the academic research should help practitioners in their endeavours and evolve further not alone, but with a helping hand of the academic community.

5.4. Limitations and avenues for future research

The accomplishment of this dissertation has risen more questions than given answers, suggesting vast opportunities for further research. The following paragraphs point out the main limitations of the present research and suggest research agenda for further investigation.

First, the settings for in-depth qualitative research chosen for the first two studies are limited to one country – Spain. The choice of this geographical location is prompted by its unique location-specific advantages that some subsidiaries have exploited. Spain is a European country often included into Ibero-American region, which puts it into two zones at a time. This double regional setting converts this country into a link in between Europe and Latin America, and the investigation of the subsidiaries located here is of a special academic interest. This, however, should not limit further research on such double environment. In the third contribution of this dissertation we have proposed other optimal RMC locations, and we believe that the qualitative in-depth investigation of RMCs located in the countries highlighted in Chapter 4 might further the understanding of these organizational units. A particularly interesting contribution could be done through a comparative

analysis of similar settings to see how managerial practices and strategies differ in different settings.

The limitations of this dissertation are also on a methodological level. The exploratory character of the objectives of the chapters 1 and 2 suggested the application of a qualitative methodology. We, however, have not undertaken an effort to contrast the results obtained in the qualitative studies with a quantitative study that involves a bigger sample of MNCs and their subsidiaries. This endeavour is out of the scope of this dissertation, but we strongly recommend furthering the investigation in this direction. Specifically, the role of a subsidiary management in the change of subsidiary mandate is heavily under-theorized (Meyer et al., 2020). Given the vital importance of this topic for practitioners, a quantitative research could bring critical implications for practitioners.

Finally, in this study we have applied a still novel methodology in the social sciences. We used evolutionary computation in order to compute differential weights for each psychic distance dimension and suggest optimal locations for RMCs. The scope of our thesis has not allowed us to test the RMC location optimization model, adding the component of a subjective managerial perception of MNC. However, we believe that it might be an interesting avenue for future research. Such double approach - stable psychic distance dimensions and individual managerial perception of psychic distance — has been sought for decades by the IB scholarship, but the methodological limitations did not allow it to happen. We believe that this study, the first of a kind, can give ground to build new theory on psychic distance and invite the IB scholarship to contribute to research of psychic distance using evolutionary computation.

All in all, this dissertation has been an attempt to advance the understanding of RMCs, and specifically, springboard subsidiaries. The interest towards this topic has been explained by a peculiarity of these RMCs on the one hand, and a scarce literature that directly analyses them, on the other hand. To be able to advance the knowledge on these RMCs we have appealed to the already existing knowledge in the three important domains of the IB - subsidiary management, regionalization strategy and psychic distance, believing that to successfully accomplish the endeavour of furthering knowledge we need to have a strong foundation. In the end of the day, if one wants to see further, "it is by standing on the shoulders of Giants".

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APPENDIX

Table A.1. Ten optimal RMC locations

List of the best RMC locations	Number of coincidences of the same RMC location in	
Tavic locations	the top 10 of the best	
	locations	destination
From cor	untries of Western Europe to S	outh American sub-region
Spain	9/9	10.76
France	9/9	11.59
Brazil	7/9	11.29
Portugal	7/9	11.22
Italy	5/9	11.48
From cou	ntries of Western Europe to Co	entral American sub-region
Spain	8/9	10.94
France	8/9	12.28
Slovenia	5/9	12.36
Belgium	5/9	12.70
United Kingdom	5/9	13.07
From cou	ntries of South America to We	estern European sub-region
Spain	11/11	10.34
France	11/11	11.26
Czech Republic	11/11	11.80
Portugal	9/11	11.19
Italy	8/11	11.47
From cour	tries of Central America to W	estern European sub-region
Spain	10/11	11.19
France	10/11	11.67
Czech Republic	9/11	11.75
Italy	8/11	11.97
Belgium	6/11	12.64
From cou	intries of Northern Europe to S	South American sub-region
Spain	7/8	11.81
Czech Republic	6/8	12.29
France	6/8	13.92
Portugal	5/8	12.29
Slovenia	5/8	12.36
From cour	ntries of Northern Europe to C	entral American sub-region
Spain	6/8	12.25
Slovenia	6/8	12.69
Czech Republic	6/8	12.73
Germany	6/8	13.66
France	6/8	13.75
	ntries of South America to Nor	
Spain	11/11	11.73
Czech Republic	11/11	12.40

