# Do MNEs from developed and emerging economies differ in their location choice of FDI? A 36-year review

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#### **Abstract**

This study examines the extent to which MNEs from developed (DMNEs) and emerging (EMNEs) economies differ in *Location* behaviour. Studies on MNE location choices have failed to capture the changing FDI landscape and leave the inconsistent findings unexplained. We address this gap by systematically reviewing the extant literature on location choices of DMNEs and EMNEs over the past 36 years – from the introduction of the OLI model to 2016. Key themes emerging from the review reflect a comprehensive picture, capturing the impact of multiple factors affecting location choices of DMNEs and EMNEs. Future research is challenged by: a. adopting an integrated approach examining three levels – individual (managerial), firm (ownership structure, type of FDI, internationalisation stages, and the different nature of ownership advantage), and context of location decisions (home, host, subnational, regional, supranational, and networking); b. refining or developing theories to capture the dynamic picture of MNE internationalisation.

Key words: Location choice, FDI, MNE, emerging and developed economies

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#### 1. Introduction

The location behaviour of multinational enterprises (MNEs) has been recognised as one of the most important organisational considerations (Buckley, 2016; Dunning, 1998, 2008). Since location economics was introduced to the international business (IB) domain by Dunning in his first major research project in 1952 (Dunning, 1958), the location dimension has become an essential and distinctive element in IB research (Buckley & Ghauri, 2004). Location choice (LC) is core to the managerial decisions of MNEs when engaging in foreign direct investment (FDI). LC decisions in most cases are irreversible, or costly to alter, and hence affect the sustainable development of MNEs (Duanmu, 2012). A location decision is very complex and involves consideration of multiple and diverse elements. Inconsistencies exist in the current LC literature and a comprehensive understanding of the factors that affect LC is still under-developed (e.g. Kim & Aguilera, 2016; Nielsen, Asmussen & Weatherall, 2017).

While the landscape of the IB research on LC has been dominated by studies on MNEs from developed countries (DMNEs), the scenery is changing, as MNEs from emerging economies (EMNEs) are disrupting the competitive milieu with their increasing participation in international trade and contribution to global economic development (Casanova & Miroux, 2016; Duanmu, 2012; Hitt, Li & Xu, 2016). EMNEs, in the past 15 years, have not only considerably expanded overseas, but have also achieved significant success. Notably, 30% of the Fortune Global 500 firms are now from emerging economies<sup>1</sup> (compared to less than 10% ten years ago), and in 2015, 40% of industry leaders were firms from emerging markets (none in 2004; Casanova & Miroux, 2016, p.12). The geographic scope of outward FDI made by EMNEs is not only South-South, but also South-North, especially since the 2007-2008 Global Financial Crisis (Casanova & Miroux, 2016; Hitt, Li & Xu, 2016). Simultaneously, DMNEs' internationalisation strategies are also evolving. While 50 years ago, business decisions and core competences were largely located at DMNE headquarters (HQ), the current competitive environment has driven DMNEs to pay greater attention to customer needs; hence, DMNEs increasingly opt for localisation and seek strategically important resources in host countries (Hitt, Li & Xu, 2016). However, comparing the two groups, EMNEs start their outward FDI later than DMNEs and face challenging home market environments characterised by inadequate business mechanisms,

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<sup>&</sup>lt;sup>1</sup>Emerging economies are defined based on four criteria (Casanova & Miroux, 2016, p. 2): (1) their level of development, (2) their upward trajectory towards a mature stage of development, (3) their increased integration in the world economy, and (4) their potential to play a significant role in the global economy.

political instability, and resource constraints (Casanova & Miroux, 2016). This provides the motivation for our study to capture the current state of knowledge on the location behaviour of both DMNEs and EMNEs.

By conducting an evidence-based systematic review (Tranfield, Denyer & Smart, 2003) of the literature on *Location* over the past 36 years, this study answers the following questions: 1) To what extent do the determinants of location choice differ between DMNEs and EMNEs? 2) What are the underlying logics that can explain the similarities and differences in the location behaviour between DMNEs and EMNEs and what are their implications for future research? This research differs from the extant review papers (e.g. Kim & Aguilera, 2016; Nielsen, Asmussen & Weatherall, 2017), as it separates LC studies into two groups based on whether the MNEs originate from emerging or developed economies (indicated by the articles themselves, and in line with the classification defined by MSCI, 2017; OECD, 2016). This allows us to compare and contrast these two groups (DMNEs vs. EMNEs) and to discover the similarities and differences in their location decisions. Key themes reflecting factors at the individual (managerial), firm, and context (of location decisions) levels affecting the LC of DMNEs and EMNEs reveal a full picture of the current state of knowledge on Location. Our study hence contributes to the IB field by enhancing our understanding of how DMNEs and EMNEs differ in their location behaviour – a gap in the existing knowledge on MNE LC. The rationales explaining the different location behaviours of the two groups are discussed and the implications for future research are considered.

The remainder of the study is organised as follows. We first explain how a systematic literature review method is employed to help identify and analyse the selected articles. The findings emerging from the review are then presented. This is followed by discussions on the rationale for DMNEs' and EMNEs' location behaviour and recommendations for future research. The paper concludes with a discussion and suggestions for future research.

#### 2. Methodology

To reveal a full picture of the current state of knowledge on the location behaviour of MNEs and to respond to recent calls on understanding why inconsistent findings exist in the extant research (Kim & Aguilera, 2016; Nielsen, Asmussen & Weatherall, 2017), this study is designed on the premise that the home country environment (developed or emerging economy) of an MNE determines its traits and objectives and hence its internationalisation

strategy (Hobdari, Gammeltoft & Li, 2017; Meyer & Peng, 2016). This paper adopts a systematic review approach, a widely used method for management and business studies (e.g. Pittaway et al., 2004; Thorpe et al., 2005), which aims to synthesise research in a 'systematic, transparent, and reproducible manner' (Tranfield, Denyer & Smart, 2003, p. 207). To enhance the reliability of the research, we undertook five procedural steps that are widely used in review papers published in international business and management (e.g. Fetscherin, Voss & Gugler, 2010; Kiss, Danis, & Cavusgil, 2012; Nielsen, Asmussen & Weatherall, 2017). Each step is explained in detail below.

#### **Step 1: Define the scope of the research**

The research database (or collection of reviewed studies) was sourced from the Social Sciences Citation Index (2015) in the subject areas of 'business' and 'management', with a total of 251 journals identified. We ranked the journals by impact factor (IF, Thomas Reuters JCR Impact Factor) and removed those with an IF below 1, resulting in 152 journals. We also checked this against the UK Association of Business Schools list (2015), and removed journals that were graded 1 and 2, resulting in a bank of 109 journals. Furthermore, drawing on the subject areas defined by the UK Association of Business Schools in 2015 and the specified aim and focus of each journal, we identified eight subject areas highly relevant to MNE LC. These areas are as follows: International business and area studies; Strategy; Organisation studies; Marketing; Innovation; HRM and employment studies; General management, ethics and social responsibility; Entrepreneurship and small business management. This step resulted in 73 journals.

The review period is from 1980 to 2016; 1980 was selected as a starting point due to the introduction of Dunning's OLI model (Dunning, 1980). The few location papers published before 1980 are not representative of the mainstream LC literature that developed thereafter. Therefore, a time span of 36 years (1980–2016) guarantees coverage of early studies as well as the most recent research on location.

## **Step 2: Article search (keywords and search strings)**

To locate relevant articles from the 73 journals and to ensure that all relevant papers on location were included, the four authors formed a review panel and discussed key search terms collectively. Agreed keywords focused on the concepts of 'location' and 'multinational', including alternative terminologies, such as 'geographic space', 'distance', 'subsidiary', 'international', 'FDI'/'Foreign Direct Investment', and 'global'. We used each string to manually search all 73 journals on the Web of Science. Thus, we identified those articles where the chosen keywords appear in the title, abstract and keyword list. The initial

search yielded 1,213 papers published in 65 journals (8 journals yielded no papers). To ensure that all relevant articles on location were included, we used 'location' only to search again in the 73 journals; the results were consistent.

## Step 3: Categorisation of articles into A, B and C classes

We read the abstracts of the 1,213 articles and classified them into categories A, B, and C, based on the inclusive criteria shown in Table 1 below. Class A represents highly relevant articles ('location' is studied as either a dependent or an independent variable), class B refers to those articles in which the research topic is indirectly related to MNE LC (e.g. consumer behaviour), and class C means that the article has no relevance to MNE location choice (e.g. migration). Group meetings took place whenever there were doubts about the classification of an article. Among the 1,213 articles, 363 were allocated to class A, 77 to class B, and 773 to class C.

