Management International Review (2022) 62:711–739
https://doi.org/10.1007/s11575-022-00481-2

mir
Management
International Review

RESEARCH ARTICLE

History Matters: Colonial-Based Connectivity and Foreign Headquarter Location Choice

Ana Botella Andreu[1] · **Katiuscia Lavoratori**[2]

Received: 7 June 2021 / Revised: 18 May 2022 / Accepted: 27 June 2022 /
Published online: 26 August 2022

Abstract

In this study, we argue that European countries' extensive relationships with former colonies represent a location factor that attracts foreign headquarter investments. The strategic role of foreign headquarters as coordinators, opportunity detectors, and global bridgeheads makes the location choice of headquarter activities sensitive to historical-based institutional connections. Drawing on a sample of 2230 foreign headquarter investments in Europe, we find that the stronger the combined effect of historical connections and current economic relationships with former colonies, the higher the probability of attracting headquarter investment projects. We refer to this combined characteristic as *colonial-based connectivity*. The study findings support the hypothesis that past colonial relationships and historical context influence FDI decisions and location preferences. We contribute to the literature by advancing the understanding of foreign headquarter location choices, and by demonstrating the importance of historical context in international business research. We emphasize how the former colonial influence continues to confer advantages upon some countries, including the attraction of FDI.

Keywords Foreign headquarters · Location choice · Foreign direct investment · Colonial links · Institutions · Intermediate headquarters

✉ Katiuscia Lavoratori
k.lavoratori2@henley.ac.uk

Ana Botella Andreu
Ana.Botella@uv.es

[1] University of Valencia, Av. Dels Tarongers, 46022 Valencia, Spain

[2] Henley Business School, University of Reading, Whiteknights, Reading RG6 6UD, UK

1 Introduction

Many European countries were deeply involved in colonialism in the past, with some exerting and wielding tremendous economic and political influence over the years as colonial centers. As a result, associations persist in the form of special economic connections (UNCTAD, 2016), concessions for ease of business practice (Jones & Khanna, 2006), or strong FDI links (Haberly & Wojcik, 2015) between Europe and its former colony countries. It is not a coincidence that these special connections and the ease of doing business in the former colonies accord privileges to some European countries in influencing the attraction of FDI.

However, the role that these connections with former colonies play in making a host country more attractive as an FDI recipient from foreign firms has received little attention in international business (IB) studies. This is particularly true for FDI used to establish affiliates that provide headquarter (HQ) activities to the other businesses of the foreign investors (intermediate or regional headquarters; Pla-Barber et al., 2021). Given the sensitivity of these activities for the company, and the importance of receiving and maintaining such FDI establishments for the host countries, it is imperative and relevant that we improve our understanding of the factors that drive FDI location choices for such activities (fDi Intelligence, 2020). This is particularly true for European countries whose governments intensively subsidize investments in high value-added activities by multinational corporations (MNCs), as a means of retaining their location advantages for those activities. This study intends to fill these gaps by investigating the extent to which a host country's connections to its former colonies acts as a location factor for foreign investments in headquarter activities of MNCs.

Previous studies show that foreign HQs are highly mobile (Benito et al., 2011; Laamanen et al., 2012), although HQ location decisions have only recently started to receive scholarly attention (Belderbos et al., 2017). Foreign HQ location choice is extremely sensitive to the institutional characteristics of host countries (Valentino et al., 2019; Zhou, 2015). However, few studies have gone beyond institutional quality to highlight the importance of relationships across countries (Li et al., 2018), or their historical contexts (Glaister et al., 2020; Makino & Tsang, 2011) as institutional cornerstones for attracting FDI. This is because beyond coordinating and controlling, HQ activities include knowledge brokering and expanding the MNC network across regions (Alfoldi et al., 2012). Thus, as they entail high value-added activities, a deeper investigation of the attributes affecting foreign HQ mobility becomes critical to help policy-makers and managers derive clearer implications of their decisions.

In this study, we examine the role of connections based on historical ties between countries as conduits for connecting regions, and as a factor affecting MNCs' decisions on the location of their foreign HQ activities. In other words, we propose that an MNC's foreign HQ investment decision tends to favor European countries with extended influence, and institutional and economic connections with former colonies, over European countries without them.

To address this, we introduce the concept of *colonial-based connectivity* as a characteristic of some European countries that have established connections with their former colonies outside their own region. These connections are based on historical ties, and have been sustained over time through ongoing economic, political, and cultural influence and interaction. Consequently, common formal rules have been developed over time, in the form of agreements, treaties and collaborations, that facilitate access from Europe to countries in Africa, Asia and Latin America. Based on this, our study introduces colonial-based connectivity as a new explanatory variable; this is a location factor that combines historical and economic connections between countries, as a determinant of the location choice of foreign HQs within the European region. We emphasize the historical and economic dimensions and the resultant connectivity as factors that work together to foster colonial-based connectivity. In other words, we investigate whether European countries' extensive vivid connections with former colonies represent a characteristic that attracts foreign HQ investment to Europe.

We build on the institutional theory proposed by North (1990) to develop our hypothesis, and empirically test it by drawing on a database of 2230 foreign greenfield investments in HQ activities in Europe, undertaken by MNCs in the period 2003–2016. The empirical findings strenuously support the importance of relationships between European countries and their former colonies, in driving the location decisions of foreign HQ investments in Europe. We control for a rich set of traditional factors affecting the location choice of foreign HQ activities, such as institutional quality, and economic and non-economic location characteristics. The results hold against a set of robustness checks.

This study makes a three-fold contribution to the literature. First, we respond empirically and theoretically to recent calls to understand where foreign HQs locate (Valentino et al., 2019). Beyond physical and knowledge connectivity (Belderbos et al., 2017; Castellani et al., 2021), foreign HQ activities appear sensitive to a variety of other dimensions and, specifically, they seem to attribute value to historical cross-regional connections. Theoretically, this is related to the roles that foreign HQs develop beyond controlling and coordinating subsidiaries. Second, our study relates to the literature on the role of institutions for international management and business (Aguilera & Grogaard, 2019; Cuervo-Cazurra et al., 2019) and the recurring need for a more fine-grained operationalization of the institutional dimensions relevant to MNC decisions. We establish that a country's historical linkages with its former colonies provide grounds for formal and informal institutional connections between these countries, that persist over time and fuel their current economic exchange relationships; thereafter, we introduce colonial and economic relationships as relevant factors that influence MNCs' FDI decisions. Furthermore, we review a systematically under-investigated dimension in IB, examining evidence that prior colonial relationships and historical context influence FDI decisions (Jones & Khanna, 2006), and generate location preferences toward some countries (Glaister et al., 2020; Makino & Tsang, 2011). These path-dependent interactions between countries create conduits between regions, and facilitate access to other markets, thereby reducing uncertainty for further international operations and signaling more familiar institutional landscapes for firms.

The rest of the paper is organized as follows. The next sections develop the theoretical framework and the colonial-based connectivity concept. The fourth and fifth sections describe the data employed in the empirical analysis and econometric strategy. The sixth section discusses the empirical results and conducts a rich set of robustness checks, while the final section concludes the paper.

2 Literature Review

2.1 The Location Choice of Foreign Headquarter Activities

Foreign headquarters are the result of the geographical dispersion of headquarter activities due to the increasing complexity of MNCs in the international context (Kunisch et al., 2019). They are defined as intermediate units located between the corporate headquarters (corporate HQs) and other subsidiaries, in terms of strategy and structure (Pla-Barber et al., 2021). The concept of foreign headquarters includes any type of headquarters different from the corporate HQs, like regional or divisional HQs. While corporate HQs seem to be "sticky" as they stick to their home countries (Meyer & Benito, 2016), foreign headquarters are highly mobile (Laamanen et al., 2012; Valentino et al., 2019). Their location choices appear to be particularly sensitive to institutional context characteristics (Valentino et al., 2019; Zhou, 2015). For example, impartial and transparent legal systems, or the supply of specialized services are characteristics of high-quality institutions that are attractive to foreign headquarters. The general perception is that the quality of institutions matters, such as "the more the better" (Valentino et al., 2019). Other studies focus on a combination of institutional factors and physical international connections that affect foreign headquarters' location choices (Belderbos et al., 2017; Castellani et al., 2021).

The above studies assume that foreign headquarters have specific roles and therefore, certain location characteristics are valuable for developing those roles. In this sense, while corporate HQs usually focus on activities related to the company's legal domicile (including MNC accounting, legal tasks, or resource allocation decisions), foreign headquarters are observed to develop three different roles. The first one is the traditional role of coordinator and controller over the existing subsidiaries, operations, or areas of influence beyond the limits of the corporate HQ. Related functions are monitoring regional markets, consolidating budgets, accounting and finance, and reporting to the corporate HQ (Alfoldi et al., 2012; Enright, 2005; Pla-Barber et al., 2021).

