

Indian Direct Investment in Europe: A study of Patterns, Motives and the Applicability of existing theoretical Frameworks

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Abstract

Emerging market multinational enterprises (EMNEs) are becoming ever more important to the global economy with developed regions such as Europe being one of the top recipients of emerging markets' foreign direct investment (FDI). This development has generated a heated discussion within the International Business (IB) literature. Scholars disagree over whether conventional theoretical frameworks are sufficient to explain FDI from EMNEs in developed regions. This thesis utilizes data on 1,123 Indian-owned companies located in Europe to assess the FDI motives of Indian MNEs and the applicability of existing theoretical frameworks to the phenomenon of Indian direct investment in Europe. In this context, a fully integrated mixed method research study is conducted, using a descriptive analysis, a regression analysis, and a case study.

First, two distinct FDI groups, differing in specific characteristics, are identified. The first FDI group consists of small subsidiaries fulfilling a service function which are wholly owned by a very large owner with a risk-averse market selection. The second FDI group comprises larger subsidiaries, which execute manufacturing or R&D for a smaller, partial owner with an aggressive, and thus less risk-averse, market selection.

Moreover, Indian investors are shown to prefer countries with large market size, a good trade relationship with India, low R&D expenditures, high educational attainment, and a stable institutional environment. In contrast, the size of the Indian population within a host country, as a proxy for psychic distance to India, appears to have no significant influence on Indian direct investment in Europe.

In addition, three motives underlying Indian direct investment in Europe are discovered, with market-seeking as the predominant motivation and strategic asset-seeking as well as seeking for stable institutions being subordinate drivers.

Furthermore, a considerable number of Indian companies investing in Europe are shown not to possess firm-specific advantages (FSAs) over their foreign competitors prior to internationalization and Indian companies directly invest in psychically distant countries using high-commitment entry modes in order to gain advantages.

Finally, it is found that most established theoretical frameworks for FDI cannot fully explain the presented data on Indian FDI in Europe. Only the springboard perspective of Luo and Tung (2007, 2018) can be confirmed, while Dunning and Lundan's (2008) extended OLI paradigm and Mathews' Linkage-Leverage-Learning (LLL) framework (2006) require further research to be fully assessed.

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List of Abbreviations

Abbreviation	Description
ATL	Apollo Tyres Limited
DMNE	Developed market multinational enterprise
DRAM	Dynamic random access memory
DRL	Dr. Reddy's Laboratories Limited
EFTA	European Free Trade Association
EMNE	Emerging market multinational enterprise
FDI	Foreign direct investment
FSA	Firm-specific advantage
GUO	Global ultimate owner
HCLT	HCL Technologies Limited
IB	International business
IFDI	Inward foreign direct investment
IT	Information technology
JV	Joint venture
LLL	Linkage-Leverage-Learning
M&A	Mergers and acquisitions
OFDI	Outward foreign direct investment
RBV	Resource-based view
SME	Small and medium-sized enterprises
Suzlon	Suzlon Energy Limited
UNCTAD	United Nations Conference on Trade and Development
US	United States

1. Introduction

In today's global economy, emerging markets' FDI into developed countries plays an increasingly important role (Brennan & Bakir, 2016; Buckley & Tian, 2017). Data from the United Nations Conference on Trade and Development (UNCTAD) (2018a) show that developing economies today make up about one third of global FDI outflows, compared to only 13% in 2007 (cf. Figure

1). Although EMNEs are considered as latecomers with a lack of sophisticated firm-specific

capabilities, several have become world leaders. Examples of such enterprises include the Chinese company Haier, the world's leading manufacturer of refrigerators; Samsung, the Korea-based world leader in the production of DRAM microchips; and India's Mittal (now ArcelorMittal), the world's leading manufacturer of steel (Chari, 2013; Mathews, 2006; Rasiah, Gammeltoft, & Jiang, 2010).



Figure 1: FDI outflows from developing economies and their share in total world outflows from 2000 to 2014. Source: Own presentation based on UNCTAD (2018a).

As research into EMNEs' internationalization processes has increased, scholars have found that EMNEs are a heterogenous group of companies which differs widely with regard to individual competitive advantages, industries, target markets, internationalization paths, and home country infrastructure and institutional systems. Consequently, generalizations should be made only with great care (Gammeltoft & Hobdari, 2017; Ramamurti & Singh, 2009). Thus, studies have tended to focus on one specific country, with the result that while China has been the subject of a number of studies, many other emerging markets are still under-researched (Jormanainen & Koveshnikov, 2012). This thesis therefore takes a closer look at Indian-owned subsidiaries located in Europe and their Indian investors as an example of the internationalization of EMNEs.

India is one of the world's fastest-growing economies with rapid GDP growth of 7.8% (Economist, 2018). The country has already overtaken Russia and Brazil to become the second largest BRIC economy after China (PTI, 2017). One driver of India's growth is the internationalization of Indian enterprises. The emergence of Indian multinational enterprises (MNEs) began in the early 1960s

with the first cross border investments of several large Indian business conglomerates such as Tata, Kirloskar and Birla (Pradhan, 2005). Since then, the number of Indian MNEs has increased continuously. Additionally, ever since the beginning of the new millennium, the increasing presence of Indian firms in Europe (measured both by number of companies and by investment expenditures) has created a close Indian-European relationship (Brennan & Bakir, 2016; Rasiah et al., 2010). As this expansion towards developed countries such as those in Europe is a relatively new phenomenon and is still poorly understood, it is important to identify the motives behind Indian investment on a broader scale.

Despite the existence of early theories about FDI from developed countries, newer theories have arisen in an attempt to explain the specific phenomenon of EMNEs. This has generated a heated discussion, dividing researchers into three groups. The first group comprises scholars who are convinced that existing theories are already sufficient to explain FDI of EMNEs. The second group consists of researchers who argue that existing theories and frameworks need to be adjusted to account for this phenomenon. The third group of authors believes that new theories must be developed specifically to explain the emergence of EMNEs (Gammeltoft & Hobdari, 2017). This discussion is still ongoing and leads to further uncertainty in the context of EMNEs.

There is very little literature examining Indian FDI in Europe, as quantitative studies generally include little or no data at the company level. In turn, qualitative research tends to consider merely a small number of case companies and thus fails to give general conclusions. Therefore, this thesis aims to provide a more comprehensive overview of motives for and characteristics of Indian investment in Europe by looking at the company level. In addition, the applicability of the aforementioned conventional and newly developed FDI theories will be assessed on the specific case of Indian FDI in Europe by combining a descriptive, regression, and case analysis in order to be able to provide a more extensive evaluation.

Accordingly, the research question of this thesis is:

Why do Indian multinational enterprises directly invest in European countries, and to what extent are existing theoretical frameworks applicable in the light of the empirical analysis?

Since the research question is very broad, a number of sub-questions will be considered in the course of this thesis in order to be able to provide a comprehensive answer. These questions will be approached in the four main sections of this thesis:

- 1. A descriptive analysis, which contains a description of the characteristics of Indian subsidiaries in Europe as well as of their Indian global ultimate owners (GUOs).
- 2. A regression analysis, which determines which host country factors attract Indian FDI in Europe.
- 3. A case study, which comprises a more detailed investigation of Indian investors and the motives underlying Indian FDI.
- 4. A discussion, which combines and interprets results from the previous sections in order to assess each sub-question and to ultimately answer the research question.