-----Insert Table 1 here-----

## Step 4: 'Location choice' as the dependent variable: DMNEs and EMNEs

The 440 A and B class articles were further classified into two groups: a) LCs of DMNEs; b) LCs of EMNEs. Articles without information on 'where from' (the home country) were identified by carefully reading the full text and subsequently excluded. Book reviews, comments, and editorial summaries were also excluded. As a result, of the 440 articles, 168 were found to be in the DMNE group (38.2%), and 71 were found to be in the EMNE group (16.1%). 201 articles (45.4%) were dropped because the 'where from' information was not explicit. We further screened the articles based on whether LC was a dependent or an independent variable in the study. All articles in which LC was an independent variable were excluded. This principle was applied to all articles, regardless of whether they used a quantitative and/or a qualitative method. This further screening resulted in the identification of 54 articles focusing on DMNEs and 30 focusing on EMNEs published across 16 journals (as shown in Table 2), as detailed in Tables 3 and 4.

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#### **Step 5: Identification of key themes (thematic analysis)**

We systematically analysed the full text of the 84 articles (54 DMNEs and 30 EMNEs). Panel discussions were conducted whenever there were doubts in framing the themes or sub-themes until a consensus was reached on the final classification. Through this rigorous synthesis process, key themes emerged from the article database. These themes shaped the development of this study and are detailed in the findings and corresponding discussion sections.

#### 3. Findings

#### 3.1 Profile of DMNEs and EMNEs

We divided the sample into two periods from a 'time' perspective. In the first period (1980 to 2000), we found only one article devoted to EMNEs, while the number for the second period (2001 to 2016) increased to 29 articles, as shown in Figure 1. The main home countries of DMNEs in the reviewed articles are the USA, Japan, Germany, Spain, Sweden, and the UK. The majority of EMNEs are from Taiwan and China, as detailed in Tables 3 and 4. In terms of types of FDI ('location of what'), the majority of MNEs in the sample invested mainly in manufacturing plants (DMNE 27.8%; EMNE 40%)), whereas more DMNEs invested in R&D sites (20.4%) than EMNEs (10%), as detailed in Table 5.

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A broad theoretical canvas is used to explain the LCs of DMNEs and EMNEs, even though approximately half of the MNE articles did not indicate a clear theoretical foundation. While the OLI perspective prevails among the theoretical underpinnings employed in the study of DMNEs, it appears less promising for explaining EMNEs' internationalisation strategy. In fact, only 3 out of 30 papers from our EMNE sample used the OLI to explicate EMNE LC (Liu & Chen, 2012; Ramasamy, Yeung & Laforet, 2012; Yeoh, 2011). However, a prevalence of the institution-based view is noted (27%) in the EMNE sample, followed by a network-based perspective (17%). Relatively new theoretical perspectives, such as the LLL (linkage–leverage–learning; Mathews, 2006) and springboard view (Luo & Tung, 2007, 2018) are also applied in the EMNE sample (Luo & Wang, 2012; Yeoh, 2011).

Articles that explicitly indicated and discussed the impact of motivation of FDI on LC (24 DMNEs and 11 EMNEs) revealed that *resource seeking* (Dunning & Lundan, 2008; Dunning & Narula, 1995) is still the main motive influencing the overseas expansion of both DMNEs and EMNEs. While 67% of resource-seeking DMNEs undertake FDI (mostly in other developed markets) to gain access to knowledge and technology (e.g. Ambos, 2005; Gerybadze & Reger, 1999), only 20% of the EMNEs (Makino, Lau & Yeh, 2002; Pananond, 2013) do so (in other developing markets). *Market and efficiency seeking* are other important motives for the LC of DMNEs (e.g. Fisch and Zschoche, 2012a, 2012b), whereas EMNEs, after *resource seeking*, undertake FDI to seek *market* and *strategic assets* (e.g. Makino, Lau & Yeh, 2002; Pananond, 2013). *Efficiency* seeking is the least important motive for EMNEs (e.g. Duanmu, 2012; Lau, 2003) due to the cost of labour being low in the home market. Notably, the impact of motivation on MNEs' LC cannot be analysed in isolation. For instance, how motivation affects an MNE's LC is contingent upon a variety of factors, with

characteristics of their home market (institutions and market structure) being one of the most influential (Buckley, 2014). The reason why DMNEs (67% of studies on DMNEs) are motivated to seek knowledge and technology could be explained by the 'location of what' (type of FDI). Our samples show that a substantial number of FDIs by DMNEs (23% compared to 10% for EMNEs) were related to the location of R&D activities, which require access to state-of-the-art knowledge and technologies.

#### 3.2 External factors

#### 3.2.1 Host country: national level

Studies on the impact of host country national level factors on MNE LC dominate the existing literature (36%), and these factors gain the highest frequency among all of the factors revealed in this study, as shown in Table 6. These factors are categorised into two groups: economic and non-economic (or institutional, Flores & Aguilera, 2007). There are more studies on host country economic factors than non-economic factors. However, economic factors are more frequently studied regarding DMNEs, whereas non-economic factors are more often studied regarding EMNEs.

-----Insert Table 6 here-----

#### 3.2.1.1. Economic or location-specific factors

Economic factors vary widely and can be generally divided into two groups: demand and supply side factors (Enright, 2009). Key factors on the supply side refer to the local infrastructure and capabilities (physical, human, knowledge), wages of the host country, and host country risk (political, economic, financial, and disaster). The quality and availability of local infrastructure are related to the cost of foreign operations (Flores & Aguilera, 2007). A high degree of quality and availability of physical infrastructure facilitates business activities and helps to reduce operation costs (Enright, 2009). The quality of a host country's infrastructure is also reflected in the availability and quality of its human capital (Bunyaratavej, Hahn & Doh, 2008; Kumar, 2001), knowledge level (Shimizutani & Todo, 2008), national innovation system (Demirbag, Tatoglu & Glaister, 2010), and/or number of patents (Chung & Yeaple, 2008). In general, the higher the level of availability and quality of the local infrastructure, the more likely it is to attract DMNEs and EMNEs (e.g. Bunyaratavej, Hahn & Doh, 2008; Flores & Aguilera, 2007). Strikingly, the supply side economic factors are studied more intensively in DMNEs (26 times) than in EMNEs (4 times). Comparatively, while DMNEs are concerned with country risk (political, financial,

economic), *political risk* in a host country seems not to deter EMNEs, which is specifically discussed in the next section on institutional factors.

The impact of the level of *labour cost* in a host country on the LC of MNEs shows different results in the DMNE and EMNE groups. In general, higher labour costs in a given country discourage DMNEs to locate in that particular location (e.g. Hahn, Bunyaratavej & Doh, 2011; Shimizutani & Todo, 2008). However, this is confirmed for EMNEs only if Chinese EMNEs invest in manufacturing subsidiaries overseas (Duanmu, 2012) or if EMNEs invest in developed countries (including developed Asian countries) (Duanmu, 2014; Kang & Jiang, 2012).

Nevertheless, a higher level of labour costs in a host country is also found to have a positive effect on LC, but the underlying logic differs between DMNEs and EMNEs. Bunyaratavej, Hahn and Doh (2007) found that countries with higher average wages are more likely to be destinations for service offshoring by US MNEs (in order to maintain the quality of services to satisfy customers in the home market). Similarly, in the sample of EMNEs, Duanmu (2014) found a significant positive relationship between the labour standards (including high labour costs and non-wage standards) and the LC when EMNEs invest in developing markets. However, the reason why EMNEs do so is because the marginal benefit in seeking even lower labour standards in these countries is limited. Moreover, in developing countries where the institutions are weak, the transaction costs saved exceed the increased labour costs, making the rigid wage structure an operational advantage for EMNEs.

The demand-side factors relate to market size, market growth, market productivity and stages of economic development (of the host country). Both DMNEs and EMNEs prefer to invest in countries with a larger market size and higher potential growth (e.g. Duanmu, 2012; Globerman & Shapiro, 2003). However, a greater proportion of studies were devoted to researching these factors in the DMNE group (9 articles) than in the EMNE group (1 article: Duanmu, 2012). Flores and Aguilera (2007) found that GDP has become less important than population in predicting the likelihood of being the recipient of US investments. Galan, González-Benito and Zuñga-Vincente (2007) emphasise that the host country's stage of economic development should be considered, as it alters the impact of specific location factors on the LC of the DMNE.