The second is their role as nodes or hubs for knowledge and information, essentially as knowledge brokers in multinational networks (Lunnan & Zhao, 2014). As a result of coordinating operations in distant locations, foreign headquarters usually pick up and transfer information between the host and home regions (Asakawa & Lherer, 2003; Li et al., 2010; Budhwar, 2012; Edgington and Hayter, 2013; Amman et al., 2014). This intermediate position in terms of knowledge management permits the improvement of information flow and connections between MNC locations. Lately, the knowledge broker function has been conferred on those units endowed

with important cross-regional knowledge stocks for international operations (Kostova, 2016; Hutzenreuter & Matt, 2017). Third, because of the first and second functions, foreign headquarters have become opportunity detectors (Hoenen et al., 2014), international boundary spanners (Schotter et al., 2017a, b), and have developed important entrepreneurial functions as bridgeheads between regions (Hoenen et al., 2014; Pla-Barber et al., 2018, 2021).

The last two functions have received much less attention from empirical studies compared to the number of studies dealing with foreign headquarters' coordinative and control functions (Schotter et al., 2017a, b). For instance, Zhou, (2015) shows how these units are located in more institutionally stable countries; supervision and monitoring activities require sound institutional infrastructure to reduce the costs of coordinating. In this sense, although it is indisputable that foreign headquarters location choice is sensitive to institutional quality (Laamanen et al., 2012; Valentino et al., 2019), knowledge brokering, boundary spanning and the "bridgeheading" functions are closely associated with the need for better-connected environments (Belderbos et al., 2017; Pla-Barber et al., 2018).

Lately, the second and the third roles (boundary spanner and bridgehead), are becoming very relevant for MNCs and a prominent means for foreign headquarters to create value (Kunisch et al., 2020). This is because digitalization is smoothing the process of controlling foreign subsidiaries, and foreign headquarters are focusing on the spanning of MNC activity. This third role includes functions such as scouting and developing new businesses (Lasserre, 1996), addressing market entry (Yeung et al., 2001) and bridging operations between regions (Holt et al., 2008; Pla-Barber & Camps, 2012; Pla-Barber et al., 2021). In the literature, we find few examples of this particular role. For instance, Pla-Barber et al. (2018) report the substantial presence of European regional HQs in Spain; MNCs value these HQs highly, due to the close linkages and connectivity between Spain and Latin America.

Although the literature on location choice refers to the importance of connectivity, it seems that not only physical infrastructures but also highly connected institutions matter (Glaister et al., 2020; Li et al., 2018).

In particular, historical connections between countries can facilitate the boundary spanning and bridging roles, becoming a means for attracting the establishment of foreign headquarters.

Although European countries are, to a certain point, quite similar in terms of a minimum level of institutional quality, there are contrasts in terms of their historical and institutional connections.

2.2 Institutions, Connectivity, and Foreign Headquarter Activities

To understand how historical connections between European countries and former colonies influence MNCs' location decisions of foreign headquarters in Europe, we draw on North's view of institutions (1991). According to North's perspective, MNCs' investments will be directed to those countries where the institutional environment facilitates further operations. This is because institutions are supposed to create order, minimize uncertainty, and provide a clear framework for relationships

in economic transactions. North (1991) reported that institutions evolve in an incremental way – dragging a past cumulative process and connecting it to the present; consequently, current institutions can only be understood as part of such a sequence. Although interactions may arise and evolve from the geographical proximity between countries (Granovetter, 1983), it is believed that historical relationships, such as colonial ties, create an institutional framework within which interactions and exchanges between pairs of countries take place (Makino & Tsang, 2011). For instance, historical ties based on colonial experiences are believed to improve trust and reduce behavioral uncertainties between countries that had the same colonizer (Chowdhury & Maung, 2018).

In general, historical paths and ties seem to be a forgotten dimension in IB location choice studies, except for studies by Makino and Tsang (2011) and Glaister et al. (2020).

Following this insight, we argue that connections based on historical ties provide some countries with a privileged position in terms of FDI reception. An example of a European country which has extensive shared connections with its former colonies is Spain, whose historical, cultural, and economic relationships with Latin America are highly valued by MNCs locating in Spain (Pla-Barber & Camps, 2012). Another example is France and the Maghreb (Cuervo-Cazurra, 2011; Meouloud et al., 2019), or the UK and the Commonwealth (Glaister et al., 2020).

In this sense, aiming to enlarge their export and investment markets, European countries have tried to maintain this active influence over the former colonies (Berger et al., 2013; Antràs & Padro-i-Miquel, 2011). For instance, during the eighteenth century, the Dutch East India Company sent a million Europeans to work in Asia. In the twentieth century, many African countries became "captive importers" of French products through external aid programs (Yeats, 1990) and, more recently, during the 1990s, European banks acquired the majority of Latin American banks, thereby strengthening their ties with the region. Furthermore, in some cases, historical ties have led to the development of formal ties. For instance, the years of historical interaction between European countries and former colonies have translated into different forms of formal political or administrative integration, such as double taxation treaties (UNCTAD, 2016). Double taxation treaties are formal rules facilitating access to uncharted markets and therefore, can be considered a type of institution facilitating further business operations.

One may argue that in the past, former colonial territories tended to be governed by transplanting the colonizer's institutions (Meouloud et al., 2019; Acemoglu et al., 2001; Día, 1996), and that this study merely hypothesizes about institutional distance, and the proximity or similarity between countries, in terms of traditional IB models (Beugelsdijk et al., 2018). However, and far from that, we focus on the active current relationship emanating from a shared historical past. Thus, it is necessary to clarify that there are several very institutionally similar countries (even very proximate ones), whose current relationships are disrupted by war or other conflicts (Makino & Tsang, 2011). Thus, institutional similarities alone are not enough for firms to reduce transaction costs between countries. There must be an effective relationship or channel of connectivity between them. Hence, we believe that a past colonial experience for a European country is not sufficient to represent a currently appealing

characteristic for attracting FDI. There should be another active and vivid link, ideally in the form of economic relationships (i.e., trade; Lundan & Jones, 2001).

3 Colonial-Based Connectivity and Foreign Headquarters' Location

3.1 Grounding the Concept of Colonial-Based Connectivity

In this study, we extend this view and introduce the concept of colonial-based connectivity, a location factor that includes historical and economic connections between countries, as a determinant for the location choice of foreign headquarters within the European region. We stress the historical and economic dimensions, and the resulting connectivity, as factors that must work together to establish colonial-based connectivity.

On the one hand, historical ties established in the colonial periods seem to weave institutional frameworks within which economic relationships between associated countries occur (Makino & Tsang, 2011) and, particularly, affect FDI flows (Glaister et al., 2020). In this sense, vivid past colonial relationships are existing channels that smooth the connections between some European countries and the former colonies. On the other hand, the active current relationship emanating from such a historical shared past is reflected in existing economic relationships and exchanges.

Based on the above, we define colonial-based connectivity as a set of linkages between two countries based on historical and economic ties established through past colonial relationships. These special connections generate interrelationships and exchanges between the two countries, representing an attractive location factor for the European country, which then provides a platform for reaching a larger market. We argue that those vivid relationships facilitate the exchange and transfer of information with a larger number of markets. Colonial-based connectivity also eases cross-border and expansion operations, thereby facilitating the second and the third roles of foreign headquarters (the knowledge broker, boundary spanner, and bridgehead roles).

From a geographical perspective, connectivity arises through two-way linkages between places, not necessarily through (nationally and internationally) well-connected physical infrastructures (such as ports and airports), but also through "the flows of knowledge capital, people and goods that circulate" globally (Beaverstock et al., 2002: 114). These less tangible forms of connection among locations can help attract foreign direct investors.

MNCs can operate as centralized or decentralized pipelines enabling connectivity (Lorenzen & Mudambi, 2013), and this pipeline role can also be played by a more aggregate entity, such as a country. Given that connectivity is a multidimensional concept which includes several sources (Castellani et al., 2021), we consider historical and economic bilateral interactions as the foundation for colonial-based connectivity.

Past colonial relationships can establish a set of linkages between two countries based on institutional and historical ties. These special connections generate interrelationships and exchanges between the two countries, representing a location factor

for the former colonizer, which can provide a favorable platform for reaching institutionally-connected markets. Indeed, without a common past of shared institutions, there could be no institutional similarities between distant countries. Similarly, without economic relationships, there is no sustained path for knowledge and business exchanges.

3.2 Colonial-Based Connectivity and Its Importance for Headquarters' Location Choice

According to the literature reviewed above, location decisions of headquarter activities are mainly driven by institutional and connectivity factors. However, ceteris paribus, we argue that once a company has selected Europe for locating headquarter activities, it would prefer a country with extended and consolidated networks with former colonies vis-à-vis a country without them. There are two underlying mechanisms for our reasoning.

The first argument rooted in classical literature is that, because of historical influence, the majority of the world's largest MNCs are headquartered in former colonial empires (Boussebaa & Morgan, 2014) which confers upon those countries a general sense of "core places" or "Metropolis" for which an agglomeration effect still exists (Prasad, 2003; da Silva et al., 2019). With time, "the cores" have become extremely well connected, especially with the former colonies (Zook & Brum, 2005), encouraging more FDI and specialized services attraction (Jones & Khama, 2006; Henderson & Ono, 2008; Bel & Fageda, 2009; Haberly & Wójcik, 2015).