Question 1: What are the patterns of Indian subsidiaries in Europe in terms of size, function, industry and degree of ownership?

Among other factors, the research question asks which motives underlie Indian direct investment in Europe. To be able to understand and identify motives, it is essential to first understand the general situation. Therefore, this first sub-question is looking for broad characteristics and patterns of Indian FDI in Europe. These will be accomplished by the descriptive analysis examining data about Indian-owned subsidiaries located in Europe. Part of this descriptive analysis is a cluster analysis which seeks to identify distinct FDI groups by revealing systematic relationships that may exist between the characteristics of subsidiaries and investors.

Question 2: What host country characteristics attract Indian FDI in Europe?

This sub-question investigates which factors influence the location choice of Indian MNEs in Europe, including possible motives underlying Indian FDI. In order to provide a representative picture, a quantitative approach in the form of a regression analysis will be applied. It uses the number of Indian direct investments per country per year as a dependent variable and selected host country factors as independent variables.

Question 3: Why do Indian companies invest in Europe?

In order to answer this sub-question and thus identify general motives underlying Indian FDI in Europe, a multiple case study will be performed in addition to the descriptive and the regression analysis. The case study will analyze four specific Indian companies from different major sectors and with distinct investment behavior.

Question 4: What kind of Indian companies invest in Europe?

To gain an understanding of the Indian ultimate owners of the European subsidiaries, the descriptive analysis of this thesis will also provide characteristics of the subsidiaries' GUOs. In addition, the case study will give further insights into Indian investors. Thereby, the focus is laid on two dimensions, namely the possession of firm-specific advantages (FSAs) and the previous international experience of the investor.

Question 5: To what extent can existing theoretical frameworks explain Indian direct investment in Europe?

In order to answer this question, the theoretical framework will present important FDI theories, including conventional theories based on developed countries as well as newer theories based on emerging countries. In addition, different opinions on the applicability of each theory to EMNEs will be outlined in the theoretical framework. Finally, all findings of the previous sub-questions will be considered to assess the applicability of these theories for the case of Indian FDI in Europe.

The present thesis is divided into seven chapters. After the introduction, the theoretical framework will be presented in the second chapter of this thesis by introducing important definition and conventional as well as newly developed FDI theories and their extensions. Chapter three will summarize the existing literature on FDI from emerging markets in general as well as from India in particular. The fourth chapter of this thesis will provide a detailed explanation of the methodology used to answer the research question, to ensure a high level of transparency. Chapter five will present the quantitative and qualitative analyses, providing the foundation for the discussion. It will contain a detailed descriptive analysis of Indian FDI patterns, a comprehensive regression analysis to identify host country factors attracting Indian direct investment in Europe, and a case study of Indian MNEs in order to determine motives and investment processes underlying Indian FDI in Europe. Based on this, chapter six will present the discussion, combining the findings of all analyses to answer the sub-questions. The last chapter, chapter seven, will draw conclusions from this thesis' findings to finally answer the research question, taking into account limitations as well as further research perspectives.

2. Theoretical Framework

The following chapter provides a comprehensive theoretical framework for the thesis. After presenting definitions that are important for a general understanding across the thesis, existing theoretical concepts of FDI will be introduced. These are divided into FDI theories based on MNEs from developed countries on the one hand and FDI theories based on emerging markets on the other. Finally, the findings about the FDI frameworks are summarized.

2.1.Definitions

According to the UNCTAD (2012), private capital flows are composed of FDI, foreign portfolio investment, and other investments such as international banking flows and loans. As this thesis analyzes direct investment, FDI is the only form of capital flow assessed, and the single term "investment" always refers to FDI.

Pursuant to the definition of the International Monetary Fund (IMF) (2003), **FDI** is "an investment made to acquire lasting interest in enterprises operating outside of the economy of the investor" (UNCTAD, 2018b). Furthermore, according to the Organisation for Economic Co-operation and Development (OECD), the "lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. The direct and indirect ownership of 10% or more of the voting power [...] is evidence of such a relationship." (OECD, 2008, p. 48 f.). When speaking of FDI at a country level, it is necessary to distinguish between two types of FDI: Outward FDI (OFDI) and Inward FDI (IFDI), representing the FDI flowing out of and into the country, respectively.

Therefore, a **foreign direct investor** is defined as "an entity (an institutional unit) resident in one economy that has acquired, either directly or indirectly, at least 10% of the voting power of a corporation (enterprise), or equivalent for an unincorporated enterprise, resident in another economy." (OECD, 2008, p. 49). The investor can be classified to any industry of the economy and can be any of the following:

- (i) "an individual;
- (ii) a group of related individuals;
- (iii) an incorporated or unincorporated enterprise;

- (iv) a public or private enterprise;
- (v) a group of related enterprises;
- (vi) a government body;
- (vii) an estate, trust or other societal organisation; or
- (viii) any combination of the above." (OECD, 2008, p. 49 f.)

However, as this thesis intends to examine the patterns and motives of Indian MNEs, FDI by Indian individuals (points (i) and (ii)) will not be part of the analysis. Moreover, the available data reflect only incorporated entities, and thus non-incorporated enterprises are excluded from consideration as well.

Foreign direct investors own a **direct investment enterprise** operating in a country which is not the economy of their residence. The OECD differentiates between different enterprises according to the level of ownership. When the direct investor holds more than 50% of the enterprise, the enterprise is defined as a **subsidiary**. This also includes the case in which the direct investor holds this amount together with other subsidiaries, since according to the OECD (2008, p. 52), "the degree of ownership that may be exercised through controlling links (more than 50% of voting power) is not diminished by the existence of multiple links in an ownership chain.". An FDI enterprise with an ownership level of at least 10% and no more than 50% is termed an **associate**. Again, this includes cases where the direct investor and its subsidiaries jointly hold the voting rights (OECD, 2008).¹

In the case of shared ownership between two parties contractually bound to work together as well as share profits and losses, a **joint venture** (JV) is present (OECD, 2008). A JV is a subsidiary or associate in which at least two independent companies are involved. Although the JV is founded and run cooperatively by two or more companies, it has autonomous status. This means that the JV acts independently and is usually also legally independent (GS, 2018).

When owning foreign direct investor enterprises, the parent company becomes a multinational enterprise. According to UNCTAD (2018c), **multinational enterprises** (MNEs) "are incorporated or unincorporated enterprises comprising parent enterprises and their foreign affiliates. A parent enterprise is defined as an enterprise that controls assets of other entities in countries other than its home country, usually by owning a certain equity capital stake."

¹ For the sake of simplicity, this thesis uses the term subsidiary to cover all Indian direct investments in Europe, even though the terms "subsidiary" and "associate" have different meanings.

The growth of direct investments from emerging market companies led to the creation of so-called **emerging market multinational enterprises** (EMNEs). According to Luo & Tung (2007, p. 482) EMNEs are "international companies that originated from emerging markets and are engaged in outward FDI, where they exercise effective control and undertake value-adding activities in one or more foreign countries." Since emerging markets and their institutional systems vary immensely, EMNEs are a highly diverse group of companies (Gammeltoft & Hobdari, 2017). In addition to this, there are also **multinationals from developed markets** (DMNEs).

In this context **emerging economies** are defined as "high-growth, low-income countries with relatively weak institutions and weak economic structures overall, which are undergoing rapid transition, usually for the better" (Gammeltoft & Hobdari, 2017, p. 4). Due to their frequent interchangeable use in the literature, the terms "developing" and "emerging" economies are used as synonyms in this thesis, even though some authors use them to refer to separate concepts.