#### 3.2.1.2 Institutional factors

It is argued that economic efficiency can only partially explain the LC of MNEs, and the institutional or non-economic context of the host country environment also affects a firm's LC (Flores & Aguilera, 2007). The existing literature investigates the impact of *regulative* 

institutions on the LC of MNEs in terms of government effectiveness, freedom of markets, political freedom, political stability and risk, and the nature of the legal system (e.g. Fernandez-Mendez, Garcia-Canal & Guillen, 2015; Jory & Ngo, 2014). Host countries with effective governance are preferred as locations of FDI by both DMNEs and EMNEs (Demirbag, Tatoglu & Glaister, 2010), although EMNEs exhibit different preferences, as discussed next. For DMNEs, a country that has a similar political or legal system to the home country seems more attractive for investment (Flores & Aguilera, 2007). Comparatively, a high level of political risk (political and legal regulative regime) in the host country seems not to affect the LC of EMNEs (Kang & Jiang, 2012; Quer, Claver & Rienda, 2012). For instance, Chinese firms prefer to locate their FDI in relatively higher risk locations (within Asian countries; Kang & Jiang, 2012) to take advantage of opportunities that are not exploited or known by DMNEs (Quer, Claver & Rienda, 2012). Two reasons might explain this phenomenon. First, Chinese firms have a specific advantage, gained from growing in a politically unstable and risky environment in their home country, and hence have expertise in adapting to a similar institutional environment, characterised by high volatility and bureaucratic intervention (Kang & Jiang, 2012). Second, Chinese firms are motivated by acquiring cheaper assets in countries with highly unstable political systems (Quer, Claver & Rienda, 2012).

The *normative* system emphasises that social values and norms exert constraints on interpersonal and interorganisational behaviour (Kang & Jiang, 2012). Cultural distance (cultural similarity, or cultural affinity – different terminologies but measured in similar ways) is often used to examine the impact of normative institutions on both DMNEs' and EMNEs' LC (e.g. Flores & Aguilera, 2007; Kang & Jiang, 2012). Studies on DMNEs highlight that cultural distance is a significant negative variable affecting DMNEs' LC (e.g. Flores & Aguilera, 2007; Yao & Li, 2015) unless DMNEs invest in R&D activities (close to innovative clusters or to customers and local production sites; Ambos, 2005). In contrast, Chinese MNEs do not shy away from investing in culturally distant developed countries (e.g. North America; Quer, Claver & Rienda, 2012) or culturally distant developing countries (e.g. East and South-East Asia; Kang and Jiang, 2012). However, the FDI in large culturally distant developed locations is aided by the already established alliances with DMNEs located in China driven by asset-seeking motives (Quer, Claver & Rienda, 2012), or the established bilateral trade in culturally distant developing countries (Kang & Jiang, 2012).

The *cognitive* system recognises that internal interpretive processes are shaped by external stimuli (Kang & Jiang, 2012). The presence of a firm's international competitors

(behavioural mimicry) is associated with a higher probability of that firm's presence in the same market for both DMNEs and EMNEs (Henisz & Delios, 2001; Yuan & Pangarkar, 2010). However, EMNEs are also strongly affected by their own past choices, or by completed deals of MNEs from a similar background, e.g. from the same home country in the same industry, or from the same region (e.g. Asian host country). That is, *behavioural inertia* (the firm's own or the same home-country affiliated firm's past choice) has a stronger impact on their location decisions than behavioural mimicry (the rivals' past choice) (Demirbag, Taoglu & Glaister, 2010; Yang & Hyland, 2012; Yuan & Pangarkar, 2010; Zhu et al., 2012). Comparatively, the number of studies on the impact of host country institutional factors on EMNE LC (15 studies) is higher than those on host country economic factors (5 studies).

#### 3.2.2 External sub-national factors

Sub-country level factors refer to differences between locations within a host country. Only six articles fall into this group from our entire sample. Mataloni (2011) proposes that DMNEs from the US follow a sequential choice process in which they first select a country based on national attributes and then a region within that country based on regional attributes. While agglomeration economies (the co-locating of firms in the same industry, or geographic clustering of an industry; Porter, 1990) affect the LC of both DMNEs and EMNEs, new insights emerge when they are applied to EMNEs. DMNEs, driven by industry demand, tend to seek proximity with greater levels of similar industry activity (agglomeration economies) within the US, where they can benefit from knowledge spillovers among competitors, a specialised pool of labour, and input providers (Shaver & Fiyer, 2000). This is also true for EMNEs, but Jindra et al. (2016) found that EMNEs, when making a sub-national location choice in the European Union (EU), are more likely to locate in regions with high population density (urbanisation) than DMNEs due to their higher level of liability of foreignness. EMNEs are significantly more responsive to regions possessing human resources in science and technology than DMNEs, and EMNEs from non-EU countries are more responsive to regions with high localised R&D activities (knowledge externalities). Thus, agglomeration economies and knowledge externalities matter for both EMNEs and DMNEs, but to different extents. Moreover, EMNEs tend to choose locations within the US where there is a higher density of home-country affiliates from the same industry (Zhu et al., 2012). Ethnic identity is seen as a valuable resource in a host country local market that can help to reduce the liability of foreignness in the host country.

With regard to the LC of DMNE within a host country in Asia, US manufacturing firms prefer to locate in regions with high wages, high levels of education, and a well-

developed transportation infrastructure (Mataloni, 2011). Within China, DMNEs see Beijing as attractive to research-intensive units due to the presence of universities and standard-setting/decision-shaping bodies, whereas Shanghai is favoured for development-focused units giving preference to customer and corporate business unit relationships (Von Zedtwitz, 2004). Conversely, China is divided into three regions according to the regional innovation system (Liu & Chen, 2012), with EMNEs from Taiwan in China undergoing an evolutionary process and moving from Guangdong (the Pearl River Delta) to Shanghai, Jiangsu, Zhejiang (the Yangtze River Delta) and later to Beijing and Tianjin. In other words, the geographical spread has shifted from labour-intensive and international market oriented locations towards capital and technology-intensive inland market-oriented places.

#### 3.2.3 External home country factors

The home country effect on MNE LC is considered by a total of five articles, three of which focus on DMNEs (Banerji & Sambharya, 1996; Martin, Mitchell & Swaminathan, 1995; Pak & Park, 2005), while the others study EMNEs (Luo & Wang, 2012; Zhou & Guillén, 2015). Home country factors are the least studied among all of the factors revealed in this research. Home market key factors that affect MNEs' LC differ between DMNEs and EMNEs. While market and industry position at home is the key factor influencing DMNEs' LC, novel factors affecting EMNEs' LC emerge, such as a firm's home base, institutional hardship, inward FDI, business development stage, home market economic growth, and home country innovation orientation.

All three articles in the DMNE sample investigate MNEs from Japan. Japanese MNEs that are market leaders in an oligopolistic industry or have a dominant market position of Keiretsu membership at home prefer to invest in developed markets (Banerji & Sambharya, 1996; Martin, Mitchell & Swaminathan, 1995; Pak & Park, 2005). In contrast, for EMNEs, Luo and Wang (2012) found that it is the typical *institutional hardship* that the EMNEs experienced at home that drives them to look for developed markets with efficient institutional environments. EMNEs are confident in doing so thanks to their previous participation in the *inward FDI* with DMNEs and their *innovation orientation* at home. EMNEs, at a mature business development stage and when the home country economic growth is high, prefer to exploit their ownership advantages in developing countries.

#### 3.2.4 External regional/supranational and networking factors

A region represents a group of countries with physical continuity and proximity. 14 articles study the regional effect on MNE LC (nine DMNEs and six EMNEs). All six articles on EMNEs examine one specific factor, networking, whereas DMNEs look at a wider range of

factors, such as, global cities (Goerzen, Asmussen, & Nielsen, 2013), a firm's prior regional investment, regional-related institutions (Fernández-Méndez, García-Canal & Guillén, 2015), and qualitative factors (value drivers, opportunities, and critical asset base) (Chiesa, 1995; Gerybadze & Reger, 1999). For example, based on the outward FDI of Japanese firms in 45 countries within eight regions, Arregle et al. (2013) found that the degree of firm internationalisation into a country is influenced not only by the country but also by the regional institutional environment, and a semi-globalisation perspective provides better explanatory power than a country-level perspective. In contrast, external networking is critical in determining EMNEs' LC. When Taiwanese EMNEs invest in developed countries to access strategic resources, they pursue a higher intensity of local linkages (volume and frequency of exchange between subsidiary and local firms) than when investing in Southeast Asia (Chen, Chen & Ku, 2004). When entering developing countries characterised by incomplete institutional support that increases the liabilities of foreignness, the presence of networks such as external relational linkages or ethnic ties of top managers significantly impacts the LC of EMNEs (Chen & Chen, 1998; Strange et al., 2009). EMNEs maximise the use of external network resources and move from closer to more distant locations when they accumulate new network resources. The high degree of networking indicates that EMNEs are likely to depend on other firms having complementary resources in order to internationalise (Lei & Chen, 2011).