Second, from the MNC perspective, beyond control and coordination, headquarters create value for the MNC also by developing entrepreneurial activities which include detecting new opportunities, boundary spanning and expanding into new markets (Alfoldi et al., 2012; Foss, 2019). These activities are better developed when the institutional and physical connectivity with others is higher. In other words, the more ties a country has, the easier it is to access more markets, detect opportunities, and expand the MNC's activities. Therefore, other things equal, locating a headquarter in a country with extended connections with other countries and regions, will increase the opportunities to create value and lead to a higher preference for that country.

We hypothesize that greater and stronger connections between European countries and their former colonies create a privileged position for FDI attraction.

> Hypothesis: *Ceteris paribus, there is a positive association between the strength of a country's colonial-based connectivity with its former colonies and the probability to receive FDI in headquarter activities from foreign MNCs.*

4 Data

The empirical analysis relies on data on new greenfield FDI from fDi Markets,[1] a database developed by fDi Intelligence (a division of the Financial Times Ltd.), which tracks greenfield investments across different industries and countries worldwide. The fDi Markets database has been widely used by several international organizations (e.g., UNCTAD, OECD) and by several scholars like Belderbos et al. (2020) and Castellani et al. (2013). For the period 2003 – 2016, the dataset contains approximately 154,737 investment projects in 193 countries. For each investment, the database provides the name of the parent company, the country and city of origin, the industry, and the business activities involved in the projects (e.g., headquarters, research and development, manufacturing, business services, logistics, and marketing and sales), as well as the final location of investment (country and city of destination). Given the purpose of our analysis, we focus on FDI projects in headquarter activities (Belderbos et al., 2017; Castellani et al., 2021).

In some cases, the information is accompanied by a short description of the activities involved, at different levels of detail, as reported by the company in one of the sources used by the fDi Intelligence to track the FDI events. We checked the available descriptions to understand which activities are intended as part of the headquarter investment projects. The headquarter business function is assigned when a company establishes a new headquarter via FDI. In the descriptions available, we found that companies opened new offices to function as headquarters: to have a more centrally-located site providing service and support to customers across the European region; to manage activities in the country, enabling the company to consolidate its business in the region and drive new growth; to serve as a development platform for central and eastern Europe; to create a finance and accounting center in the host city, or a new corporate office in response to significant growth; to take on all international operations, finance operations, management, supply chain management, human resources, marketing, service/product development management, and platform communications and business development in the European region; or to connect to other regions of the world. These reported activities coincide with the representative activities performed by foreign headquarters, as highlighted by Alfoldi et al. (2012).

During the period 2003 – 2016, 2230 new foreign investments in headquarter activities took place in the European region, in 27 countries. Twelve European countries (i.e., the UK, Germany, France, the Netherlands, Ireland, Spain, Denmark, Belgium, Austria, Sweden, Poland, and Italy) receive 94.9% of the investment projects in foreign headquarters. Figure A1 in the Online Appendix shows the geographical distribution of the investments by EU country. Of these investments, 70.18% (1,565)

[1] The *fDi Markets* database also contains information on decisions to expand existing projects (expansions), which represent 23% of the total investments in HQ activities. We have decided not to include expansions in our sample because the drivers of expansion projects could differ from the new ones and may strongly relate to the prior decision and pre-existing activities in a country. We focus on the location decision of newly established HQ projects.

are made by non-European multinational companies (mainly from the USA, Japan, and China) and 29.82% (665) are made by European companies.[2] We also include the latter because MNCs sometimes fragment regions, offshoring some headquarter activities and assigning more than one headquarter facility in a single region (Li et al., 2010).

These investments are made by 2044 MNCs, which operate in 39 different sectors, according to the classification provided by fDi Markets. Service industries such as software and IT services, communication, business and financial services account for 52.42% of the new foreign headquarter projects, followed by life sciences (8.2%), industrial sectors and transport equipment.

5 Empirical Strategy

5.1 Location Choice Model: Conditional Logit Model

We aim at investigating the factors driving the foreign location decisions of MNCs that have to choose one alternative from a set of possible geographical locations, in their decision to locate a new headquarter activity in Europe. In so doing, we estimate a Conditional Logit model – CLM (McFadden, 1974), in line with the empirical literature on FDI location decisions (Alcácer & Chung, 2007; Castellani et al., 2021; Nielsen et al., 2017). The CLM is similar to a logistic regression, where the dependent variable is a binary choice, but the data occur in groups, which represent the location choice set available for each location decision. Thus, the model explains why a given choice (alternative) is more likely to be chosen, conditional on the other available alternatives in the choice set. More precisely, such modeling is consistent with a choice process where firms choose the country that provides the largest expected profit, based on the observable characteristics of the chosen country and the characteristics of all the possible alternative countries not chosen (in our case, the EU countries). The CLM assumes that for a foreign investment i, firm f will choose country c that yields the highest profit among all possible alternatives, as a function of observed firm-location and location characteristics (Z_c). The probability that for the investment i, firm f invests in location c can be represented by the following expression:

$$Pr_{ifc*} = \frac{\exp\left(\beta Z_{c*}\right)}{\sum_{c=1}^{C-1} \exp\left(\beta Z_c\right)}, \forall c \neq c^*(c = 1, .., C-1) \tag{1}$$

where c* is the country chosen, and $c = 1, 2, \ldots, C–1$ are the alternative locations. Since the location decisions under observation are undertaken in Europe, our location choice set comprises the full list of 28 European countries (EU 27 + the UK), as the group of possible alternative locations.

[2] However, we also perform the econometric analysis by removing the investments made by the European companies from the sample. The results hold and are available from the authors on request.

5.2 Model Specification

Our final database is composed of investment projects in foreign headquarters made by multinational companies in Europe during the period 2003 – 2016, at the country level. Each observation captures the establishment of a new FDI, thus each investment project is a one-time event (location decision event *i*) throughout the period, given the cross-sectional structure of the data. Our administrative area of analysis is Europe 27 and the United Kingdom, which represents our location choice set. The econometric specification is as follows:

$$\text{Location Choice}_{ifc} = \alpha + \beta\left(\text{Colonial} - \text{based Connectivity}_{c}\right) + \delta(\text{X}_{c}) + \gamma(\text{W}_{ch}) + \varepsilon_{ifc} \tag{2}$$

where, $\text{Location Choice}_{ifc}$ is the location decision of project *i*, by firm *f* in country *c*, $\text{Colonial} - \text{based Connectivity}_{c}$ is the colonial-based connectivity of country *c*, X_{c} are firm-country and country controls, and W_{ch} are measures capturing the distance between home *h* and destination *c* countries. A detailed description of the variables is provided in the following.

Dependent Variable. The dependent variable ($\text{Location Choice}_{ifc}$) is the location choice of a foreign headquarter investment project *i* (the decision event) by the firm *f* in a given country *c*. The variable assumes a value of one for the country chosen, and zero for all other alternative countries not chosen. Our location choice set is composed of 28 European countries.[3]

Colonial-Based Connectivity with Former Colonies. Our main independent variable ($\text{Colonial} - \text{based Connectivity}_{c}$) is the *colonial-based connectivity,* representing the historical and current economic connections between European countries and their former colonies. Thus, the measure is a combination of two elements, (a) the colonial-based linkage (based on historical ties) and (b) economic relations, between each European country and its former colonies.

Following Srivastava and Green (1986), and Dow and Karunaratna (2006), we measure historical linkages based on colonial ties, creating a dummy variable *Former Colony*. From the CEPII database, we compile the list of colonies for each European country, identifying 116 countries linked to European countries through (past) colonial relationships. Figure 1 graphically depicts the extent of these colonial links, while Table A.1 in the Online Appendix reports the list of colonies for the European countries.

We then combine the historical component with an economic element, thus capturing ongoing economic relations with former colonies. We build this measure based on the bilateral trade volume (Lundan & Jones, 2001), as a measure of economic linkages and business relations between each European country and its

[3] In the location choice set, we include Bulgaria since the country is part of EU 27 + United Kingdom, even though it has not received any HQ investments during the considered period. The total number of observations is 62,440 (2,230*28). Due to missing values of country-level controls, the final number of observations may be slightly different.

Fig. 1 Geographical representation of colony links, by European country. Source: authors' elaboration. Note: The size of the (red) dots for each European country is related to the number of colony links with former colonies among emerging countries (colour figure online)

former colonies, through the export flows from the EU country to these territories. Formally,

$$Colonial-based\ Connectivity_{c,} = \sum_{j=1}^{J}\left[\frac{\left(Exports_{cj,}\right)}{GeoDist_{cj}} * FormerColony\right], \quad (3)$$

where c is the European country, j represents the receiving countries (with j = 1, …, J), *Exports* is the total value of goods exported from country c to country j in thousands of US dollars, *Former Colony* is a dummy variable equal to one if country j is a former colony of the European country c (and zero otherwise), and *GeoDist* is the geographical distance between country c and country j. We include the role of geographical distance, since a greater distance between two countries can negatively impact the bilateral trade between them (Disdier & Head, 2008), and can also reduce the attractiveness of a location due to the higher coordination and operational costs (Castellani et al., 2013).

Further, to strengthen our results, we build an alternative measure based on the economic attractiveness and size of the former colonial territories as a measure of market potential (Davidson, 1980), relying on the GDP; we weigh this second measure by the relative importance of the business relationship between the EU country and the former colony, from the perspective of the former colony. Specifically, we multiply this measure by the ratio of the imports of the former colony from its colonizer to its total imports (*colonial-based connectivity – Market Potential, weighted*). These two variables are strongly correlated. The colonial-based connectivity is measured in the year before the observed new investment decision.