Furthermore, this thesis focusses on Europe as a destination for Indian investment. In detail, Europe will be seen as the combination of the enlarged European union (EU-28)² and the countries belonging to the European Free Trade Association (EFTA).³

Lastly, this thesis differentiates between **greenfield** and **brownfield investments**. Greenfield investments are defined as FDIs which are completely set-up by the foreign direct investor or its subsidiaries (Raff, Ryan, & Stähler, 2005). Thus, the direct investor always holds 100% of the voting rights. Brownfield investments include all other types of FDI (M&A and/or JVs).

2.2. FDI Theories

While early theories on FDI were already being developed in the 18th and 19th centuries (Smith, 1776 and Ricardo, 1817 as cited in Moosa, 2015), new FDI theories flourished after the Second World War as the importance of multinational companies grew, and especially as direct investments from the United States (US) in Europe took off (Nayak & Choudhury, 2014). Many

² EU-28 = Belgium (BE), Denmark (DK), France (FR), Germany (DE), Greece (EL), Ireland (IE), Italy (IT), Luxembourg (LU), Netherlands (NL), Portugal (PT), Spain (ES), the United Kingdom (UK), Austria (AT), Finland (FI), Sweden (SE), Cyprus (CY), the Czech Republic (CZ), Estonia (EE), Hungary (HU), Latvia (LV), Lithuania (LT), Malta (MT), Poland (PL), Slovakia (SK), Slovenia (SI), Bulgaria (BG), Romania (RO), and Croatia (HR) (Eurostat, 2018).

³ Countries of the EFTA = Iceland (IS), Liechtenstein (LI), Norway (NO), and Switzerland (CH) (EFTA, 2018).

schools of thought developed over time, and to date, no overarching consensus or general theory of FDI has been established (Moosa, 2015).

In addition, the emergence of EMNEs in the early 21st century split researchers in three groups: (1) scholars who argue that existing theories and frameworks can adequately explain this phenomenon, (2) scholars who argue that existing theories and frameworks need to be extended and adjusted to explain EMNEs, and (3) scholars who argue that new theories need to be developed to properly account for EMNEs (Gammeltoft & Hobdari, 2017). This thesis therefore examines theories based on developed countries and theories based on emerging countries, as well as their extensions. Seven theories are assessed below: (1) the internalization theory, (2) the internationalization process model, (3) the eclectic paradigm, (4) the resource-based view, (5) the Linkage-Leverage-Learning framework, (6) the springboard perspective, and (7) institutional arbitrage logic. All are well-established theories, especially within EMNE research (Luo & Tung, 2018; Luo & Zhang, 2016).

2.2.1. FDI Theories based on Developed Countries

In the following, four theories are presented which were introduced based on research concerning the internationalization of DMNEs. After a brief introduction to each theory, literature connecting the theory to the internationalization of EMNEs will be summarized.

Internalization Theory

The internalization theory was first put forward by Buckley and Casson (1976) and has its origins in several theories, including the studies of transaction cost economics by Coase (1937) and Hymer's FSAs (1968; 1976). The theory puts the MNE as an institution in the focus of the analysis, as researchers examined why firms chose to engage in international production themselves, rather than utilizing licensing or supply contracts with local companies in the foreign market (Barclay, 2002). Therefore, the key point of the theory is that there are various operational ways of exploiting a company's knowledge-based assets in foreign countries, with a limited number of variables specifying the "optimal" form of operationalization (Verbeke & Hillemann, 2013). The main variable specifying the chosen form is transaction cost, suggesting that firms will internalize until the costs of doing so outweigh the benefits (Buckley, 1989; Casson & Buckley, 1983). Over time, the internalization theory underwent some development, resulting in the so-called "new" internalization theory (e.g. Rugman & Verbeke, 1992, 2003, 2004). During this development, the focus of the theory shifted from emphasizing the variables encouraging MNEs to invest in foreign markets to the internal organization of an MNE and its network capabilities. Broadly speaking, this extension differentiates between FSAs which are available to the whole MNE (and are often developed within the headquarters) and FSAs which are available only to specific departments. Thus, the new theory aims to link FSAs with strategic management (Verbeke & Hillemann, 2013).

The internalization theory has been criticized in the light of EMNEs' global expansion. As many studies suggest that EMNEs do not possess FSAs—at least not to the same extent than DMNEs do—the logic of internalization theory suggests that their chosen form of internationalization should mainly be exporting. However, scholars have argued that many EMNEs chose rather aggressive internationalization modes (e.g. M&A) to obtain FSAs (P. P. Li, 2003; Surdu, Mellahi, & Glaister, n.d.). Moreover, researchers have found that EMNEs are more likely to internalize operations abroad as they experience relatively high transaction costs at home (Cuervo-Cazurra, 2012; Kittilaksanawong & Dai, 2015).

Internationalization Process Model

The dominant model of internationalization process theory in the IB literature is the Uppsala model put forward by Johanson and Vahlne (1977) (Welch, Nummela, & Liesch, 2016). The model was first proposed in 1977 and has since been extended several times, with a revised version presented in 2009 (Johanson & Vahlne, 1990, 2003a, 2003b, 2009; Welch et al., 2016). Essentially, the model sees international expansion as a process involving a series of incremental steps, suggesting that lack of both experience and knowledge is a significant barrier to this expansion (Johanson & Vahlne, 1977, 1990). The original model, which is based on an analysis of 2000 subsidiaries of Swedish companies, suggests that the incremental internationalization process is based on two dimensions: "(1) a progressive establishment chain of operation modes [export \rightarrow sales agency \rightarrow foreign production facilities], and (2) market selection based on the psychic distance from the home market [liability of foreignness]" (Welch et al., 2016, p. 785).

The process presents a dynamic interplay between learning and commitment: the more a company or managers of a company learn about a foreign market, the more they are willing to commit to this market which will lead to even more knowledge and thus a deeper commitment, creating a virtuous cycle. While the key change mechanism stays the same in the 2009 revised model, Johanson and Vahlne point out that psychic distance (= liability of foreignness) is not as important a factor as business networks (= liability of outsidership). They state that experiential knowledge in internationalization is shared and gathered and that the knowledge base extends beyond company boundaries, falling back on relationships and networks (Johanson & Vahlne, 2009; Welch et al., 2016). Thus, the barrier to foreign expansion today is mainly the outsidership of networks.

Focusing on the internationalization of EMNEs, a key question in the IB literature is whether EMNEs follow the incremental path suggested by the Uppsala model (Surdu et al., n.d.). While some scholars have concluded that EMNEs follow a gradual expansion process, as pioneering is not an option for companies from emerging markets (Da Rocha, Cotta de Mello, Pacheco, & De Abreu Farias, 2012; Meyer & Thaijongrak, 2013), others assert that EMNEs do not follow the incremental steps of the internationalization process, as they heavily invest abroad at an earlier growth stage than their fellow competitors from developed countries do (Bonaglia, Goldstein, & Mathews, 2007; Gaur & Kumar, 2015; P. P. Li, 2003; Mathews, 2002).

Referring to the revised model from 2009, scholars found that building social and political networks helps EMNEs access valuable assets such as financial capital and/or host market knowledge, which increase the pace of their internationalization (Bangara, Freeman, & Schroder, 2012; Santangelo & Meyer, 2011; H. Zhao & Hsu, 2007). Thus, these researchers confirmed the applicability Johanson and Vahlne's 2009 model, or at least parts of it, in the internationalization of EMNEs.