#### 3.3 Internal factors

#### 3.3.1 Firm-based factors

The number of studies (11 DMNEs and 11 EMNEs) on firm-based factors ranked second, just after host country factors; however, if we exclude studies that use these factors as control variables (e.g. firm size and international experience), the resulting number is much lower (two DMNEs and seven EMNEs). Firm-based factors that affect LC refer to the firm's size, international experience, specific resources and capabilities, competitiveness, and ownership structure. Firm-specific resources (e.g. intangible assets that are intrinsic to the firm or its competitive position in the industry) offer the firm superior ownership advantage, which can enable DMNEs to locate beyond their home regions (Asmussen & Goerzen, 2013) or EMNEs to locate in more developed foreign countries (Lei & Chen, 2011). While DMNEs' own capabilities, such as technology, marketing and partnering, drive them to spread across cultural and institutional distance (Asmussen & Goerzen, 2013; Rugman & Verbeke, 2004), studies on EMNEs stress that a firm's ownership advantage should include *relational competence* and *political capabilities* (Yeoh, 2011). Compared to DMNEs, studies on the

impact of firm-specific factors on EMNEs' LC typically highlight the impact of the ownership structure of parent companies and their subsidiaries (only one article in the DMNE sample and four in the EMNE sample). State-controlled Chinese MNEs are less concerned about the political risk of the host country, and prefer countries that are endowed with ownership advantages, particularly technical and innovative superiority (Duanmu, 2012; Ramasamy, Yeung & Laforet, 2012). Family-owned Taiwanese MNEs choose FDI locations where both the risk and potential reward are greater, such as inland China (Lien & Filatotchev, 2015; Strange et al., 2009). Notably, better conditions gained from host governments and regulators enable EMNEs to invest overseas (Yeoh, 2011).

#### 3.3.2 Internal managerial factors

MNE LC cannot be understood without knowing the process behind such choices at the level of the individual manager. However, only two studies in our sample investigated the impact of managerial factors on LC, and both did so from a DMNE perspective (Buckley et al., 2007; Schotter & Beamish, 2013). Specifically, Schotter and Beamish (2013) found that the location decisions of DMNEs were influenced by how inconvenient it would be for managers to travel to or live in certain places. Buckley et al. (2007, p. 1086) reveal that firm-focused rationality interplays with individual-manager focused rationality, and that more country-specific factors enter the decision with higher priority when moving from 'consider' to 'invest'. Given the shortage of studies on managerial factors, our understanding of how they affect MNEs' LC, especially how managers' choices are translated into an MNE's final decision, is still unclear.

#### 3.4. Relocation

The FDI of firms can be classified into three stages of evolution (or degrees of internationalisation): (1) starting from moving value chain activities outside home countries; (2) to a foreign subsidiary taking on a powerful strategic role in the firm; (3) to locating or relocating corporate or divisional HQ abroad (Barner-Rasmussen, Piekkari & Bjorkman, 2007; Forsgren, Holm & Johanson, 1992). Studies have recently focused on the third stage of internationalisation – DMNEs locating or relocating their corporate HQ (Baaij, Mon & Van Den Bosch, 2015) or divisional HQ beyond their own national borders (Benito, Lunnan & Tomassen, 2011; Forsgren, Holm & Johanson, 1995) or establishing host-country HQ in key host countries (Pan et al., 2014). No studies in our review looked at this phenomenon in the EMNE sample. There are two groups of factors that affect DMNEs' LC of HQs and divisional HQs: (1) corporate factors (e.g. the degree of internationalisation and diversification, the degree of embeddedness in/attractiveness of the home country), and (2)

divisional or subsidiary level factors (e.g. the degree of the division's internationalisation and diversification, the dominance of the single subsidiary in a division, and the division's dominance in the corporate arena). Notably, the complete relocation of HQ is rare.

#### 4. Discussion and recommendations for future research

#### 4.1 Different stages of internationalisation and LC of DMNEs and EMNEs

Our findings reveal that DMNEs and EMNEs are at different stages of internationalisation. This is evidenced by the presence of five articles that analyse DMNEs' relocation of HQ and divisional HQs (third stage), but a lack of such research in the EMNE sample. In addition, in our sample, the articles on EMNEs' LC mainly appear after the year 2000, thus lagging behind the studies on DMNEs' LC strategies by almost 20 years. Looking at the 'location of R&D', in alignment with the argument that R&D is usually one of the last value chain functions to be located abroad (Mansfield et al., 1979), our findings further confirm that DMNEs and EMNEs are at different stages of internationalisation: more than 20% of the articles in the DMNE subsample studied the location of R&D, compared to 10% in the EMNE subsample.

The different stages of internationalisation of DMNEs and EMNEs revealed by this study demonstrate the need for future research to explain the location behaviour of DMNEs and EMNEs. Our research has shown that, to a certain extent, EMNEs have followed the same internationalisation path as DMNEs in selecting locations, but salient differences exist. Further research is needed to examine the extent to which the factors that affected DMNEs' LC influence EMNEs' LC at their first and second stages of internationalisation. Looking forward, it is particularly interesting to explore EMNEs' LC in their next stage of internationalisation. For example, will EMNEs, similar to DMNEs, relocate their HQ out of their home country, from which their competitive advantage originates? If so, where will they choose to locate? It is also imperative to explore how DMNEs continue to locate their businesses abroad beyond the third internationalisation stage. While both DMNEs and EMNEs are increasingly internationalising (dual players), little research in our sample has examined how a dynamic interplay between DMNEs and EMNEs influences their future location behaviour.

The above underexplored areas call for an overhaul of the existing and established theories derived from studies on DMNEs, and the development of new theories to explain the location behaviour of DMNEs and EMNEs. Future research is suggested, for example, to refresh the psychic distance model (Johanson & Vahlne, 1977) to explore factors that drive

MNEs to leapfrog psychic distance stages to locate in far distant markets at the early stages of their internationalisation (e.g. Li & Roberts, 2012). If a 'reverse internationalisation' (Chin et al., 2016, p. 202) or a springboard strategy is also possible (Luo & Tung, 2007, 2018), e.g. to build success in far distant markets before the home market and then use their success overseas and acquired resources and experiential learning to improve their home base and compete globally, future research is needed to examine how this can explain MNEs' LC behaviour.

# 4.2 Underexplored effect of home environment on DMNEs' and EMNEs' LC

The idiosyncrasies of the environments from which MNEs originate leave a stamp on their subsequent international behaviour. DMNEs developed in a home environment where there is a free market and a private ownership system (Whitley, 1994). Private owners exercise exclusive ownership rights over their economic resources and activities, supported by the legal framework under free market laws and regulations (Ra, 2008). Conversely, a considerable proportion of EMNEs are founded and developed in a home environment undergoing institutional transition from a central planned economy to a market-based one, where firms are dominated by government ownership and monopoly power and undertake business activities in an inadequate institutional environment (Peng & Heath, 1996). For example, in China, prior to 2004, only approved state-owned enterprises could access foreign exchange; private firms were not permitted to invest overseas (Ramasamy, Yeung & Laforet, 2012). However, although there is a lack of corporate governance mechanisms, the close supervision by the central government offers state-owned enterprises preferential status; for example, they enjoy financial favouritism, privileged access to government networks, and monopoly production rights (Morck, Yeung & Zhao, 2008). This enables them to invest even in politically unstable countries where DMNEs might be less likely to enter (Duanmu, 2012; Ramasamy, Yeung & Laforet, 2012). Therefore, EMNEs' internationalisation tends to adhere to the government's plans or follow an institutional perspective in internationalisation (Morck, Yeung & Zhao, 2008). Additionally, EMNEs experience inward FDI in the home market before they invest abroad (Luo & Wang, 2012). This unique experiential learning process, steered through the interaction with DMNEs, prepares EMNEs for international expansion. For example, Luo and Wang (2012) suggest that this process facilitates EMNEs' entry into developed countries by following previous connections. These processes, derived from the EMNEs' distinct home environment, are normally absent from the traditional DMNE-based research.