Since the measure captures the combined effect of historical ties and ongoing economic relations, this can be seen as an interaction term between the two elements (i.e., *Former Colony*, as a dummy variable that assumes a value of one if the country has colonies; *Total exports*, as the exports flow of goods worldwide, and *Global market potential,* as the sum of worldwide countries' GDP, weighted by the distance between each pair of countries). For this reason, we also include these variables directly in the model. We gather data on GDP from CHELEM database – the CEPII database on International trade flows, balance of payments and world revenues, and the flows of exports and imports from UNCTAD.

We then introduce a set of firm-country and country controls (X_c) to control for other possible location drivers, computed in the year before the observed investment. *Firm host-country prior presence* is computed as the firm's cumulated prior investments in the destination country (from 2003 to t−1); as previous presence in the country increases the firm's experience and familiarity with that specific foreign environment, reducing the uncertainty of operating abroad and representing a path-dependence factor, driving future location decisions (Chan et al., 2006; Demirbag & Glaister, 2010; Schmeisser, 2013).

Country Characteristics. We control for a set of traditional location characteristics at the country level. First, we control for pure economic factors (Nielsen et al., 2017), associated with the size of the host domestic market (*GDP* and *population* of the host country) and the size of the potential neighboring markets that can be reached in the region (*intra-European market potential*). We collect data on GDP from the CHELEM database and population from the World Bank. We also control for the technological development and industrial endowment of the country through the percentage of *high-tech manufacturing exports* provided by the World Bank. Along with economic factors, the quality of institutions and human capital represent two other critical factors that can affect the foreign location decisions of knowledge-intensive activities like headquarters (Belderbos et al., 2017; Globerman & Shapiro, 2002). Therefore, we control for the quality of institutions with the widely adopted indicator of *Rule of Law,* capturing the quality of contract enforcement, property rights and the courts, and the quality of human capital as the percentage of *enrollment in tertiary education,* all of which are collected from the World Bank. Finally, corporate tax rates are another important element in the location decision of MNCs which tend to choose countries with low corporate tax rates (Laamanen et al., 2012; Foss et al., 2019), thus we control for taxation level with the *average tax rates* provided by the World Bank.

International Connectivity Factors. We control for other measures of international connectivity at the country level, such as the amount of inward FDI per capita (*FDI per capita*) from the World Bank, the number of airports (*No. of airports*, in log) made available by Eurostat, and knowledge connectivity, through the number of patent applications made by non-resident inventors over the total number of patent applications (*Share of non-resident patents*) from the World Bank (Belderbos et al., 2017; Castellani et al., 2021). Finally, along with the traditional location factors driving MNC decisions, we consider non-economic location factors associated with managerial travel inconveniences in a potential location that can be particularly important for the establishment of a headquarter activity. Thus, we include the

"*hassle factor*" as an additional control (Schotter & Beamish, 2013). This factor is a composite indicator that combines possible travel "inconveniences" from multiple sources, for example, local transportation standards, medical standards, food and water hygiene, vaccination, business hotel standards, to mention a few.[4]

Since the model incorporates alternative-specific variables (Train, 2003), we are unable to control for firm-specific characteristics that do not vary across locations. However, we include some measures capturing the distance between home *h* and destination countries *c* (W_{ch}). For *Geographical, Cultural and Educational distance* between host and home country, we follow the measures developed by Dow and Karunaratna (2006)[5] in terms of language, religion, and educational level. Geographical distance is computed as the distance in km (capital to capital) between the home country and each possible host EU country gathered from GeoDist – the CEPII database for several geographical variables.

Table 1 reports the source and description of the variables. Tables A.2 and A.3 in the Online Appendix report descriptive statistics of our main country-specific variables for all the European countries in our sample and the correlations among variables, respectively.

6 Results

Using a conditional logit model, we investigate the factors driving the location decision of foreign headquarter investments in European countries, by looking at the special role played by the colonial-based connectivity with their former colonial countries linked through historical and economic relationships. Results are reported in Table 2. We also report the odds ratios[6] for all coefficients to facilitate the interpretation of the results (in italic), and we cluster the standard errors by firm since each firm can have more than one investment in the period.

We introduce our main measure of colonial-based connectivity based on colonial links and exports (I), and then we include the alternative measure based on market potential, weighted by imports (II) in a different specification as an alternative measure to test the sensitivity of the results to the selected measure. Second, we progressively introduce firm-country and country variables to control for other factors potentially affecting the decision. Our preferred model is Mod. 3 which includes all control variables and presents a lower log-likelihood and a greater Pseudo-R^2 compared to less specified models. This is also confirmed when estimating the Mod. 2 specification using the sample with data available for all variables (Mod. 3), suggesting an increase in the fit of the model.

[4] The indicator is available for about 180 countries over the period 2008–2018 on a biannual basis. For additional details, please see https://www.ivey.uwo.ca/internationalbusiness/research/hasslefactor/

[5] For more details, please see http://dow.net.au.

[6] The table also reports odds ratios, which are the exponential of the coefficient [exp(b)]. For example, the coefficient of colonial-based connectivity is 0.2775 and the related odds ratio is 1.3198 [=exp (0.2775)].

Table 1 Description of variables

Variable	Source	Description	Type
Location	fDi markets	Location decision for a new investment in HQ among countries in EU 27 + United Kingdom; dummy = 1 if the firm chooses country r, 0 otherwise	Firm-country
Colony (Colonial links)	GeoDist/CEPII	Dummy = 1 if the pair of countries – each EU country and emerging economies – previously had a colonial relationship	Country
Colonial-based Connectivity			
(I) Colonial-based Connectivity, Export	UNCTAD	Flows of goods in thousands of US dollars received by the economies linked through colonial ties (i.e., multiplied by the Colony dummy) from the trading partner (i.e., the focal European country), divided by the geographical distance, at time t-1 (the year before the investment decision), in log	Country
(II) Colonial-based Connectivity, Market potential weighted	CHELEM/ CEPII	Sum of GDP of countries multiplied by the Colony dummy, divided by the geographical distance, and weighted by the ratio between the imports of the emerging economy from its former colonizer and its total amount of imports, at time t-1 (the year before the investment decision), in log	Country
Control variables			
Firm host-country prior presence	fDi Markets	Firm's cumulated prior investments in the country from 2003 to t-1	Firm-Country
Intra-EU market potential	CHELEM/ CEPII	Sum of other EU-countries' GDP, weighted by the distance between each country and the destination country, in log	Country
Total exports	UNCTAD	Flows of goods in thousands of US dollars from the focal European country received by worldwide destinations (223 countries), in log	Country
Global Market Potential	UNCTAD/CEPII	Sum of worldwide countries' GDP (199 countries), weighted by the distance between each country and the destination country, in log	Country
GDP	CHELEM/ CEPII	GDP of destination country, in log	Country
Population	World Bank	Total population, in log	Country
Tax rate	World Bank	Average value of tax rates between 2002–2013	Country

Table 1 (continued)

Variable	Source	Description	Type
Education	World Bank	Enrollment in tertiary education (% gross)	Country
High-tech exports	World Bank	Share of high-technology manufacturing exports (in total manufacturing exports)	Country
Rule of Law	World Bank	Rule of Law, capturing the rules of society, in particular the quality of contract enforcement, property rights, and the courts	Country
Geographic Distance	GeoDist/CEPII	Geographical distance between the home country and all the possible host countries, in log	Country
Cultural and Educational distance	Dow and Karunaratna (2007	Measures of distance in terms of language, religion, and educational level (Dow & Karunaratna, 2006)	Country
North	Eurostat	Dummy equal to one if the company is from a country not located in the Southern area of Europe, zero otherwise. Countries located in the southern area of Europe are Andorra, Croatia, Greece, Italy, Portugal, Slovenia, Serbia, and Spain	
FDI per capita	World Bank	FDI inflows, per inhabitant	Country
Share of non-resident patents	World Bank	Share of patent applications made by non-resident inventors in total patent applications (by residents and non-residents)	Country
No. of airports (log)	Eurostat	Number of airports, in log	Country
Hassle factor	Schotter and Beamish (2013)	A composite indicator that combines travel "inconveniences" associated with non-economic location determinants. More specifically, there are 11 indicators, such as Local Transportation, Climate, Business Facilitation, Health & Medical, Risks for Women, Visa & Entry Permits, Telecommunications, Hotel Standards, Language, Food & Water Hygiene, Personal Safety	Country

Findings show that the intra-European market potential (*Intra-EU market potential*) and the openness of the country through total export flows (*Total Exports*) play a positive role in the location choice of foreign headquarter activities; this is to be expected, given that being located in the European area can facilitate access to the other nearby European countries. Additionally, a country that is more open to the