Eclectic Paradigm (OLI)

One of the most widely known FDI theories is the eclectic paradigm of Dunning (1981, 1988). The theory was first put forward in 1976 at the Nobel Symposium in Stockholm and has been extended many times since then (Dunning, 2001). It combines three different schools of thought in one paradigm: oligopolistic, internalization, and location theory (Dunning, 2001; Moosa, 2015; Nayak & Choudhury, 2014). The paradigm suggested that a company would engage in FDI when it simultaneously possesses ownership-specific (O) and internalization (I) advantages and one or

more host countries possess location-specific (L) advantages (Makoni, 2015; Nayak & Choudhury, 2014).

More precisely, the idea of O advantages (= FSAs) is based upon the concept of oligopolistic theory and emphasizes the possession of advantages which are specific to the individual firm. These advantages can be in the form of tangible and intangible assets and can be enjoyed over domestic as well as foreign firms. For instance, they include but are not limited to superior technology, technical knowledge, patents, access to or control over raw materials, management or marketing skills, and economies of scale. In the end, these advantages lead to cost reductions, which allow the company to compete with firms in a foreign market (Dunning, 1981, 1988, 2001; Makoni, 2015; Nayak & Choudhury, 2014).

L advantages are based upon location theory and refer to characteristics of foreign countries which can influence the performance of a foreign investor in that market. Location-specific advantages of one country over another can for instance stem from natural resources, a skilled workforce, superior market opportunities, low-cost labor, and/or the legal and cultural environment (Dunning, 1981, 1988, 2001). According to the OLI paradigm, MNEs locate their production activities in countries which are the most favorable in terms of cost (e.g. labor) and revenue (e.g. market demand) (Luo & Tung, 2018).

Finally, I advantages are built upon the concept of transaction costs and are inspired by Buckley and Casson's (1976) internalization theory and its extension by other scholars (Dunning, 1981, 1988, 2001). As stated above, internalization theory suggests that an activity should be internalized if it can be carried out more cheaply or efficiently within the firm than outside of it. Thus, based on I advantages, FDI is only reasonable for a company if attaining and using the aforementioned ownership- and location-specific advantages for itself is more profitable than selling or leasing them to foreign companies through management contracts or licensing (Makoni, 2015).

Over the years, the OLI paradigm has constantly been refined (Dunning, 2001). In 2008 Dunning, Kim, and Park compared today's EMNEs with DMNEs thirty years ago and found that although there are certain differences between the two types of companies, the OLI paradigm is generally capable of explaining the internationalization of EMNEs, but might need some extension. One of the most important differences found by Dunning, Kim, and Park is that EMNEs often do not possess direct firm-specific ownership advantages in the same ways as DMNEs did or do. However, EMNEs still own so-called country-specific ownership advantages, such as a rich supply

of liquid assets. The main challenge for companies is thus to internalize these advantages and utilize them across borders (Dunning, Kim, & Park, 2008).

Moreover, building upon the work of Jack Behrman (1972), Dunning and Lundan summarized four motives for foreign production: (1) natural resource-seeking, (2) market-seeking, (3) efficiency-seeking and (4) strategic asset- or capability-seeking (Dunning & Lundan, 2008b, Chapter 3.3). The authors note that MNEs nowadays often pursue more than one objective at the same time and that the motives behind international production may change over time (Dunning & Lundan, 2008b, Chapter 3.3).

Companies classified as natural resource seekers invest in foreign countries to acquire particular resources of a higher quality at lower real costs than they could obtain in their home country (if the resources are obtainable at all). The motivation behind their FDI, then, is to be more profitable and competitive within both established and new or prospective markets by having access to better resources. Generally, three different types of resource seekers can be distinguished based on the resources they pursue. The first group searches for physical resources of one kind or another, the second group seeks rich supplies of well-motivated and cheap unskilled or semi-skilled labor, and the third group pursues technological capability (Dunning & Lundan, 2008b, Chapter 3.3).

Market seekers are enterprises which invest abroad to supply goods or services to specific geographical markets. Their investment may be conducted either to protect or sustain existing markets or to promote or exploit new markets. Market size and market growth are therefore the main reasons which prompt companies to engage in market-seeking investments (Dunning & Lundan, 2008b, Chapter 3.3).

Firms engaging in efficiency-seeking FDI, in turn, want to rationalize the organization of established market-seeking or resource-seeking investments in such a way that they can exploit the geographically dispersed activities to the fullest. Thus, economies of scale and scope are the main benefits being pursued (Dunning & Lundan, 2008b, Chapter 3.3).

Lastly, strategic asset seekers engage in FDI to promote their long-term strategic objectives by acquiring assets of foreign companies. The motive for the acquisition is less to exploit marketing or cost advantages, but rather to expand the global portfolio of tangible and intangible assets to either strengthen their own FSAs or weaken competitors' FSAs. Dunning and Lundan note that, interestingly, strategic asset-seeking investments are increasingly undertaken by EMNEs (Dunning & Lundan, 2008b, Chapter 3.3).

In the context of attempting to explain the internationalization of EMNEs, the OLI paradigm is the most commonly employed and interrogated model within the IB literature (e. g.: Amighini, Cozza, Giuliani, Rabellotti, & Scalera, 2015; Gaur & Kumar, 2015; Surdu et al., n.d.). The traditional school of thought argues that EMNE's internationalization does not differ from that of large DMNEs and can thus be perfectly explained by the OLI paradigm (Cantwell & Narula, 2001; Narula, 2006). Its authors claim that the successful international expansion of, for example, certain emerging market companies without early ownership-specific advantages (defying the OLI paradigm) should not be used as the basis for analytical conclusions. Instead, they argue, these companies represent irrelevant outliers (Narula, 2006).

Dunning and Lundan's (2008a) extension of the OLI model, discussed above, shows that Dunning himself belongs to a second school of thought, which suggests that the OLI framework can adequately explain EMNE's internationalization, if it is expanded and modified to account for the aspects which are unique to EMNEs (Dunning, 2006; Gaur & Kumar, 2015).

A third school of thought criticizes the entire framework of the OLI paradigm, arguing that it is insufficient for explaining EMNEs. The OLI model, including Dunning and Lundan's 2008 extension, suggests that firms must possess ownership-specific advantages before they engage in FDI. However, many scholars find that EMNEs in fact internationalize precisely to obtain advantages which they lack (Mathews, 2002). Thus, the paradigm is seen as a static framework which takes only pre-existing advantages into account and cannot explain the development of firm capabilities over time (Amighini et al., 2015).

Resource-based View

The resource-based view (RBV) was first introduced by Penrose (1959) and refined by Dierickx and Cool (1989), Barney (1991), and Teece, Pisano and Shuen (1997) (Cuervo-Cazurra, 2012). It holds that companies have competitive advantages in the form of firm-specific capabilities or resources which are used by managers to create products, and that these competitive advantages are based on the development of a bundle of resources that fulfils the VRIN-framework, meaning the resources need to be valuable, rare, inimitable and non-substitutable (Luo & Tung, 2018).