List of the best RMC locations	Number of coincidences of the same RMC location in the top 10 of the best locations	country in the region of origin + RMC location+ the region of destination	
France	11/11	12.60	
Portugal	10/11	12.57	
Slovenia	9/11	12.64	
From count	From countries of Central America to Northern European sub-region		
Czech Republic	10/11	12.51	
Spain	8/11	12.28	
Latvia	8/11	12.79	
France	7/11	12.81	
Estonia	6/11	12.50	
From cou	intries of Eastern Europe to So	uth American sub-region	
Spain	7/9	10.29	
Croatia	7/9	10.99	
Brazil	6/9	10.94	
Slovenia	4/9	10.70	
Italy	4/9	11.08	
From cour	ntries of Eastern Europe to Cer	ntral American sub-region	
Croatia	7/9	11.20	
Tunisia	7/9	11.86	
Spain	6/9	10.40	
Czech Republic	5/9	9.72	
Bolivia	5/9	11.62	
	ntries of South America to Eas		
Spain	11/11	10.94	
Croatia	11/11	11.41	
Tunisia	10/11	11.41	
Paraguay	9/11	11.00	
Bolivia	9/11	11.27	
	tries of Central America to Ea		
Croatia	10/11	11.53	
Tunisia	10/11	11.59	
Dominican	8/11	11.54	
Republic			
Spain	7/11	11.44	
Bolivia	6/11	12.08	
	ntries of Southern Europe to So		
Spain	8/8	9.31	
Brazil	8/8	10.08	
Paraguay	8/8	10.74	
Portugal	7/8	10.01	
Bolivia	7/8	10.32	
	tries of Southern Europe to Ce		
Spain	7/8	10.15	
Dominican	7/8	10.94	
Republic	,,,	10.21	
Bolivia	7/8	11.06	
2011114	,,,	11.00	

List of the best RMC locations	Number of coincidences of the same RMC location in the top 10 of the best locations	country in the region of origin + RMC location+ the region of destination
Peru	6/8	10.84
Tunisia	6/8	11.33
From coun	tries of South America to Sout	thern European sub-region
Spain	11/11	9.51
Croatia	10/11	10.82
Portugal	9/11	10.18
Suriname	9/11	10.61
Bolivia	9/11	10.65
From count	ries of Central America to Sou	thern European sub-region
Croatia	9/11	10.64
Tunisia	8/11	10.75
Spain	7/11	10.13
Bolivia	7/11	10.41
Dominican	6/11	10.74
Republic	0,11	2017
	countries of Western Europe to	Maghreb sub-region
France	9/9	6.21
Czech Republic	9/9	7.17
Tunisia	8/9	7.31
Italy	8/9	8.04
Belgium	7/9	7.05
Spain	7/9	8.01
<u> </u>	countries of Northern Europe to	
France	8/8	7.87
Czech Republic	7/8	9.09
Tunisia	6/8	7.67
Estonia	5/8	7.48
Germany	5/8	8.30
Italy	5/8	9.14
	countries of Southern Europe to	
Tunisia	8/8	5.77
Croatia	8/8	7.14
	7/8	6.77
Algeria		
Bulgaria	7/8	7.29
Italy	5/8	7.30
	countries of Eastern Europe to	5 5
Algeria	8/9	7.64
Tunisia	7/9	6.13
Croatia	6/9	6.99
Bulgaria	6/9	7.38
Hungary	5/9	6.62
Czech Republic	5/9	7.01
From countries of Maghreb to Western European sub-region		
Tunisia	4/4	7.58
Italy	4/4	8.27

List of the best RMC locations	Number of coincidences of the same RMC location in the top 10 of the best locations	country in the region of origin +
Belgium	4/4	9.21
France	3/4 (except Libya)	6.48
Spain	3/4	8.43
From countries of Maghreb to Northern European sub-region		
Tunisia	4/4	8.30
Czech Republic	4/4	9.16
Algeria	4/4	9.56
Estonia	4/4	9.76
France	3/4	7.82
From	countries of Maghreb to Easter	n European sub-region
Tunisia	4/4	6.50
Bulgaria	4/4	8.04
Albania	4/4	8.19
Croatia	3/4	6.90
Hungary	3/4	6.93
	countries of Maghreb to Souther	
Tunisia	4/4	6.09
Bulgaria	4/4	7.59
Romania	4/4	8.00
Spain	3/4	6.99
France	3/4	7.09
	countries of Western Europe to	
Lebanon	8/9	11.89
Turkey	8/9	12.26
Tunisia	8/9	12.40
Algeria	8/9	12.65
Jordan	8/9	13.25
	ountries of Northern Europe to	
Turkey	7/8	12.20
-		
Lebanon	6/8	11.52 12.12
Georgia	6/8	
Jordan	6/8	12.30
Romania	6/8	12.56
	ountries of Southern Europe to	-
Turkey	8/8	8.65
Lebanon	8/8	9.41
Jordan	8/8	10.36
Romania	8/8	10.70
Albania	7/8	10.29
	countries of Eastern Europe to 1	<u> </u>
Turkey	9/9	8.69
Jordan	9/9	10.05
Lebanon	8/9	9.14
Iraq	8/9	10.31
Romania	7/9	10.04

List of the best	Number of coincidences of	Mean distance between the	
RMC locations	the same RMC location in	country in the region of origin +	
	the top 10 of the best	RMC location+ the region of	
	locations	destination	
From coun	From countries of Western Europe to Eastern European sub-region		
Czech Republic	9/9	6.30	
Slovenia	8/9	6.72	
Germany	8/9	7.12	
France	8/9	7.17	
Italy	7/8	6.20	
From coun	tries of Northern Europe to Ea	stern European sub-region	
Estonia	8/8	7.51	
Czech Republic	8/8	7.70	
Latvia	7/8	6.63	
Lithuania	6/8	6.35	
Slovenia	6/8	6.67	
From coun	From countries of Southern Europe to Eastern European sub-region		
Croatia	8/8	5.28	
Hungary	8/8	5.91	
Tunisia	8/8	6.47	
Slovenia	7/8	5.65	
Italy	7/8	6.06	

End of Table A.1.