Table 2 Results from Conditional Logit Model

	Mod 1		Mod 2		Mod 3	
	(I)	(II)	(I)	(II)	(I)	(II)
Colonial-based Connectivity						
(I) Exports	0.2775		0.2405		0.1836	
	(0.0057)		(0.0247)		(0.0297)	
	1.3198		*1.2719*		*1.2016*	
	([0.0000])		([0.0000])		([0.0000])	
(II) Market potential (weighted by imports)		2.1586		1.4302		1.0377
		(0.0403)		(0.1565)		(0.1855)
		8.6588		*4.1797*		*2.8228*
		([0.0000])		([0.0000])		([0.0000])
Colony			− 0.888	0.3729	− 1.7489	− 0.8174
			(0.2613)	(0.1801)	(0.3359)	(0.2499)
			0.4115	*1.4519*	*0.174*	*0.4416*
			([0.0007])	([0.0384])	([0.0000])	([0.0011])
Firm-specific experience			0.0569	0.0621	0.0499	0.0525
			(0.0205)	(0.0209)	(0.0195)	(0.0196)
			1.0586	*1.064*	*1.0512*	*1.0539*
			([0.0055])	([0.0030])	([0.0105])	([0.0074])
GDP			0.1945	0.2892	− 0.5969	− 0.5345
			(0.2333)	(0.2124)	(0.3116)	(0.3009)
			1.2147	*1.3353*	*0.5505*	*0.586*
			([0.4045])	([0.1733])	([0.0554])	([0.0757])
Intra-EU market potential			− 0.1985	− 0.1909	0.7107	0.6616
			(0.0956)	(0.0963)	(0.1258)	(0.1227)
			0.82	*0.8262*	*2.0354*	*1.9379*
			([0.0379])	([0.0474])	([0.0000])	([0.0000])
Total (global) market potential			− 0.1858	− 0.1746	0.0635	0.0211
			(0.1033)	(0.0916)	(0.0530)	(0.0594)
			0.8304	*0.8398*	*1.0656*	*1.0213*
			([0.0721])	([0.0567])	([0.2306])	([0.7226])
Total Exports			1.0255	0.8239	0.9831	0.7427
			(0.1530)	(0.1346)	(0.2032)	(0.1786)
			2.7886	*2.2793*	*2.6727*	*2.1015*
			([0.0000])	([0.0000])	([0.0000])	([0.0000])
Population			0.0139	− 0.0483	0.7223	0.8446
			(0.1470)	(0.1441)	(0.2196)	(0.2140)
			1.014	*0.9529*	*2.0592*	*2.3271*
			([0.9247])	([0.7377])	([0.0010])	([0.0001])
High-tech exports			− 0.0075	− 0.0004	− 0.0029	0.0045
			(0.0067)	(0.0058)	(0.0071)	(0.0062)
			0.9926	*0.9996*	*0.9971*	*1.0046*
			([0.2686])	([0.9419])	([0.6861])	([0.4659])

Table 2 (continued)

	Mod 1		Mod 2		Mod 3	
	(I)	(II)	(I)	(II)	(I)	(II)
Rule of law			0.4343	0.3565	1.0866	0.9394
			(0.1830)	(0.1769)	(0.2593)	(0.2539)
			1.5439	*1.4284*	*2.9641*	*2.5584*
			([0.0176])	([0.0438])	([0.0000])	([0.0002])
Tax rate			− 0.0448	− 0.0523	− 0.0267	− 0.0268
			(0.0035)	(0.0039)	(0.0046)	(0.0047)
			0.9562	*0.9491*	*0.9737*	*0.9735*
			([0.0000])	([0.0000])	([0.0000])	([0.0000])
Education (tertiary)			0.003	0.0046	− 0.0033	− 0.0034
			(0.0029)	(0.0028)	(0.0038)	(0.0038)
			1.003	*1.0046*	*0.9967*	*0.9966*
			([0.3069])	([0.1069])	([0.3913])	([0.3750])
North			0.2783	− 0.0121	− 0.2507	− 0.4983
			(0.2275)	(0.2235)	(0.3099)	(0.3262)
			1.3209	*0.988*	*0.7782*	*0.6076*
			([0.2211])	([0.9568])	([0.4185])	([0.1266])
Geographic distance					− 0.0552	− 0.0463
					(0.0985)	(0.0986)
					0.9463	*0.9548*
					([0.5751])	([0.6389])
Language (distance)					− 0.3693	− 0.3794
					(0.0244)	(0.0244)
					0.6912	*0.6843*
					([0.0000])	([0.0000])
Education level (distance)					1.336	1.3044
					(0.2568)	(0.2617)
					3.804	*3.6856*
					([0.0000])	([0.0000])
Religion (distance)					− 0.973	− 0.9215
					(0.1521)	(0.1512)
					0.3779	*0.3979*
					([0.0000])	([0.0000])
FDI per capita					0.000	0.000
					(0.0000)	(0.0000)
					1.000	1.000
					([0.0252])	([0.0150])
Share of (non resident) patents					1.6594	1.5062
					(0.3787)	(0.3705)
					5.256	*4.5098*
					([0.0000])	([0.0000])

Table 2 (continued)

	Mod 1		Mod 2		Mod 3	
	(I)	(II)	(I)	(II)	(I)	(II)
No. of airports (log)					0.0553	− 0.0478
					(0.0650)	(0.0667)
					1.0568	*0.9533*
					([0.3953])	([0.4739])
Hassle factor					− 0.0834	− 0.4418
					(0.2546)	(0.2583)
					0.92	*0.6429*
					([0.7433])	([0.0872])
No. of Obs	61,834	61,834	61,834	61,834	50,612	50,612
No. of MNEs	2044	2044	2044	2044	1983	1983
Chi2	2329.06***	2867.41***	3076.58***	3159.21***	2865.35***	2948.97***
Log-likehood	− 6254.214	− 6644.913	− 5019.528	− 5034.396	− 4433.915	− 4440.341
Pseudo-R2	0.1558	0.1031	0.3225	0.3205	0.3455	0.3446

The dependent variable is the location decision of a new foreign HQ investment in the country *c*. Choice set: 28 countries in Europe. Odds ratios in italic. Standard errors are clustered by firm and reported in parentheses. Statistical significance (p-values) in square brackets below the coefficient's odds ratios, ***p-value < 0.01

rest of the world tends to be more attractive. As expected, a high tax rate discourages the location of foreign headquarter investments in the host country, while the geographical distance between home and host country does not impact the location decision for foreign headquarter activities. It is worth highlighting that the quality of institutions (*Rule of Law*) plays a crucial role in driving the decision of headquarters as knowledge-intensive activities, while the percentage of high-tech manufacturing exports and the level of educational quality (captured by enrollment in tertiary education) do not have a significant effect.

Looking at the measures of cultural distance, we reveal that a greater distance between home and host country in terms of language and religion has a negative association with the probability of choosing that destination country (as showed by the negative coefficients and odds ratios smaller than 1): MNCs are more incentivized to locate in a culturally similar country. Conversely, a greater distance in terms of educational level[7] makes the destination country more attractive for the location

[7] Each indicator developed by Dow & Karunaratna (2006) is composed of sub-indicators capturing different aspects. For example, in the case of education, the indicator is composed of E1ij (the difference in the % of literate adults between countries i & j), E2ij (the difference in the % of population enrolled in secondary education between countries i & j) and E3ij (the difference in the % of population enrolled in tertiary education between countries i & j). If we have Argentina as a source country and Austria as a destination country, the Argentina-Austria value is -0.69, meaning that the level of education in Austria is higher than in Argentina. For ease of interpretation, we include the indicator as its inverse.

of headquarter investments: MNCs tend to locate their foreign headquarter activities in more developed countries in order to gain access to better human capital and institutional systems and to reduce the costs of operating abroad. In this regard, a firm's prior presence in the host country can incentivize the company to locate subsequent investments there due to the familiarity with the host country's economic, cultural and institutional environment, which reduces the costs related to the liability of foreignness and the uncertainty of operating in a new context (Chan et al., 2006; Demirbag & Glaister, 2010; Schmeisser, 2013; Zaheer, 1995), as confirmed by the positive and significant result of firm host-country prior presence.

International connectivity can be another important driver in the decision to locate high value-added activities, such as headquarters (Belderbos et al., 2017; Castellani, et al., 2021). For this reason, we control for a set of consolidated measures of connectivity in terms of inward FDI flows, infrastructural connectivity (thought the number of airports), and knowledge connectivity (through patent applications involving non-resident inventors). Our results support previous findings that a higher level of international connectivity with other foreign countries can positively drive foreign headquarter location decisions. We find a positive but not significant effect across specifications of the airport number at the country level, which may suggest that this factor may operate at a subnational level within a country. Finally, the hassle factor score is higher in countries where the "hassles" are greater and so more hostile contexts. The coefficient shows a negative effect in line with our expectations, although it is not statistically significant and highly correlated with the quality of institutions (Rule of Law).

Moving on to our main independent variable *colonial-based connectivity* and after controlling for a rich set of traditional location decision factors, findings indicate that having strong relationships with former colonies' markets through historical and economic links is a driving factor for the location decision of foreign headquarter investments, increasing the attractiveness of the European country. This effect is confirmed whether we look at the business relations of each European country with its former colonies, computed as the flows of exports to historically-connected countries, or we look at the market potential of those territories weighted by the relative importance of the business relations between former colony and colonizer from the perspective of the former colony. Indeed, we see a positive and strongly significant effect across our measures, supporting our main argument, therefore *colonial-based connectivity* in one country leads to an increase in the likelihood of investing in a new headquarter activity in that given host country.