In contrast to the other FDI theories presented, the RBV was not developed specifically for MNEs. It has nevertheless also been extended to explain FDI. The application of the RBV to the study of MNEs emphasizes the use of resources across borders (Tallman & Fladmoe-Lindquist, 2002). In the traditional model, the existence of sustainable resources is a key condition for international expansion, as companies use only their existing capabilities to expand abroad (Cuervo-Cazurra, 2012).

One extension to the RBV is the knowledge-based view introduced by Nonaka (1994), which argues that knowledge is the foundation for any company competing against others, as knowledge is the capability that defines the value of all other resources. Thus, a company becomes a MNE if it is better at transferring knowledge across borders than the market is (Kogut & Zander, 1993). However, compared to other theories, the main difference remains that the RBV does not specifically explain any motives behind FDI, but rather discusses what sustainable advantages are and how to obtain them (Luo & Tung, 2018).

In light of the study of EMNEs, scholars find that the high importance of sustainable advantages leads companies to prefer entry modes which provide a high level of control over operations, as they want to protect their resources and knowledge (Cuervo-Cazurra, 2012). Moreover, scholarship has since modified the traditional model and argued that EMNEs develop capabilities and internationalize in a co-evolutionary manner, obtaining new capabilities and resources by acquiring companies to upgrade their capabilities at home and catch up to DMNEs (Bonaglia et al., 2007; Cuervo-Cazurra, 2003; Kumaraswamy, Mudambi, Saranga, & Tripathy, 2012; Luo & Rui, 2009; Luo & Tung, 2007).

2.2.2. FDI Theories based on Emerging Markets

After presenting four different FDI theories based on developed countries, the following section introduces three newly developed FDI theories which are based on emerging markets. The goal of these theories is to explain how non-Western firms can become competitive through international expansion.

Linkage-Leverage-Learning Framework

Mathews (2006) explains the internationalization process of EMNEs by introducing the Linkage-Leverage-Learning (LLL) framework. It was initially developed with reference to large Asian companies from newly industrialized economies such as South Korea, Hong Kong, and Singapore. However, as the model is based on the internationalization of latecomers to the global business system, scholars argue that it is also applicable for EMNEs more generally, including from countries such as India (Thite, Wilkinson, Budhwar, & Mathews, 2016).

According to the model, EMNEs are less focused on and rarely possess FSAs such as technological or managerial resources. Instead, they focus on forming various external partnerships to seek these resources through linkages with Western MNEs (W. Li, Guo, & Xu, 2017; Mathews, 2006). The best and fastest way to enter the global market place, according to the LLL model, is first to partner with other companies (especially from developed countries) to gain market intelligence and overcome uncertainty (linkage); second, to leverage these established links everywhere to overcome resource barriers and allocate resources optimally (leverage); and third to create an organizational process of learning through repeated investments abroad (learning) (Lu, Ma, Taksa, & Wang, 2017; Mathews, 2003, 2006).

As EMNEs, in the LLL conceptualization, do not possess FSAs and seek to obtain these through linkages with MNEs from developed countries, scholars argue that "strategic asset-seeking in overseas markets is the primary motive or antecedent of internationalization" of EMNEs (Lu et al., 2017, p. 758).

Even though the LLL framework enjoys popularity within the IB literature, very few studies have been conducted to test it (Surdu et al., n.d.). For example, by conducting interviews with Chinese managers, Ge and Ding (2008) found that the model provides an explanation for the catch-up strategies of EMNEs in the manufacturing sector—however Surdu et al. point out that it remains to be seen whether the LLL model is significantly different from more conventional theories such as the OLI paradigm, or if the difference is simply a matter of emphasis (Surdu et al., n.d.).

Springboard Perspective

The springboard perspective was introduced in 2007 by Luo and Tung in response to the finding that conventional FDI theories were unable to explain the rapid and aggressive international expansion of EMNEs. The theory resembles the LLL framework to the extent that both models recognize the pursuit to overcome resource deficiencies by accessing external resources as well as by the use of networks and linkages (Luo & Tung, 2018).

In Luo & Tung's logic, EMNEs use internationalization as a springboard, systematically and recursively internationalizing to reach several strategic goals: "(1) acquire strategic resources to

compensate for their capability voids, (2) overcome laggard disadvantages, (3) exploit competitive advantages and market opportunities in other countries, (4) alleviate institutional and market constraints at home and bypass trade barriers into advanced markets, and (5) better compete with global rivals with augmented capabilities and improved home base after strategic asset acquisition" (Luo & Tung, 2007, p. 130 f.). Luo and Tung emphasize that EMNEs are pursuing a long-term strategy, since the ultimate goal of EMNEs is to be innovative by themselves. Therefore, acquired assets not only serve to improve the global competitive position, but are also acquired to generate future growth. It is thus critical for a MNE to be able to integrate value-chain activities performed in the home and host countries as well as to be able to transfer strategic assets and knowledge from the host countries back to the home country (Luo & Tung, 2007; Luo & Tung, 2018).

Much like the LLL framework, springboard perspective enjoys popularity within the IB literature, but lacks a significant number of studies conducted to test it (Surdu et al., n.d.).

Institutional Arbitrage Logic

The institution-based view was established before the internationalization of EMNEs became a prominent topic in the IB literature. North (1990) introduced the theory by discovering that formal and informal institutions—ranging from governmental institutions to cognition and norms—have a significant influence on the context in which decisions are made. According to institutional theory, companies are therefore embedded in the economic and social context of a society (Scott, 1995).

However, certain extensions of the institution-based view are focused specifically on explaining the internationalization of EMNEs. These extensions include the development of two concepts: (1) the exit view, also known as escapism, and (2) the exploitation view (Luo & Tung, 2018; Luo & Wang, 2012).

The scholars who advocate escapism, or the exit view, argue that EMNEs internationalize to countries with stable institutional environments in order to avoid or distance themselves from poor institutions at home (Boisot & Meyer, 2008; Witt & Lewin, 2007; Yamakawa, Peng, & Deeds, 2008). The exploitation view on the other hand claims that EMNEs are experts in handling poor institutions and are exploiting this knowledge by internationalizing to other countries with weak institutions, thus mainly investing in other emerging countries. In comparison to MNEs from

developed countries, EMNEs are superior in handling these weak institutions and thus possess advantages (Cuervo-Cazurra & Genc, 2008).

Institutional arbitrage logic has also been criticized by other scholars, who argue that institutions are only one variable explaining the internationalization of EMNEs and cannot in and of themselves fully explain the phenomenon. These scholars claim that the co-existence of escapism and exploitation of weak institutions bolsters their criticism (Luo & Tung, 2018).

2.2.3. Summary

In comparing the different FDI theories discussed above as well as views on the internationalization of EMNEs, it becomes apparent that there are three factors that recur frequently across different models: the possession (or non-possession) of FSAs over foreign competitors; the choice of entry mode; and the specific motives underlying FDI. While most theories based on developed countries suggest that a company must possess FSAs before even considering going abroad, newer theories argue that EMNEs do not in fact possess FSAs, and therefore internationalize to obtain these advantages. Moreover, according to traditional theories, a lack of FSAs would result in EMNEs launching their internationalization with modes that require less commitment, such as exports or licensing. However, newer theories argue that EMNEs start by directly investing in foreign countries in order to achieve a high degree of control over their newly obtained businesses. Lastly, conventional theories present strategic asset-seeking as either the main motive (cf. the LLL framework) or as an important motive alongside inter alia market-seeking (springboard).