Given the different home-environment endowed characteristics between DMNEs and EMNEs (e.g. different types of ownership structure, such as state-owned; Party-appointed CEOs with fixed terms; previous connections established and inward FDI experience gained by EMNEs before their outward FDI; and DMNEs' home environment change with more inward FDIs from EMNEs), future research focusing on the effect of the home environment on MNE's LC is suggested. During the economic transition, some of the preferential conditions at home for EMNEs may fade away. In turn, this may lead EMNEs to face new challenges that DMNEs might never have encountered. It is hence interesting to compare the LC behaviour patterns between state-owned and private-owned EMNEs. Concurrently, DMNEs' home environment is also changing as a result of the increasing inward FDIs not only by other DMNEs but also by EMNEs. However, little of the research in our sample investigated how the entrance of EMNEs into DMNEs' home environment affects DMNEs' LC behaviour. Hence, theoretical refinement or new development is needed. For example, moving beyond the existing focus on OLI, future research could investigate MNEs' LC from multiple theoretical lenses, such as resource, network, and institution-based perspectives, to develop new theories in addition to, or to complement, the LLL (linkage-leverage-learning, Mathews, 2006) and the springboard view (Luo & Tung, 2007, 2018). Furthermore, this study reveals that studies on DMNEs' LC cover a wide range of home economies (North America, Asia and Europe). The EMNEs in our sample are almost exclusively from Asia. Future research is called for, to broaden the focus of EMNE location research by investigating emerging market contexts across the world.

# 4.3 Understudied differences in the nature of the 'O' advantage between DMNEs' and EMNEs' LC

Marked discrepancies exist between DMNEs and EMNEs in terms of the nature of 'ownership advantage' (Dunning, 1980). DMNEs grow in developed markets where consumers enjoy high incomes and are able to purchase high-priced goods, produced by capital-intensive industries, which price-sensitive consumers in emerging markets cannot afford. This stimulates DMNEs to invest in innovation and tailor their products to consumers' requirements (Ra, 2008). Home-based innovation not only establishes a DMNE's own capabilities, but also offers it competitive advantage to enter other developed markets, and later emerging markets. Hence, the ownership advantage of DMNEs lies in *firm-specific* assets, such as technology, management, marketing know-how, and skills in managing equity finance in business development (where stock markets are the main source of corporate finance) (Casanova & Miroux, 2016; Ramasamy, Yeung & Laforet, 2012). In contrast, these

types of firm-specific ownership advantage are absent in EMNEs due to the different home environment, as discussed above.

However, EMNEs enjoy unique ownership advantages, accumulated from home country embeddedness and operations, such as political capability (skills enabling firms to obtain better conditions from the host government and regulators), relational competence (managing internal and external relationships) (Luo & Wang, 2012; Yeoh, 2011), abilities to deal with uncertainty and institutional hardship (Luo & Wang, 2012), and networking (frequent interaction with key suppliers/buyers, firms of non-related industries, financial institutions, government agents, leveraging ethnic linkages, and personal relations) (e.g. Jean, Tan & Sinkovics, 2011; Lei & Chen, 2011). However, these valuable, inimitable resources and capabilities that formed ownership advantages of EMNEs are not explained by existing theories, and hence their impact on EMNEs' LC is still underdeveloped. Furthermore, the dynamics of the changes in the aforementioned advantages during the transition and liberalisation of previously closed markets are not fully explained by the extant theories. If EMNEs leverage home-environment related ownership advantages to build firm-specific ownership advantages, e.g., by acquiring DMNEs in foreign locations, future research needs to examine how the consequent ownership advantages resulting from EMNEs' home endowment and overseas acquisition affect their future LC. It would also be interesting to examine how DMNEs develop further firm-specific ownership advantages, e.g. building institutional capabilities to better understand and analyse the location conditions in markets with different institutional environments and compete more sustainably in the global market.

## 4.4 Location of what (type of FDI) and DMNEs' and EMNEs' LC

Knowing what activities (e.g. production/manufacturing, R&D, services, HQ, sales) firms invest in abroad, namely the type of FDI, is essential for understanding the location behaviour of MNEs. Activities differ in terms of *scale sensitivity* (e.g. sales and customer service activities are less scale sensitive than production) and *knowledge intensity* (e.g. R&D) (Enright, 2009). Comparatively, cost and efficiency-related factors affect the LC of manufacturing, whereas intangible, knowledge- and value-related factors are more likely to determine the LC of R&D (Gerybadze & Reger, 1999). Hence, distinct activities may respond to the same factor differently and result in different location choices.

However, how the type of FDI affects MNE LC is not fully explored by the extant literature. Both DMNEs and EMNEs seem to follow the traditional pattern rooted in geographic and psychic distance to make the LC of manufacturing investment (e.g. Chang & Park, 2005; Fisch & Zschoche, 2012a, b; Lau, 2003). Comparatively, findings on factors

affecting the LC of R&D do not mirror the same pattern as manufacturing activities and differences exist between DMNEs and EMNEs.

Eleven articles in the DMNE sample and three in the EMNE sample look at the 'location of R&D'. Relatively, DMNEs locate their R&D in a wider range of areas than EMNEs, including developed and developing markets, as detailed in Table 3, whereas the EMNEs in the three articles are all from Taiwan and invest in China (Chen & Hsiao, 2013; Liu & Chen, 2012; Lu, 2004). DMNEs tend to invest in R&D activities not only in high cost locations, such as North America, Western Europe and Japan, even if the geographic distance between the home and the host market is large (e.g. MNEs from Denmark locate their R&D activities in North America and Japan, Jensen & Pedersen, 2011), but also in low cost locations, i.e. developing countries where both the geographical and psychic distance is large (e.g. American R&D activities reside in Brazil, Mexico, Kumar, 2001, and China, Von Zedtwitz, 2004). Compared to DMNEs, Taiwan-based EMNEs are relatively new players in outward R&D internationalisation, and the parent firms in Taiwan are Chinese subsidiaries' main source of technology (Liu & Chen, 2012). Therefore, geographical and linguistic proximity can help to reduce the technology transfer cost underpinning R&D activities overseas (Liu & Chen, 2012; Lu, 2004). Notably, attention should be paid to the differences in the impact of factors on the LC of R&D. R-based activities aim at the exploitation of foreign advanced knowledge; hence, the host country's knowledge stock or a location in close proximity to universities or research institutions will positively affect the LC of both DMNEs and EMNEs (e.g. Liu & Chen, 2012; Shimizutani & Todo, 2008). D-based activities must be close to customers, and are thus likely to be influenced by the market-related factors of the host country for both DMNEs and EMNEs (e.g. Liu & Chen, 2012; Von Zedtwitz, 2004).

LCs vary across activities. In our sample, only one article (Enright, 2009) compared the location choices of different activities for manufacturing firms. This may also explain the gaps in the current knowledge on location decisions related to different activities and why inconsistent findings exist. We suggest that further research be dedicated to the 'location of what' in a comprehensive manner, encompassing all activities located abroad by MNEs. This study also recommends that comparative studies be conducted on the impact of the 'location of what' on the LC between DMNEs and EMNEs. These may provide further insights into MNEs' LC behaviour.

#### 4.5 Data and methodology

The majority of the articles reviewed employed a quantitative approach (86%) and a similar pattern was found in studies of both DMNEs and EMNEs. Only one study in the DMNE group (Gerybadze & Reger, 1999) and four studies in the EMNE group (Chen, 2003; Lau, 2003; Lu, 2004; Pananond, 2013) collected qualitative interview data, with several senior managers from the same firm conferring increased data validity from a firm perspective. While the outcomes of these studies have helped to progress the LC literature considerably, the LC decision-making process of managers remains unclear. This implies an important area for future research, as the existing studies, through adopting either a quantitative or a qualitative approach, make assumptions about the rules used by firms to make LC decisions, 'yet the decisions are made by boundedly rational managers' (Buckley et al., 2007, p. 1069). While most studies used secondary data (73%), primary data are more likely to be used in studies on EMNEs (33%) than DMNEs (17%). This supports our findings that compared to DMNEs, EMNEs are relatively new players in outward FDI; hence, there is a lack of secondary data on this relatively new phenomenon. A focus on primary data collection would allow researchers to investigate factors not yet captured by secondary data sources. In addition, the FDI LC as a dependent variable is measured in various ways in the studies of both DMNEs and EMNEs, such as the number of FDI entries (e.g. Li & Yao, 2010), the share of foreign R&D expenditure (e.g. Gerybadze & Reger, 1999), a dummy variable (1 if FDI conducted, 0 if not; e.g. Zhou, 2015), or the percentage of foreign equity ownership (e.g. Pan, 1997). FDI LC is a complex concept with multiple facets, so there clearly cannot be a single FDI measure. However, while future studies could explore the possibility of defining multiple measures, a consistent measure of FDI across similar studies is important to facilitate comparative analyses of FDI LC with a view to increasing the accuracy, validity and generalisation of findings on factors affecting MNE FDI LC.