Furthermore, looking at the pure *Former Colony* dummy (a country with or without former colonies), it is worth noting that the combined effect of the existence of colonial ties and economic relationships is more important in predicting the location decision of foreign headquarters than the only existence of former colonies.

It should be noted that we are aware some variables show a relatively high correlation, which can raise multicollinearity problems. However, Lindner et al. (2019) have recently shown that keeping collinear variables in the regression will not create biased results even if standard errors can be inflated, while excluding collinear but important variables can create more severe issues of omitted variables that we cannot control for. However, in order to check for possible multicollinearity issues concerning the colony

dummy, we estimate the model excluding the variable (column mod.1, Table A.4 in the Online Appendix). The result of our main variable is confirmed.

In sum, in line with our argument, having a strong relationship with former colonial countries is perceived as a location factor driving the location decision for foreign headquarter operations. The potential access to this network appears as a possible beneficial element.

We perform a set of robustness checks to strengthen and validate our results. First, the motivation driving FDI is considered an important element. However, especially in secondary data, information on motivations is scarce. We exploit the data and examine the description provided for the sub-sample of projects for which we have a description (36% of projects under investigation). We manually checked each description and assigned the mandate and market target(s). Many projects (71%) report a regional and multi-regional mandate. In 227 cases (29%) the target market is unspecified, or the host domestic country market is reported as the first step into Europe. Thus, we estimate our model on the sub-sample of projects with an available description, and exclude the projects with an unspecified or host domestic country target market. The results are reported in Table A.4 on the Online Appendix (mod. 2). The results of the sub-sample of these projects support the importance of *colonial-based connectivity* in the decision of investing in Europe.

Second, some MNCs may already have some operations in the host country's former colonies, therefore perceiving a reduced importance of *colonial-based connectivity*. For this reason, we create a measure capturing this prior presence via greenfield investments undertaken by the company in the host country's former colonies. We use data available from fDi Markets from 2003 to the year before the focal investment project to create a cumulated measure. In the majority of FDI project events (98%), firms do not present any prior experience, however, we find that in some cases firms have prior operations in former colonial countries, ranging from one project (0.7% of cases) to a maximum of 134 (only one case). Interestingly, we find that when a firm has a prior presence in the host country's former colonies, it has a lower probability of investing in that country. We can explain this result by suggesting that a company that has prior experience in those third countries, perceives a lower need of using the country as a "bridge" to obtain facilitated access, since the company is already familiar with those institutional environments. The results are reported in Table A.4 (mod. 3). As a note of caution, we highlight that the database provides information only for greenfield projects, and we are unable to control for other forms of internationalization or presence in third countries; we recognize this as a limitation.

Third, the duration of the colonial period can affect the legacy of the colonizer on the former colony; indeed, a longer period can foster the establishment of sustained institutions (Glaister et al., 2020). For this reason, we compute the *colonial-based connectivity* measure, substituting the colony dummy in the formula with the length of the period that the colonizer ruled the former colony, calculated as the difference between the year of colonization and the year of independence. We gather this information from the "Index of Possessions and Colonies" in the

World Statesman.[8] Results are reported in the last column (mod. 4) of Table A.4 in the Online Appendix, showing that the *colonial-based connectivity* effect persists.

Fourth, to test the strength of the effect of *colonial-based connectivity* on foreign headquarter location decisions, we perform a placebo test to verify that the *colonial-based connectivity* does not indirectly capture other country-specific characteristics. To this end, we randomly assign connectivity values to other EU countries, and perform estimations with several samples of countries with randomly assigned *colonial-based connectivity* values (Keller, 1998). We report a selection of these models in Table A.5 (Online Appendix) with the idea of showing a certain degree of variety in the effects. However, the significant and positive effect persists across different samples of countries.

Finally, to check the validity of our econometric strategy, we also estimate a Random Parameter (Mixed) Logit model (MLM), in line with more recent studies on location choice (Train, 2003; Chung & Alcacer, 2002; Basile et al., 2008; Rasciute & Downward, 2017; Castellani & Lavoratori, 2020). The MLM is a more flexible technique that relaxes several assumptions in the CLM (e.g., independence of irrelevant alternatives). It returns an average coefficient (mean), and the deviation from this average effect for each observation (standard deviation). CLM can be considered a special case of a more general MLM, where all parameters are fixed. The results from the mean coefficient from the MLM are like the results from the CLM, supporting our strategy.

7 Conclusions

In this study, we aim to investigate whether European countries' relationships with former colonies attract the establishment of foreign headquarters. We argue that foreign headquarters – with their strategic roles as operational coordinators, opportunity detectors (Alfoldi et al., 2012), hubs for knowledge (Lunnan & Zhao, 2014), and boundary spanning bridgeheads (Hoenen et al., 2014; Pla-Barber et al., 2021) – may acquire a central position in an area of influence, becoming coordinators of value chain activities across multiple countries and regions. Although there has been little investigation into the knowledge hub and bridgehead roles, existing institutional connections appear to be an extremely important influence on the location decisions of headquarter activities. Therefore, deeper relationships between European countries and their former colonial territories constitute an optimal characteristic for certain foreign headquarters. Our results suggest that the combination of the existence of former colonies and ongoing economic relationships makes it a relevant factor for predicting foreign headquarter location choice.

We refer to the combined effect of historical and economic ties as colonial-based connectivity. Our empirical findings strongly support our hypothesis. When controlled for a rich set of economic and non-economic location characteristics, we posit that strong colonial-based connectivity represents an additional location

[8] For more details, see https://www.worldstatesmen.org/COLONIES

characteristic. We believe that, on the one hand, the company takes on the advantages of European centers; on the other, serving as a bridge, it builds on the possibility of reaching those connected countries, not only with owned operations (wholly-owned subsidiaries) but also with other entry modes like alliances, outsourcing or exporting, due to the facilitated access that the country can offer.

7.1 Key Contributions and Implications

First, we shed light empirically and theoretically on the recent attempts to understand where foreign headquarters locate (Valentino et al., 2019). Most previous studies focus on firm characteristics to explain why headquarters may move away (Benito et al., 2011; Birkinshaw et al., 2006) and only recently, a few studies have started paying attention to the location characteristics that attract foreign headquarters' location decisions (Laamanen et al., 2012). Beyond physical and knowledge connectivity (Belderbos et al., 2017; Castellani et al., 2021) and the general statement claiming that "good" institutional environments attract headquarter activities, we suggest that foreign headquarter activities assign high value to historical cross-regional connections. Therefore, colonial-based connectivity with former colonies in emerging markets works as a force attracting high value-added activities, and smoothening the acquisition of knowledge, access and legitimacy for future operations and connections. This is likely due to their role as bridges between corporate HQs and dispersed operations and subsidiaries, and the improved possibility to extend their geographical area of influence from some countries. Given the special nature of foreign (divisional, intermediate, regional) headquarter activities, specific characteristics of institutional settings deserve further attention.

In this regard, our second contribution is in responding to the call for fine-graining the operationalization of institutional dimensions and examining how they influence MNC decisions (Jackson & Degg, 2008; Cuervo-Cazurra et al., 2019). We aim to provide inspiration on how to conceptualize these dimensions as the result of underlying historical interactions (Kim & Aguilera, 2016). In line with other studies, we believe that it is urgent to investigate other attributes that affect the international mobility of high value-added activities. In this vein, we claim that historical context influences FDI decisions, manifesting in location advantages for some countries (Glaister et al., 2020; Makino & Tsang, 2011). Historical contextualization appears to be neglected by IB studies (Jones & Khanna, 2006), which may lead to mistaken conclusions and implications. For instance, our study points to the fact that historical positions continue to influence FDI movements. Recognizing this privilege for some countries should initiate a conversation on how to translate the results of our research into policy implications.

Third, at the theoretical level, we show that historical pathways are sources for FDI attraction. These path-dependent interactions between countries create conduits between regions, and facilitate access to other markets, thereby reducing uncertainty for further international operations and signaling better landscapes for firms. Institutional attributes affect the locations of various value chain activities differently, and therefore, we need to deepen research on what a good institutional environment is.

Policy-makers may want to understand that managing relationships with former colonies has implications for FDI attraction. First, as an additional dimension of country connectivity. Second, it would be useful for policy-makers to examine how foreign investment seeks out useful networks, and review the privileges that accrue from engaging with specific markets. This may drive a debate on how potential connections can be improved to attract FDI. There is a related debate on the assignment of public policy resources which may influence FDI attraction toward high value-added activities. Additionally, managers should be aware that cross-regional connections with emerging markets smoothen future connections to these markets. Furthermore, interaction with other economic actors in host countries may translate into useful information and future opportunities across regions.