In summary, it appears that there is no uniformity within the IB literature about theories explaining FDI in general, let alone the internationalization of EMNEs. While the seven presented theories might present some similarities, their differences are significant (cf. Table 1). This thesis will therefore assess whether any of these theories can explain Indian FDI in Europe.

Theory	Initial argument	Major assumptions	Key question on MNC behavior & key answer	Implica Locations/Target Countries	tions on FDI Entry S Timing/Speed of Internationalizatio	trategies Investment Scale/Mode of	Suggested differences between EMNEs behavior and the theory's expected behavior
Internalization Theory	Buckley and Casson (1976)	• Companies invest abroad if the benefits of exploiting FSAs outweigh the relative costs of the operation abroad • Companies develop their own internal markets whenever the associated costs of transactions can be made lower within the firm	How does an MNC internalize cross- boarder transactions? > MNC uses a hierarchy in a cross- border transaction when the costs of using contracts exceed the costs of internalizing the transaction	Countries that have lower adjustment costs (e.g. information costs, currency risk, etc.) Countries with little transaction costs	• Determined by firms' economies of scale and the degree and nature of competition at home and abroad	Firms use foreign direct investment until the cost of internalization outweigh its benefits	EMNEs have a greater tendency to internalize operations overseas because of their experience of a relatively higher level of transaction costs at home. Thus, the attitudes toward transactions costs are different among managers from different countries.
Internationali- zation Process Model (Uppsala Model)	Johanson and Wiedersheim- Paul (1975)	Companies invest abroad based on gradual learning and the development of market knowledge The process of internationalization is evolutionary and sequential build-up of foreign commitments over time	How does an MNC internationalize? > MNC internationalizes incrementally to minimize risks and obtain experiential knowledge from abroad	 First countries with less psychic distance and step by step countries with further psychic distance (original model) First countries with good existing networks and step by step countries with lower position in networks (2009 model) 	Determined by the amount of knowledge the firm possesses, particularly experiential knowledge and the uncertainty regarding the decision to internationalize	• A sequential and successive process is followed from no regular export, to export via agents, to establishment of overseas subsidiaries, to overseas production	EMNEs choose between a country with lower psychic distance but with less attractive market or a country with greater psychic distance but with more attractive market. EMNEs have a higher level of tolerance for risk. Thus, EMNEs contribute to the separation of psychic distance from market attractiveness in decisions on the target countries. The level of risk aversion in selecting target countries and entry mode is influenced by home country.
Eclectic Paradigm (OLI)	Dunning (1977)	Market expansion is based on the possession of home- based ownership- specific advantages and the transfer of them to benefit from overseas location advantages Firms directly invest abroad if they possess internalization advantages	Why does an MNC set production facilities abroad? > MNC sets up production facilities abraod when it has ownership advantages (O) at home, location advantages (L) abraod and internalization advantages (I) of keeping the foreign operation within the firm	Countries that have location-specific advantages (e.g. natural resources, the quality and size of the labor force, cultural factors, political barriers, etc.)	• When companies' competitive advantages are sufficient to compensate for the costs of setting up and operating a foreign value adding operation	Determined by the extent to which companies can utilize their ownership advantages (e.g. property, technologies, knowledge, managerial abilities) • Determined by the marginal internalization costs and benefits	EMNEs expand overseas not only to exploit distinct ownership advantages developed at home, but also to search for ownership advantages. Such expansion involves the search for location advantages without moving their production abroad. Thus, types of ownership and location advantages derived from internationalization rely on the country of origin. EMNEs not only internationalize to gain these advantages but also to mitigate the disadvantages at home.
Resourced- Based-View	Penrose (1959)	• Competitive advantages are based on a company's ability to develop a bundle of resources which is valuable, rare, imitable and non-substitutable. • Companies become MNCs if they are better than others in utilizing their resources across boarders	How does an MNC expand and compete across countries? > MNC creates firm specific assets whose services are used to create products and services, with management being the key constraint to growth at some point in time	Countries, in which the general and competitive conditions allow the MNC to utilize home-based resources	When companies' resources are sufficient and especially the companies' management is able to successfully manage the resources across boarders	Depends on the presence of sustainable advantages	EMNEs prefer entry modes which provide a high level of control over foreign operations as they want to protect their knowledge and resources. At the same time, EMNEs develop sustainable advantages and internationalize in a co-evolutionary manner.
Linkage- Leverage- Learning Framework (LLL)	Mathews (2006)	Companies' OFD1 focusses not only on their own advantages, but on the advantages that can be leveraged and linked externally Repeated application of linkage and leverage processes may result in organizational learning	How did large Asian companies internationalize? > Large Asian companies used external advantages by leveraging and linking them and repeated this process, which resulted in organization learning.	• Countries that firms can gain resources through linkage with external firms • Countries where firms can leverage external linkages and learn	Early accelerated internationalization Determined by companies' desire to overcome latecomer disadvantages	Determined by the extent to which companies need to gain linkages Determined by supplies of leverage and learning activities	Ι.

Springboard Perspective	Luo & Tung (2007)	• Companies use internationalization systematically and recursively as a springboard to compensate for their competitive disadvantages and latecomer disadvantages	Why does an EMNE internationalize? > To overcome its own poor standing in terms of ownership specific advantages	Countries in which companies can acquire strategic resources Countries in which companies can reduce the institutional hardship and market constraints at home	Accelerated internationalization Internally propelled by corporate entrepreneurship Externally boosted by home governmental supports	Relatively in large scales with leapfrog trajectories	Л.
Institutional Arbitrage Logic	Witt & Lewin (2007) Boisot & Meyer (2008) Cuervo- Cazurra & Genc (2008)	Companies engage in international expansion to either escape or exploit their poor institutional situation at home	Why does an EMNE internationalize? > To exploit the institutional hardship by using the gained knowledge in other developing countries or to escape this hardship by entering developed countries	 Countries with strong institutions (exit view) Countries with poor institutions (exploitation view) 	n/a	Rather committing modes to really profit from the institutional stability (exit view)	Л.

Table 1: Overview of FDI theories. Source: Cuervo-Cazurra (2012), Kittilaksanawong & Dai (2015), Luo & Tung (2018) and Luo & Wang (2012).

3. Literature Review

The following chapter provides an overview of the existing literature related to the remarkable development of FDI from emerging markets and particularly from India. Thus, the first section presents literature referring to the general rise of EMNEs, while the second section introduces literature regarding the emergence of Indian MNEs, especially concerning Europe as one of the top recipients of FDI from emerging markets and as the focus of this thesis (Jindra, Hassan, & Cantner, 2016). Section three summarizes this chapter.

3.1. The Emergence of EMNEs

In today's competitive global economy, rapid growth of EMNE FDI activities is one of the most significant developments (Buckley & Tian, 2017; Kotabe & Kothari, 2016; Luo & Tung, 2007; Mathews, 2006; Rienda, Claver, & Quer, 2013; UNCTAD, 2010). In this context, current literature groups the gradual emergence of FDI from emerging economies into three different waves (e.g. Dunning, 1994; Gammeltoft, 2008; Rasiah et al., 2010; UNCTAD, 2005). The first wave took place from the 1960s to mid-1980s and was characterized by investments mainly coming from Latin America and directed towards other, often neighboring developing countries, predominantly driven by resource- and market-seeking motives (Gammeltoft, 2008). The second wave (late 1980s

to mid-1990s) was dominated mainly by Asian MNEs and included the beginnings of investment in developed countries with market- and asset-seeking as main motives (Gammeltoft, 2008; Rasiah et al., 2010). In the third wave, which has been going on since the 1990s, the largest Asian MNEs already compete with Western MNEs. Although other developing countries continue to be the main destination for FDI from emerging markets, emerging market investments in developed countries for strategic asset-seeking motives are continuously increasing (Gammeltoft, 2008; Rasiah et al., 2010).