While narrowing down to the group of quantitative studies, very similar results were found across DMNEs and EMNEs; namely, the use of longitudinal data is slightly higher (58%) than the use of cross-sectional data (42%). There is no clear evidence to indicate that the latest studies are more likely to use longitudinal or cross-sectional data than earlier studies in our review of MNE LC over 36 years. Indeed, the scarcity of data may constrain the research design. It can be inferred that there is a lack of longitudinal data on MNEs' LC in numerous emerging economies, hence rendering longitudinal studies on EMNEs more challenging.

To analyse the quantitative data, a variety of statistical methods are used, such as regression analysis, correlation analysis, ANOVA, MANOVA and so on; however,

regression analyses prevail in both the DMNE and the EMNE groups. While we note that many of the studies reviewed here employ sophisticated statistical analyses to test their assumptions, we echo prior calls for new and advanced methods (e.g. Buckley et al., 2007) with a view to generating more reliable results.

Among the quantitative studies, few (6 in DMNEs, 12%, and 5 in EMNEs, 19%) conducted a form of causality/endogeneity test. Findings derived from studies where the causality bias is unaddressed may provide limited insights into the empirical execution of MNEs' LC decisions. For example, when the direction of causation between the explanatory variables and the FDI LC is uncertain and reverse causality may exist, the association between cause and effect produced by regression models is subject to bias. These biased estimations may lead to misleading interpretations regarding MNEs' LC decisions. Researchers used different methods to control for the causality issue in the reviewed studies, e.g. using lagged values (e.g. Dai, Eden & Beamish, 2013; Jean, Tan & Sinkovics, 2011; Oh & Oetzel, 2011) or Heckman's (1979) two-step estimation procedure (Chen & Hsiao, 2013). However, the findings show that the number of studies that controlled for causality bias in our sample is rather limited. Therefore, we would encourage future research to alleviate the causality problems that may be inherent in their data sets, thus potentially generating consistent and reliable results on MNE LC.

In sum, the rise of EMNE FDI and the evolution of DMNE LC strategies challenge the fundamentals of internationalisation theories. In addition to the underdeveloped areas discussed above, the findings from this study demonstrate that understanding location requires the consideration of three levels of factors in regard to location decisions: individual (managerial), firm (stages of internationalisation, ownership structure, location of what, and different nature of ownership advantage) and context (home, host, sub-national, regional, supranational, and networking), as shown in Figure 2. A comprehensive approach encapsulating these three levels would help to identify what, when, how, and why these factors may generate different impacts on the LC of DMNEs and EMNEs, a missing value in the existing literature.

------Insert Figure 2 here-----

#### 5. Conclusion

This study contributes to the existing IB literature by revealing the similarities and differences between DMNEs and EMNEs in their location behaviour based on a systematic review of studies spanning the past 36 years. Our findings reveal that DMNEs differ from

EMNEs, with some factors even having opposite impacts on the LC of the two groups. The idiosyncrasies of the environments from which MNEs originate motivate their different stages of internationalisation and the varying nature of ownership advantage (firm-specific for DMNEs as compared to home country and network based for EMNEs). However, LC is a complex decision, tightly linked to the decision-maker (individual/managerial), firm (investing activity, ownership structure, internationalisation stages, 'O' advantage), and context (home, host markets, and regional/supranational/networking environment) where the investment takes place. Although an approach integrating all aspects and levels of observation is difficult to achieve, such a study could better explain both DMNE and EMNE LC. We call for future research to fill the knowledge gaps reviewed by this study. While this systematic review is based on studies in the areas of business and management, future research with a wider coverage and from different disciplines<sup>2</sup> (e.g. economics, psychology, and politics) is encouraged to provide further insights on MNEs' LC. Such research would entail refining the existing theories or developing new ones to explain the different location behaviour across DMNEs and EMNEs. Further attention should be paid to underdeveloped areas, such as 'location of what', 'firm managerial' factors, the different internationalisation stages, and the varying nature of 'O' rooted in DMNEs and EMNEs.

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# **Appendix:**

Table 1. Inclusion criteria

No.	Inclusion criteria	Reasons for inclusion
1	Empirical studies	Capture key themes of research on location choice
2	Between 1980 to 2016	Ensure the coverage of most recent research in IB
		(Dunning's OLI, 1983)
3	All industries	Ensure the width of research in IB
4	Quantitative and qualitative	Capture all empirical evidence
5	All countries	Focus on 'location' in a global arena
6	MNE focused	In line with the OLI
7	IB focused	Aim of the paper (non IB focused areas, e.g. political
		research, supply chain, IT, retailing, HR are excluded)

Table 2. A summary of journals and number of articles included in the review

Journals	N	Number of articles						
	DMNEs	EMNEs	Per journal					
1. Journal of international business studies (JIBS)	15	3	18					
1. Strategic management journal (SMJ)	11	2	13					
2. Journal of world business (JWB)	4	5	9					
3. Research policy (RP)	7	1	8					
4. Journal of international management (JIM)	5	3	8					
5. International business review (IBR)	1	5	6					
6. Journal of management studies (JMS)	3	1	4					
7. Management international review (MIR)	2	1	3					
8. Journal of business research (JBR)		3	3					
9. Long range planning (LRP)	2		2					
10. Global strategy journal (GSJ)	1	1	2					
11. R&D management (RDM)	1	1	2					
12. International marketing review (IMR)		2	2					
13. California management review (CMR)	1		1					
14. Administrative science quarterly (ASQ)	1		1					
15. Asia Pacific journal of management (APJM)		1	1					
16. Management and organization review (MOR)		1	1					
	54	30	84					

**Table 3. Characteristics of studies reviewed (DMNEs)** 

No.	Authors (surname/year)	Source	Home Country	<b>Host Country</b>	Method	Location of what
1	Davidson (1980)	JIBS	US	Mixed*	Quantitative	Manufacturing
2	Benito & Gripsrud (1992)	JIBS	Norway	Mixed	Quantitative	Manufacturing
3	Hakanson & Nobel (1993)	RP	Sweden	Mixed	Quantitative	R&D
4	Bartmess & Cerny (1993)	CMR	US	Not specified^	Qualitative	Manufacturing
5	Martin, Mitchell & Swaminathan (1995)	SMJ	Japan	US	Quantitative	Manufacturing
6	David & Stephen (1995)	JIBS	US	Mixed	Quantitative	Not explicitly mentioned
7	Forsgren, Holm & Johanson (1995)	JMS	Sweden	Mixed	Quantitative	Divisional HQ
8	Chiesa (1995)	LRP	US, EU, Japan	Mixed	Qualitative	R&D
9	Banerji & Sambharya (1996)	JIBS	Japan	US	Quantitative	Manufacturing
10	Pan (1997)	SMJ	Japan and US	China	Quantitative	Not explicitly mentioned
11	Gerybadze & Reger (1999)	RP	Germany, Switzerland, Netherlands, Japan and US.	Not specified	Qualitative	R&D
12	Patel & Vega (1999)	RP	UK, Germany, Switzerland, France, Sweden. Japan, US, Canada	US	Quantitative	Manufacturing
13	Shaver & Flyer (2000)	SMJ	Canada, France, Germany, Japan, and the UK	US	Quantitative	Manufacturing
14	Henisz & Delios (2001)	ASQ	Japan	Mixed	Quantitative	Manufacturing
15	Kumar (2001)	RP	US, Japan	Mixed	Quantitative	R&D
16	Ito & Rose (2002)	JIBS	US	Mixed	Quantitative	Not provided
17	McKelvey, Alm & Riccaboni (2003)	RP	Sweden	Mixed	Qualitative	R&D
18	Globerman & Shapiro (2003)	ЛВS	US	Mixed	Quantitative	Not explicitly mentioned
19	Feinberg & Gupta (2004)	SMJ	US	OECD countries	Quantitative	R&D
20	Von Zedtwitz (2004)	RDM	US, Japan and others	China	Qualitative	R&D
21	Ambos (2005)	RP	Germany	Mixed	Quantitative	R&D