7.2 Limitations and Future Research

Our study is not without limitations. First, although we focus on historical links and active economic connections, our measure overlooks other potential sources of country connectivity, such as diplomatic and political networks (Li et al., 2018) that can represent a substitute mechanism in the absence of the strong institution-based connections associated with colonial ties. Additionally, our measure of colonial-based connectivity is based on trade in total goods, therefore future developments of the measure could include trade in service categories, which could be a significant part of the economic activity between the focal country and its former colonies. Second, our sample does not differentiate between the location and relocation (post-movements) of foreign headquarters, which may also be a source of potential heterogeneity (Benito et al., 2011; Laamanen et al., 2012). Third, our data do not allow the deepening of the investigation on the outcome side, and the subsequent internationalization strategies in historically-connected countries. In other words, we do not consider how the MNC benefits from the "bridge" role of its foreign headquarters, due to the advantage of facilitated access to those connected places. Thus, future research could build on this through multiple case studies, surveys, or additional data collection, considering alternate entry modes, not only wholly-owned subsidiaries.

Furthermore, several other possible avenues for future research can be suggested. First, investigating firm heterogeneity can contribute to a better understanding of the location decisions for foreign headquarter activities; for example, exploring a firm's country of origin, the geographical scope of the headquarters, and the international experience of the companies, especially in terms of institutional diversity. Previous studies have found that different headquarter units with different characteristics and needs may be attracted by different factors (Baaij et al., 2015; Birkinshaw et al., 2006), thus the colonial-based connectivity effect may also differ. Additionally, although we think our context is especially important for high value-added activities, it would be interesting to extend this investigation to the location decision of other crucial activities along the firm's value chain (e.g., production, research and development, logistics and distribution, business services) beyond sectoral heterogeneity,

to see whether similar patterns arise and whether historical and colonial-related connections are more relevant for some activities than others.

Another interesting future research avenue may be to search for a reverse effect: if there is a similar effect for emerging market countries. For instance, Meouloud et al. (2019) explain how African companies jump into Europe through France, from northern African countries that also share historical context.

Finally, the idea that headquarters have become mobile (Valentino et al., 2019) suggests that governance structures may be distributed across networked MNCs (Ciabuschi et al., 2012). In this sense, location choice models may evolve to study the attraction for a particular set of sub-activities, rather than addressing the attraction for traditional types of subsidiaries and headquarters.

Supplementary Information The online version contains supplementary material available at https://doi.org/10.1007/s11575-022-00481-2.

Acknowledgements The authors would like to thank the editor, Michael-Jörg Oesterle, and two anonymous reviewers for their insightful comments and constructive suggestions. This paper also benefited from the feedback received from Gabriel Benito, Davide Castellani, Nigel Driffield, Cristina Villar, and the participants at the EIBA 2019 conference (Leeds). The authors kindly thank Matteo Borghi and Filippo Santi for their support, and the University of Florence (Italy) for allowing access to the data. Ana Botella-Andreu gratefully acknowledges the support of the Ministerio de Ciencia e Innovación, project PID2020-118340RB-I00. Katiuscia Lavoratori gratefully acknowledges the support of the Economic and Social Research Council, grant ES/S002278/1.

Author Contributions Authors are listed in alphabetical order and contributions were equal.

Data Access Statement No new data were created in this study.

References

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review, 91*(5), 1369–1401.

Aguilera, R. V., & Grøgaard, B. (2019). The dubious role of institutions in international business: A road forward. *Journal of International Business Studies, 50*(1), 20–35.

Alcácer, J., & Chung, W. (2007). Location strategies and knowledge spillovers. *Management Science, 53*(5), 760–776.

Alfoldi, E. A., Clegg, L. J., & McGaughey, S. L. (2012). Coordination at the edge of the empire: The delegation of headquarters functions through regional management mandates. *Journal of International Management, 18*(3), 276–292.

Amann, B., Jaussaud, J., & Schaaper, J. (2014). Clusters and regional management structures by Western MNCs in Asia: Overcoming the distance challenge. *Management International Review, 54*(6), 879–906.

Antràs, P., Padró, I., & Miquel, G. (2011). Foreign influence and welfare. *Journal of International Economics, 84*(2), 135–148.
Asakawa, K., & Lehrer, M. (2003). Managing local knowledge assets globally: The role of regional innovation relays. *Journal of World Business, 38*(1), 31–42.
Baaij, M. G., Mom, T. J., Van den Bosch, F. A., & Volberda, H. W. (2015). Why do multinational corporations relocate core parts of their corporate headquarters abroad? *Long Range Planning, 48*(1), 46–58.
Baaij, M. G., & Slangen, A. H. (2013). The role of headquarters–subsidiary geographic distance in strategic decisions by spatially disaggregated headquarters. *Journal of International Business Studies, 44*(9), 941–952.
Basile, R., Castellani, D., & Zanfei, A. (2008). Location choices of multinational firms in Europe: The role of EU cohesion policy. *Journal of International Economics, 74*(2), 328–340.
Beaverstock, J. V., Doel, M. A., Hubbard, P. J., & Taylor, P. J. (2002). Attending to the world: Competition, cooperation and connectivity in the world city network. *Global Networks, 2*, 111–132.
Bel, G., & Fageda, X. (2008). Getting there fast: Globalization, intercontinental flights and location of headquarters. *Journal of Economic Geography, 8*(4), 471–495.
Belderbos, R., Du, H. S., & Goerzen, A. (2017). Global cities, connectivity, and the location choice of MNE regional headquarters. *Journal of Management Studies, 54*(8), 1271–1302.
Belderbos, R., Du, H. S., & Slangen, A. (2020). When do firms choose global cities as foreign investment locations within countries? The roles of contextual distance, knowledge intensity, and target-country experience. *Journal of World Business, 55*(1), 101022.
Benito, G. R., Lunnan, R., & Tomassen, S. (2011). Distant encounters of the third kind: Multinational companies locating divisional headquarters abroad. *Journal of Management Studies, 48*(2), 373–394.
Berger, D., Easterly, W., Nunn, N., & Satyanath, S. (2013). Commercial imperialism? Political influence and trade during the cold war. *American Economic Review, 103*(2), 863–896.
Beugelsdijk, S., Ambos, B., & Nell, P. C. (2018). Conceptualizing and measuring distance in international business research: Recurring questions and best practice guidelines. *Journal of International Business Studies, 49*(9), 1113–1137.
Birkinshaw, J., Braunerhjelm, P., Holm, U., & Terjesen, S. (2006). Why do some multinational corporations relocate their headquarters overseas? *Strategic Management Journal, 27*(7), 681–700.
Boussebaa, M., & Morgan, G. (2014). Pushing the frontiers of critical international business studies: The multinational as a neo-imperial space. Critical Perspectives on International Business.
Budhwar, P. (2012). Management of human resources in foreign firms operating in India: The role of HR in country-specific headquarters. *The International Journal of Human Resource Management, 23*(12), 2514–2531.
Castellani, D., Jimenez, A., & Zanfei, A. (2013). How remote are R&D labs? Distance factors and international innovative activities. *Journal of International Business Studies, 44*(7), 649–675.
Castellani, D., & Lavoratori, K. (2020). The lab and the plant. Offshore R&D and co-location with production activities. *Journal of International Business Studies, 51*, 121–137.
Castellani, D., Lavoratori, K., Perri, A., & Scalera, V. (2021). International connectivity and the location of multinational enterprises' knowledge-intensive activities: Evidence from US metropolitan areas. *Global Strategy Journal*. https://doi.org/10.1002/gsj.1404
Chan, C. M., Makino, S., & Isobe, T. (2006). Interdependent behavior in foreign direct investment: The multi-level effects of prior entry and prior exit on foreign market entry. *Journal of International Business Studies, 37*(5), 642–665.
Chowdhury, R. H., & Maung, M. (2018). Historical ties between nations: How do they matter in cross-border mergers and acquisitions? *International Review of Economics & Finance, 58*, 30–48.
Chung, W., & Alcácer, J. (2002). Knowledge seeking and location choice of foreign direct investment in the United States. *Management Science, 48*(12), 1534–1554. https://doi.org/10.1287/mnsc.48.12.1534.440
Ciabuschi, F., Dellestrand, H., & Holm, U. (2012). The role of headquarters in the contemporary MNC. *Journal of International Management, 18*(3), 213–223.
Cuervo-Cazurra, A. (2011). Selecting the country in which to start internationalization: The non-sequential internationalization model. *Journal of World Business, 46*(4), 426–437.
Cuervo-Cazurra, A., Mudambi, R., & Pedersen, T. (2019). Clarifying the relationships between institutions and global strategy. *Global Strategy Journal, 9*(2), 151–175.

da Silva Lopes, T., Casson, M., & Jones, G. (2019). Organizational innovation in the multinational enterprise: Internalization theory and business history. *Journal of International Business Studies, 50*(8), 1338–1358.

Davidson, W. H. (1980). The location of foreign direct investment activity: Country characteristics and experience effects. *Journal of International Business Studies, 11*(2), 9–22.

Demirbag, M., & Glaister, K. W. (2010). Factors determining offshore location choice for R&D projects: A comparative study of developed and emerging regions. *Journal of Management Studies, 47*(8), 1534–1560.

Desai, M. A. (2009). The decentering of the global firm. *World Economy, 32*(9), 1271–1290.

Dia, M. (1996). Africa's management in the 1990s and beyond: Reconciling indigenous and transplanted institutions. The World Bank.

Disdier, A. C., & Head, K. (2008). The puzzling persistence of the distance effect on bilateral trade. *Review of Economics and Statistics, 90*(1), 37–48.