Motives & Drivers

Studies have determined several distinct drivers for increasing FDI from EMNEs around the world (e.g. Buckley et al., 2007; Gammeltoft, 2008; Gammeltoft & Hobdari, 2017; Luo & Tung, 2007; Rasiah et al., 2010). EMNE's motivation is not only to make use of their competitive advantages such as cost-innovation and high cost-benefit ratio in both developing and developed countries (Buckley et al., 2007; Luo & Tung, 2007; Peng, 2012), but also to overcome their competitive disadvantages (lack of key technologies, shortfall of managerial expertise etc.) by increasingly focusing on developed countries (Makino, Lau, & Yeh, 2002; Ramasamy, Yeung, & Laforet, 2012; W. Zhao, Liu, & Zhao, 2010). This gives them the opportunity to rapidly upgrade their firm-specific resources and capabilities in order to catch up with their global competitors (Gammeltoft, 2008; Gammeltoft & Hobdari, 2017; Kotabe & Kothari, 2016; Luo & Zhang, 2016).

Throughout the three waves, market-seeking has been the prevailing motive for EMNEs to engage in FDI (Gammeltoft & Hobdari, 2017; Rasiah et al., 2010). With time, EMNEs have invested in markets progressively further away from their home countries (Rasiah et al., 2010).

Moreover, access to strategic assets has become more important to EMNEs ever since the late 1990s, mainly due to growing competitive pressure (Rasiah et al., 2010). Firms have been acquiring companies from developed economies to seek technology, marketing and R&D capabilities, distribution networks, brands, and managerial and organizational skills (Rasiah et al., 2010).

Institutional factors, such as home government support or on the other hand existing institutional voids (e.g. insufficient enforcement of commercial laws, lack of legal protection for property rights, lack of transparency in judicial and litigation systems etc.), have also been widely identified throughout the literature as important drivers for the internationalization process of EMNEs (e.g.

Aulakh, 2007; Luo & Tung, 2007; Wright, Filatotchev, Hoskisson & Peng, 2005). In many cases, home governments increasingly promoted internationalization of their companies by implementing various institutional reforms (administrative and fiscal decentralization, market liberalization, industrial restructuring, etc.). This has led to a corporate transformation of fundamental mechanisms in these countries and set off radical changes in firms (Aulakh & Kotabe, 2008; Dacin, Goodstein, & Scott, 2002; Luo, Xue, & Han, 2010). However, in other cases EMNEs have tried to bypass institutional voids in their home economies by undertaking FDI (Kalotay & Sulstarova, 2010; Perez-Batres & Eden, 2008).

Location Choice & Entry Modes

Literature suggests that EMNEs often target less or similarly developed host countries, since they are used to operating in a weaker institutional environment, which gives them a competitive advantage towards DMNEs in these markets (e.g. Cuervo-Cazurra & Genc, 2008; Guillén, 2002; Kang & Jiang, 2012; Kimura & Lee, 1998; Morck, Yeung, & Zhao, 2008). In addition, narrower technological gaps exist between developing countries, which may facilitate the absorption of technological knowledge and hence generate more spillovers than in the case with developed countries (Herzer, 2011). Nevertheless, some EMNEs have entered developed economies such as Western Europe (Dunning & Narula, 1996), where they have been competing against developed firms which usually have richer resource portfolios (Hoskisson, Tihanyi, White, & Kim, 2004). Case studies have shown that partnerships with Europe in the area of R&D remain elusive. However, they also for brand building. Thus, companies are eager to expand local production capacity in the European market (Brennan & Bakir, 2016).

In the first wave, EMNEs typically entered through greenfield investments, whereas from the 1990s onwards, international acquisitions became more common (Rasiah et al., 2010). In this context, several key factors have been shown to have an impact on the entry mode of EMNEs, including the institutional characteristics of home and host country (Michailova & Ang, 2008), the competitive situation and imitation in the home economy (Deng, 2009; Li & Yao, 2010), and more generally, the strategic intention to internationalize (Fabian, Molina, & Labianca, 2009). Furthermore, studies have found that entry strategies of EMNEs tend to be more radical than those of traditional MNEs (Luo & Zhang, 2016). This is proved by several case studies of large EMNEs

that rapidly expanded internationally through high-risk, high-control entry modes, particularly acquisitions (e.g. Rui & Yip, 2008; Satta, Parola, & Persico, 2014).

3.2. The Emergence of Indian MNEs

The emergence of Indian MNEs on an international level began in the early 1960s, when a number of large Indian business conglomerates such as Tata, Kirloskar and Birla began to expand their production processes cross-border by investing in African countries and Sri Lanka (Pradhan, 2004, 2005). Since then, the number of Indian MNEs has grown continuously, promoted by economic liberalization and characterized by significant changes in their patterns and motivations (new destinations, new sectors, and different patterns of ownership) (Bhasin & Jain, 2015; Kumar, 2008; Pradhan, 2008). According to UNCTAD (2002, 2017), OFDI flow from India has risen from an average of US\$37 million per year in the period of 1990–1995 to approximately US\$8 billion from 2011 to 2016.

Therefore, the evolution of Indian OFDI can be divided into two periods. The first period is commonly known as the "pre-1990 period," and the second period runs from 1991 to the present (Pradhan, 2005). Throughout the first period, Indian FDI activities originated largely in the manufacturing sector, were generally marked by minority Indian equity participation and targeted mainly other nearby developing countries (Kumar, 2008; Pradhan, 2004, 2005). This changed during the second period, when Indian FDI arose mainly in the service sector and increasingly focused on developed countries, often marked by majority ownership to protect FSAs (Nayyar, 2008; Pradhan, 2004, 2007).

According to the literature, the economic relationship between India and Europe has intensified since the new millennium, when the presence of Indian firms reached a critical amount in both number of companies and investment expenditures (Brennan & Bakir, 2016; Rasiah et al., 2010). Well-known examples are Videocon International's acquisition of Thomson SA in 2005, Dr. Reddy's 100% acquisition of German pharmaceutical and health care company Betapharm Arzneimittel GmbH in 2006, and Tata Steel's 100% acquisition of British Corus Steel in 2007 (Rasiah et al., 2010). The most prominent example of Indian FDI in Europe is the acquisition of the UK firms Jaguar and Land Rover by Indian conglomerate Tata with the purpose of entering a more innovation-intensive sector of the automotive market, as JLR provided advanced technology, innovation, and production capability (Brennan & Bakir, 2016).