22	Pak & Park (2005)	JWB	Japan	Mixed (US and China)	Quantitative	Manufacturing
23	Belderbos & Sleuwaegen (2005)	SMJ	Japan	Mixed (US, EU, and Asia)	Quantitative	Manufacturing
24	Galan & Gonzalez-Benito (2006)	JWB	Spain	Latin America	Quantitative	Not explicitly mentioned
25	Bunyaratavej, Hahn & Doh (2007)	JIM	US	Mixed	Quantitative	Service
26	Buckley, Devinney, & Louviere (2007)	ЛВS	Australia, Denmark and US	Not specified	Quantitative & Qualitative	Not explicitly mentioned
27	Flores & Aguilera (2007)	JIBS	US	Mixed	Quantitative	Not explicitly mentioned
28	Galan, Gonzalez-Benito & Zunga- Vincente (2007)	JIBS	Spain	Mixed (Latin America and EU countries)	Quantitative	Mixed (manufacturing and service)
29	Bunyaratavej, Hahn & Doh (2008)	JWB	US	Mixed	Quantitative	Service
30	García-Canal & Guillén (2008)	SMJ	Spain	Mixed (Latin American countries)	Quantitative	Not explicitly mentioned
31	Chung & Yeaple (2008)	SMJ	US	Mixed	Quantitative	R&D
32	Shimizutani & Todo (2008)	RP	Japan	Mixed	Quantitative	R&D
33	Zaheer, Lamin & Subramani (2009)	JIBS	US and others	India	Quantitative	Service
34	Enright (2009)	ЛВS	North America, EU and Japan	12 economies in the Asia Pacific region	Quantitative	Mixed (sales, service, production and R &D)
35	Belderbos, Van Olffen & Zou (2011)	SMJ	Japan	China	Quantitative	Manufacturing
36	Hahn, Bunyaratavej & Doh(2011)	MIR	US and EU	Mixed	Quantitative	Service
37	Oh & Oetzel (2011)	SMJ	12 EU countries	Mixed	Quantitative	Not explicitly mentioned
38	Mataloni (2011)	JWB	US	Mixed (Australia, China, Japan, South Korea)	Quantitative	Manufacturing
39	Jensen & Pedersen (2011)	JMS	Denmark	Mixed	Quantitative	Mixed (Manufacturing, R&D, and services)
40	Benito Lunnan & Tomassen (2011)	JMS	Norway	Not specified	Quantitative	Divisional HQ
41	Alcantara & Mitsuhashi (2012)	JIM	Japan	Mixed	Quantitative	Manufacturing
42	Fisch & Zschoche (2012)			Mixed (EU countries and East Asia etc.)	Quantitative	Manufacturing
43	Fisch & Zschoche (2012)	IBR	Germany	Mixed (30 EU countries)	Quantitative	Manufacturing
44	Dai, Eden & Beamish (2013)	JIBS	Japan	Mixed	Quantitative	Not explicitly mentioned

45	Arregle at al. (2013)	SMJ	Japan	Mixed	Quantitative	Not explicitly mentioned
46	Goerzen, Asmussen, & Nielsen (2013)	ЛВS	Japan	Mixed	Quantitative	Mixed (production, service, sales and others)
47	Schotter & Beamish (2013)	ЛВS	Japan	Mixed	Quantitative & Qualitative	Not explicitly mentioned
48	Asmussen & Goerzen (2013)	GSJ	Japan	Mixed	Quantitative	Not explicitly mentioned
49	Pan et al. (2014)	JIM	US	China	Quantitative	HQ
50	Jory & Ngo (2014)	JIBS	US	Mixd (China, France, Poland, UK, Canada etc.)	Quantitative	Not explicitly mentioned
51	Baier, Rammer & Schubert (2015)	JIM	Germany	China	Qualitative	R & D
52	Baaij et al. (2015)	LRP	Dutch	Not specified	Quantitative &Qualitative	HQ
53	Fernández-Méndez, García-Canal & Guillén (2015)	JIM	Spain	Mixed	Quantitative	Not explicitly mentioned
54	Yao & Li (2016)	MIR	US	China	Quantitative	Mixed (manufacturing and service)

<sup>\*</sup>Mixed: the located destinations (host countries) are a mixture of developed and emerging countries (either specified/or not the exact names of the host countries); ^Not specified: does not clarify targeting developed or emerging countries

**Table 4 Characteristics of studies reviewed (EMNEs)** 

No.	Authors (surname/year)	Source	Home Country	<b>Host Country</b>	Method	Location of 'What'
1	Chen & Chen (1998)	JIBS	Taiwan	Mixed (US, Thailand, Malaysia, China)	Quantitative	Manufacturing
2	Makino, Lau & Yeh (2002)	JIBS	Taiwan	Mixed	Quantitative	Manufacturing
3	Chen (2003)	JMS	Taiwan	Malaysia, China, Mexico	Qualitative	Manufacturing
4	Lau (2003)	JBR	China	Developing Asian countries	Qualitative	Mixed (manufacturing and sales)
5	Chen, Chen & Ku (2004)	JIBS	Taiwan	Mixed (US, China, Thailand, Malaysia, Philippine, Vietnam)	Quantitative	Manufacturing
6	Lu (2004)	R&DM	Taiwan	China	Mixed method	R& D
7	Chang & Park (2005)	SMJ	South Korea	China	Quantitative	Manufacturing
8	Strange <i>et</i> al. (2009)	MIR	Taiwan	China	Quantitative	Manufacturing
9	Li & Yao (2010)	JIM	From 32 emerging markets	China	Quantitative	Manufacturing
10	Demirbag, Tatoglu & Glaister (2010)	IMR	Turkey	Mixed	Quantitative	Manufacturing
11	Yuan & Pangarkar (2010)	IMR	China	Mixed	Quantitative	Not explicitly mentioned
12	Jean, Tan & Sinkovics (2011)	IBR	Taiwan	China	Quantitative	Not explicitly mentioned
13	Lei & Chen (2011)	IBR	Taiwan	China and Vietnam	Quantitative	Not explicitly mentioned
14	Yeoh (2011)	IMR	India	Mixed	Qualitative	Manufacturing
15	Quer, Claver & Rienda (2012)	r, Claver & Rienda (2012) APJM China Mixed		Mixed	Quantitative	Mixed (manufacturing and service)
16	Yang & Hyland (2012) JIM China			Mixed	Quantitative	Mixed (Manufacturing and service)
17	Luo & Wang (2012) GSJ China		Mixed	Quantitative	Manufacturing	
18	Chen & Yeh (2012)	n & Yeh (2012) JBR Taiwan China		China	Quantitative	Manufacturing
19	Liu & Chen (2012)	RP	Taiwan	China	Quantitative	R&D

20	Zhu et al. (2012)	IBR	Emerging-market (Asian banks)	`		Service
21	Ramasamy, Yu & Laforet (2012)	JWB	China	Mixed	Quantitative	Not explicitly mentioned
22	Kang & Jiang (2012)	JWB	China	Developing countries	Quantitative	Not explicitly mentioned
23	Duanmu (2012)	JWB	China	Mixed	Quantitative	Mixed (manufacturing and service)
24	Pananond (2013)	ananond (2013) JIM Tair		Thailand	Qualitative	Mixed (manufacturing and R&D
25	Chen & Hsiao (2013)	JWB	Taiwan	China	Quantitative	R&D
26	Duanmu (2014)	IBR	BRICs	Mixed	Quantitative	Mixed (manufacturing and service)
27	Lien & Filatotchev (2015)	JWB	Taiwan	China	Quantitative	Not explicitly mentioned
28	Lo & Lin (2015)	JBR	Taiwan	Not specified	Quantitative	Manufacturing
29	Zhou (2015)	SMJ	China	Mixed	Quantitative	Not explicitly mentioned
30	Jindra & Hassan & Cantner (2016)	IBR	A variety of emerging economies	Mixed EU countries	Quantitative	Mixed (manufacturing and service)

Table 5: Home market, host market, type of FDI, and data and methodology

		Host	market			Type of FDI Data and methodolog					gy								
Home market	Develop ed	Emerg ing	Mixed	Not specified	Manufact uring		Service	HQ	Mixed	Not explicitly	Т	ype of da	ta	Rese	earch appr	oach	Data co	llection	Causation test (quan.)
	cu	mg		specified	uring			110		mentioned	Pri.#	Sec.@	P&S."	Qan.*	Qua.^	MixM.	Cros.\$	Long.~	Yes
Developed	5	9	35	5	15	11	4	4	5	15	9	42	3	47	5	2	21	28	6
(n = 54)	(9.3)	(16.6)	(64.8)	(9.3)	(27.8)	(20.4)	(7.4)	(7.4)	(9.3)	(27.8)	(16.7)	(77.8)	(5.5)	(87.0)	(9.3)	(3.7)	(42.9)	(57.1)	(12)
Emerging	1	14	14	1	12	3	1	0	7	7	10	19	1	25	3	2	11	16	5
(n=30)	(3.3)	(46.7)	(46.7)	(3.3)	(40)	(10)	(3.3)		(23.3)	(20)	(33.3)	(63.3)	(3.3)	(83.3)	(10.0)	(6.7)	(40.7)	(59.3)	(19)

Note: The figures in brackets are percentages.