Dow, D., & Karunaratna, A. (2006). Developing a multidimensional instrument to measure psychic distance stimuli. *Journal of International Business Studies, 37*(5), 578–602.

Edgington, D. W., & Hayter, R. (2013). "Glocalization" and regional headquarters: Japanese electronics firms in the ASEAN region. *Annals of the Association of American Geographers, 103*(3), 647–668.

Enright, M. J. (2005). The roles of regional management centers. *Management International Review*, 83–102.

Foss, N. J., Mudambi, R., & Murtinu, S. (2019). Taxing the multinational enterprise: On the forced redesign of global value chains and other inefficiencies. *Journal of International Business Studies, 50*(9), 1644–1655.

Glaister, K., Driffield, N., & Li, Y. (2020). Foreign direct investment to Africa: Is there a colonial legacy? *Management International Review, 60*, 315–349.

Globerman, S., & Shapiro, D. (2002). Governance infrastructure and US foreign direct investment. *Journal of International Business Studies, 34*, 19–39.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory, 1*, 201–233.

Haberly, D., & Wójcik, D. (2015). Tax havens and the production of offshore FDI: An empirical analysis. *Journal of Economic Geography, 15*(1), 75–101.

Henderson, J. V., & Ono, Y. (2008). Where do manufacturing firms locate their headquarters? *Journal of Urban Economics, 63*(2), 431–450.

Hoenen, A. K., Nell, P. C., & Ambos, B. (2014). MNE entrepreneurial capabilities at intermediate levels: The roles of external embeddedness and heterogeneous environments. *Long Range Planning, 47*(1), 76–86.

Holt, J., Purcell, W. R., Gray, S. J., & Pedersen, T. (2008). Decision factors influencing MNEs' regional headquarters location selection strategies. In Thought Leadership in Advancing International Business Research (pp. 104–133). Palgrave Macmillan, London.

Hutzschenreuter, T., & Matt, T. (2017). MNE internationalization patterns, the roles of knowledge stocks, and the portfolio of MNE subsidiaries. *Journal of International Business Studies, 48*(9), 1131–1150.

Jackson, G., & Deeg, R. (2008). Comparing capitalisms: Understanding institutional diversity and its implications for international business. *Journal of International Business Studies, 39*(4), 540–561.

Jones, G., & Khanna, T. (2006). Bringing history (back) into international business. *Journal of International Business Studies, 37*(4), 453–468.

Keller, W. (1998). Are international R&D spillovers trade-related? *European Economic Review, 42*(8), 1469–1481.

Kim, J. U., & Aguilera, R. V. (2016). Foreign location choice: Review and extensions. *International Journal of Management Reviews, 18*(2), 133–159.

Kostova, T., Marano, V., & Tallman, S. (2016). Headquarters–subsidiary relationships in MNCs: Fifty years of evolving research. *Journal of World Business, 51*(1), 176–184.

Kunisch, S., Menz, M., & Birkinshaw, J. (2019). Spatially dispersed corporate headquarters: A historical analysis of their prevalence, antecedents, and consequences. *International Business Review, 28*(1), 148–161.

Kunisch, S., Menz, M., & Collis, D. (2020). Corporate headquarters in the twenty-first century: An organization design perspective. *Journal of Organization Design, 9*(1), 1–32.

Laamanen, T., Simula, T., & Torstila, S. (2012). Cross-border relocations of headquarters in Europe. *Journal of International Business Studies, 43*(2), 187–210. https://doi.org/10.1057/jibs.2011.52

Lasserre, P. (1996). Regional headquarters: The spearhead for Asia Pacific markets. *Long Range Planning, 29*(1), 30–37.
Li, J., Meyer, K. E., Zhang, H., & Ding, Y. (2018). Diplomatic and corporate networks: Bridges to foreign locations. *Journal of International Business Studies, 49*(6), 659–683.
Li, G. H., Yu, C. M., & Seetoo, D. H. (2010). Toward a theory of regional organization. *Management International Review, 50*(1), 5–33.
Lindner, T., Puck, J., & Verbeke, A. (2019). Misconceptions about multicollinearity in international business research: Identification, consequences, and remedies. *Journal of International Business Studies*. https://doi.org/10.1057/s41267-019-00257-1
Lorenzen, M., & Mudambi, R. (2013). Clusters, connectivity and catch-up: Bollywood and Bangalore in the global economy. *Journal of Economic Geography, 13*(3), 501–534.
Lundan, S. M., & Jones, G. (2001). The 'Commonwealth Effect' and the process of internationalisation. *World Economy, 24*(1), 99–118.
Lunnan, R., & Zhao, Y. (2014). Regional headquarters in China: Role in MNE knowledge transfer. *Asia Pacific Journal of Management, 31*(2), 397–422.
Makino, S., & Tsang, E. W. (2011). Historical ties and foreign direct investment: An exploratory study. *Journal of International Business Studies, 42*(4), 545–557.
McFadden, D. (1974). Conditional logit analysis of qualitative choice behaviour. In P. Zarembka (Ed.), *Frontiers in econometrics Chap 4* (pp. 105–142). New York: Academic Press.
Meouloud, T. A., Mudambi, R., & Hill, T. L. (2019). The metropolitan effect: Colonial Influence on the internationalization of francophone African firms. *Management and Organization Review, 15*(1), 31–53.
Meyer, K. E., & Benito, G. R. (2016). Where do MNEs locate their headquarters? at home! *Global Strategy Journal, 6*(2), 149–159.
Mudambi, R., Navarra, P., & Delios, A. (2013). Government regulation, corruption, and FDI. *Asia Pacific Journal of Management, 30*(2), 487–511.
Nielsen, B. B., Asmussen, C. G., & Weatherall, C. D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business, 52*(1), 62–82.
North, D. C. (1991). Institutions. *Journal of Economic Perspectives, 5*(1), 97–112.
Pla-Barber, J., Botella-Andreu, A., & Villar, C. (2021). Intermediate units in multinational corporations: Advancing theory on their co-parenting role, dynamics and outcomes. *International Journal of Management Reviews, 23*(1), 116–147.
Pla-Barber, J., & Camps, J. (2012). Springboarding: A new geographical landscape for European foreign investment in Latin America. *Journal of Economic Geography, 12*(2), 519–538.
Pla-Barber, J., Villar, C., & Madhok, A. (2018). Co-parenting through subsidiaries: A model of value creation in the multinational firm. *Global Strategy Journal, 8*(4), 536–562.
Prasad, A. (2003). *Postcolonial theory and organizational analysis: A critical engagement*. Springer.
Rasciute, S., & Downward, P. (2017). Explaining variability in the investment location choices of MNEs: An exploration of country, industry and firm effects. *International Business Review, 26*(4), 605–613.
Schmeisser, B. (2013). A systematic review of literature on offshoring of value chain activities. *Journal of International Management, 19*(4), 390–406.
Schotter, A., & Beamish, P. W. (2013). The hassle factor: An explanation for managerial location shunning. *Journal of International Business Studies, 44*(5), 521–544.
Schotter, A. P., Mudambi, R., Doz, Y. L., & Gaur, A. (2017a). Boundary spanning in global organizations. *Journal of Management Studies, 54*(4), 403–421.
Schotter, A. P., Stallkamp, M., & Pinkham, B. C. (2017b). MNE headquarters disaggregation: The formation antecedents of regional management centers. *Journal of Management Studies, 54*(8), 1144–1169.
Srivastava, R. K., & Green, R. T. (1986). Determinants of bilateral trade flows. *Journal of Business, 59*(4), 623–640.
Strauss-Kahn, V., & Vives, X. (2009). Why and where do headquarters move? *Regional Science and Urban Economics, 39*(2), 168–186.
Train, K. E. (2003). *Discrete choice methods with simulation*. Cambridge University Press.
UNCTAD United Nations Conference on Trade and Development (2016) *World investment report 2016: Investor Nationality: Policy Challenges*. UN.
Valentino, A., Schmitt, J., Koch, B., & Nell, P. C. (2019). Leaving home: An institutional perspective on intermediary HQ relocations. *Journal of World Business, 54*(4), 273–284.

Xu, K., Hitt, M. A., Brock, D., Pisano, V., & Huang, L. S. (2021). Country institutional environments and international strategy: A review and analysis of the research. *Journal of International Management, 27*(1), 100811.

Yeats, A. J. (1990). Do African countries pay more for imports? Yes. *The World Bank Economic Review, 4*(1), 1–20.

Yeung, H. W. C., Poon, J., & Perry, M. (2001). Towards a regional strategy: The role of regional headquarters of foreign firms in Singapore. *Urban Studies, 38*(1), 157–183.

Yoo, D., & Reimann, F. (2017). Internationalization of developing country firms into developed countries: The role of host country knowledge-based assets and IPR protection in FDI location choice. *Journal of International Management, 23*(3), 242–254.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal, 38*(2), 341–436.

Zhou, Y. M. (2015). Supervising across borders: The case of multinational hierarchies. *Organization Science, 26*(1), 277–292.

Zook, M. A., & Brunn, S. D. (2005). Hierarchies, regions and legacies: European cities and global commercial passenger air travel. *Journal of Contemporary European Studies, 13*(2), 203–220.