#Primary; @Secondary; "Primary and Secondary; \*Quantitative; ^Qualitative; 'Mixed Methods; \$ Cross sectional; ~ Longitudinal

Table 6: Classification, frequency of key factors, and the source of studies on DMNE and EMNE LC

I 'ad a Cara a' al la a	Freq	uency	Articles	
List of variables	DMNE	EMNE	DMNE	EMNE
External				
National level (Host)				
Economic				
Demand side				
Market size, growth, productivity, and stages of economic development	9	1	Flores & Aguilera (2007); Globerman & Shapiro (2003); Shimizutani & Todo (2008); Enright (2009); Kumar (2001); Belderbos & Sleuwaegen (2005); Henisz & Delio (2001); Hahn, Bunyaratavej & Doh (2011); Galan, Gonzalez-Benito & Zunga-Vincente (2007)	Duanmu (2012)
Supply side				
Local infrastructure (physical, human, knowledge)	6	1	Globerman & Shapiro (2003); Flores & Aguilera (2007); Enright (2009); Bunyaratavej, Hahn & Doh (2007); Bunyaratavej, Hahn & Doh (2008); Chung & Yeaple (2008)	Demirbag, Tatoglu & Glaister (2010)
Host country risk (political, economic, financial, disaster)	2		Hahn, Bunyaratavej & Doh (2011); Oh & Oetzel (2011)	
Labour cost (wages)	9	3	David & Stephen (1995); Kumar (2001); Bunyaratavej, Hahn & Doh (2008); Shimizutani & Todo (2008); Belderbos & Sleuwaegen (2005); Hahn, Bunyaratavej & Doh (2011); Flores & Aguilera (2007); Bunyaratavej, Hahn & Doh (2007); Fisch & Zschoche (2012)	Duanmu (2012); Duanmu (2014); Kang & Jiang (2012)
Institutional		3	Bunyaratavoj, ritaini & Bon (2007), ritsen & Eschoene (2012)	
Regulative (legislation, regulation, legal and political system)	6	3	Globerman & Shapiro (2003); David & Stephen (1995); Flores & Aguilera (2007); Fernandez-Mendez; Garcia-Canal & Guillen (2015); Alcantara & Mitsuhashi (2012); Jory & Ngo (2014)	Demirbag, Tatoglu & Glaister (2010); Kang & Jiang (2012); Quer, Claver & Rienda (2012)
Normative (cultural distance, cultural similarity, cultural affinity)	9	2	Ambos (2005); Flores & Aguilera (2007); Pan (1997); Galan, Gonzalez-Benito & Zunga-Vincente (2007); Galan & Gonzalez-Benito (2006); Yao & Li (2015); Bunyaratavej, Hahn & Doh (2007); Dai, Eden & Beamish (2013); Hahn, Bunyaratavej & Doh (2011)	Quer, Claver & Rienda (2012); Kang & Jiang (2012)
Cognitive (intensity of business transactions, mimetic isomorphism)	3	5	Ito & Rose (2002); Henisz & Delio (2001); Banerji & Sambharya (1997)	Yuan & Pangarkar (2010); Demirbag, Tatoglu & Glaister (2010); Zhu et al., (2012); Yang & Hyland (2012); Kang & Jiang (2012)
Sub-national(Host)				
Clustering of similar industry	3	1	Shaver & Flyer (2000); Mataloni (2011); Zaheer, Lamin & Subramani (2009)	Zhu et al., (2012)

Wage	1		Mataloni (2011)	
Education	1		Mataloni (2011)	
Transportation infrastructure	1		Mataloni (2011)	
Variation of R&D resources	1	1	Von Zedtwitz (2004)	Liu & Chen (2012)
Home market factors				
Market and industry structure at			Pak & Park (2005); Banerji & Sambharya (1997); Martin, Mitchell &	
home	3		Swaminathan (1995)	
Home base		1		Zhou & Guillen (2015)
Competitive pressure at home		1		Luo & Wang (2012)
Home market economic growth		1		Luo & Wang (2012)
Institutional hardship at home		1		Luo & Wang (2012)
Inward FDI at home		1		Luo & Wang (2012)
Business development stage at				Luo & Wang (2012)
home		1		
Innovation orientation at home		1		Luo & Wang (2012)
Regional/supranational and networking				
Global cities	1		Goerzen, Asmussen & Nielsen (2013)	
Prior regional investment	1		Arregle et al. (2013)	
Region-related institutions	1		Arregle et al. (2013); Fernandez-Mendez; Garcia-Canal & Guillen (2015)	
(regulatory, political democracy,				
economic investment, market				
volatility)	2			
Qualitative factors (value drivers,			Gerybadze & Reger (1999); Chiesa (1995)	
opportunities, critical asset base)	2			
Ability of local destination to			Hahn, Bunyaratavej & Doh (2011)	
accommodate inward FDI	1			
Networking or external linkage			Ambos (2005); Battmes & Cerny (1993)	Chen &Chen (1998); Jean, Tan &
	2	6		Sinkovics (2011); Strange et al., (2009);
	2	O		Chen (2003); Lei & Chen (2011); Chen,
				Chen & Ku (2004)
Internal				
Firm-based				
	_	_	Ito & Rose (2002); Enright (2009); Banerji & Sambharya (1997);	
Firm size	7	2	Belderbos & Sleuwaegen (2005); Oh & Oetzel (2011); Flores & Aguilera (2007); Benito, Lunnan & Tomassen (2011)	Lei & Chen (2011); Quer, Claver & Rienda (2012)

International experience	5	2	Ito & Rose (2002); Enright (2009); Garcia-canal & Guillen (2008); Henisz & Delio (2001); Belderbos & Sleuwaegen (2005)	Yang & Hyland (2012); Lei & Chen (2011)
Firm-specific resources	3	4	Asmussen & Goerzen (2013); Belderbos & Sleuwaegen (2005); Globerman & Shapiro (2003);	Lei & Chen (2011); Yeoh (2011); Lo & Lin (2015); Demirbag, Tatoglu & Glaister (2010)
Firm's competitiveness	1		Belderbos & Sleuwaegen (2005)	
Ownership structure (parent company and subsidiary)	1	4	Garcia-canal & Guillen (2008)	Duanmu (2012); Lien & Filatotchev (2015); Ramasamy, Yeung & Laforet (2012); Strange et al., (2009)
Firm-Managerial	2		Buckley et al., (2007); Schotter & Beamish (2013)	
Relocation of HQ, Divisional HQ or establishing host country HQ				
Corporate (HQ)				
Degree of internationalisation	4		Forsgren, Holm & Johanson (1995); Benito, Lunnan & Tomassen (2011); Baaij, Mom & Van Den Bosch (2015); Pan et al. (2014)	
Size	1		Benito, Lunnan & Tomassen (2011)	
Diversification	2		Benito, Lunnan & Tomassen (2011); Pan et al. (2014)	
Degree of embeddedness in home country	1		Benito, Lunnan & Tomassen (2011)	
Attractiveness of home country	1		Baaij, Mom & Van Den Bosch (2015)	
Strategic importance of the host country	1		Pan et al., (2014)	
Industry	1		Benito, Lunnan & Tomassen (2011)	
Ownership concentration and state ownership	1		Benito, Lunnan & Tomassen (2011)	
Division or subsidiary				
Degree of internationalisation	1		Forsgren, Holm & Johanson (1995)	
Diversification	1		Pan et al.(2014)	
The dominance of a single subsidiary in a division	1		Forsgren, Holm & Johanson (1995)	
The division dominance in corporate	1		Forsgren, Holm & Johanson (1995)	

Figure 1: Time period comparison (DMNEs vs EMNEs)

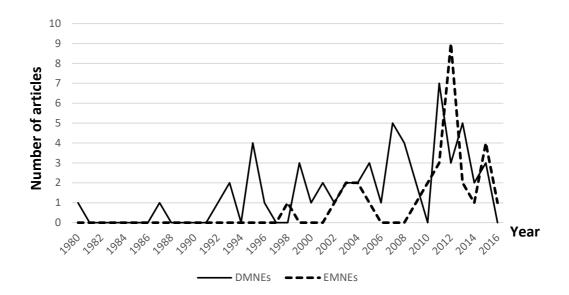


Figure 2: Synopsis of findings: factors affecting MNEs' location choice behaviour