Motives & Drivers

Many Indian firms consider FDI as an important part of their corporate strategy in order to enhance global competitiveness (Bhasin & Jain, 2015; Hattari & Rajan, 2010; Singal & Jain, 2012). Their main motives for FDI are (1) to get away from a restrictive business environment caused by government regulations, (2) to ameliorate the high costs of imported and domestic inputs, and (3) the desire to make use of host countries' growing markets (Gammeltoft, 2008) by buying brand names, acquiring technology, management know-how, processes, and marketing and distribution networks (Hattari & Rajan, 2010). However, the motivations underlying Indian FDI have also undergone significant changes in the two periods. The general pattern has moved from mere market-access - and natural resource-seeking to more strategic asset-seeking in order to obtain access to technology, known brands, networks, and human skills, thus enhancing the investor's position in the globalizing world market (Hattari & Rajan, 2010; Kumar, 2007; Pradhan, 2004, 2005; UNCTAD, 2017). In addition, Indian economic presence through subsidiaries across global markets assures closer interaction between Indian firms and their buyers as well as better aftersales-services, which are highly important factors for international competitiveness (Kumar, 1998). Other Indian FDI drivers presented in the literature are previous experiences in export activities as well as competition with other MNEs within India (Gammeltoft, 2008; Pradhan, 2004).

Location Choice & Entry Modes

In terms of the location, the IB literature records that particularly during the first period (pre-1990), proximity in geography, history, ethnicity and languages had a great impact on the location choice of Indian MNEs and they therefore mainly engaged in FDI in other emerging countries (Gammeltoft, 2008; Kumar, 2008). Thus, Sri Lanka, Thailand, Malaysia, and Singapore had the highest inflow of Indian FDI (Gammeltoft, 2008; Pradhan, 2004). However, throughout the second period (from 1990 ongoing), Indian MNEs increasingly focused on industrialized countries that had already been key destinations for Indian exports such as Europe (mainly UK) and the US (Gammeltoft, 2008; Kumar, 2007; Pradhan, 2005; Singal & Jain, 2012).

A major change also took place in terms of the entry modes of Indian FDI (Tolentino, 2010). Since greenfield investments in developing countries were the dominant entry mode in the context of

Indian FDI until the end of the 1990s, brownfield investments in developed countries, particularly in the form of acquisitions, became more and more popular for various strategic reasons (Hattari & Rajan, 2010; Pradhan, 2008; Tolentino, 2010).

Sectors

According to the literature, low- and medium-technology manufacturing sectors characterized the first period of Indian OFDI (Rasiah et al., 2010), while the service sectors emerged as another significant investor in the second period (Pradhan, 2008; Pradhan & Singh, 2009). Since then, the sectors that have made the biggest number of acquisitions abroad are IT services, telecommunications and manufacturing (automotive, pharmaceuticals, steel, chemicals and consumer goods) (Nayyar, 2008; Singal & Jain, 2012).

OFDI Policy

The emergence of Indian OFDI has been guided by the increasing liberalization of its government policy and better access to financial markets (Hattari & Rajan, 2010; Kumar, 2008; Rienda et al., 2013). Not only did the Indian government realize the importance of outward investments for the global competitiveness of Indian industry, but the relative foreign exchange scarcity in the country also led to increasing government support for outward investing (Kumar, 2008). India therefore deregulated foreign exchange policies, access to international capital markets, foreign ownership ceilings and several other regulations, all with the purpose of promoting OFDI (Hattari & Rajan, 2010). This development of OFDI government policy occurred in three phases, reflecting the different OFDI limits set by the government (Kumar, 2007, 2008). First came the restrictive policy during 1978–1992, then the permissive policy in 1992–2003, and since then the liberal policy, in which Indian enterprises are allowed to invest up to 100% of their net worth in other countries (Nayyar, 2008).

Relationship with Europe

The economic relationship between India and Europe has been based primarily on trade cooperation, which was transformed into a strategic partnership in 2014. Agreements such as the "Broad-based Trade and Investment Agreement", a free trade agreement that has been the subject of ongoing negation since June 2007, might be another inducement for Indian companies to expand their presence across Europe (Brennan & Bakir, 2016). However, several disagreements still exist between both parties and thus no consensus has yet been reached (Suneja, 2018).

An analysis of 585 Indian firms that conducted 1,112 operations of investment in Europe during the 2002–2012 period shows that the number of Indian investments went through significant changes with a rapid fall in 2009 due to the effects of both the subprime and eurozone crises. However, in 2010 a sharp rebound occurred (cf. Figure 2). Moreover, the analysis found that the major share of Indian firms located in Europe during that time were held by private entities, with only a small amount (3%) of public investment. In addition, Indian direct investment in Europe is not driven only by large companies, but also by small- and medium-sized enterprises (SMEs), especially in technology-intensive sectors such as ICT and pharmaceutics. Although the numbers of greenfield investments and M&A are quite similar, there is a significant difference in terms of value, where M&A far outpace greenfield investments. They not only provide access to new markets, but also to strategic assets, such as new technology and know-how, brands, and distribution networks, and hence lead to a transfer of knowledge such as intellectual property rights. As a matter of fact, the more technology-intensive the sectors are, the higher the number of M&A (Brennan & Bakir, 2016).



Figure 2: Indian investments in Europe from 2002 to 2012. Source: Brennan & Bakir (2016).

In terms of location choice, literature shows that Indian companies prefer countries with a large market size, which emphasizes Indian firms' market-seeking motivations. According to Brennan and Bakir's (2016) analysis, ten European countries receive the major share of Indian investments in Europe (cf. Figure 3). The UK, Germany, and France make up approximately 70% of the total share. Considering that these countries accounted for roughly 50% of the total European GDP in 2012, this supports other scholars' findings that market size attracts FDI (e.g. Buckley et al., 2007; Kolstad & Wiig, 2012). Moreover, other aspects such as history, language, ethnic community, and/or culture may also be significant in Indian firms' location choice (Brennan & Bakir, 2016).



Figure 3: Top ten host countries within Europe for Indian investment from 2002 to 2012. Source: Brennan & Bakir, (2016).

Regarding company functions, Brennan and Bakir found that services (e.g. software consulting, marketing, logistics, after sales) and manufacturing are the primary functions operated by Indian subsidiaries in Europe. R&D has only a minor share, which can be explained by, among other factors, the crisis period, in which limited investments in R&D were made. Moreover, the analysis identified three main sectors of Indian investments in Europe, with IT services by far the most important (e.g. Tata Consultancy Service, Infosys Tech and Wipro Tech), followed by pharmaceutics and engineered goods and metals (Brennan & Bakir, 2016).

3.3. Summary

The existing literature on FDI activities of EMNEs, particularly that of Indian MNEs, shows that their motives, location choices, entry modes, and sectors have changed over time. In terms of motives, strategic asset-seeking has gained more and more popularity, although market-seeking seems to remain the main motive underlying FDI from EMNEs. Moreover, the target location of EMNEs' FDI has changed over time, with developed regions such as Europe becoming one of the top recipients of emerging markets' FDI. This goes along with the changed entry strategies, in which M&A have become more and more popular. In addition, the main sectors involved in Indian direct investment in Europe are IT services, pharmaceutics, and engineered goods and metals.

Nevertheless, most of the studies on EMNEs are biased towards China, while other emerging markets are under-researched (Jormanainen & Koveshnikov, 2012). Thus, the above-mentioned quantitative analysis of Indian firms seems to be an exception. It covers a number of areas that will also be a focus of this thesis, such as the motives of Indian firms engaging in FDI, their entry modes, the sectors and functions in which they operate, as well as host country factors that attract Indian FDI. However, the study covered only host countries' GDP as a potential factor and did not investigate in other factors.

4. Methodology

In tackling a research question, the research process and results are always influenced by the underlying research philosophy and the research approach. Moreover, a research question is turned into a research project by determining three research design factors: methodological choice, research strategy, and the time horizon for the research (Saunders, Lewis, & Thornhill, 2012). Therefore, this chapter will first present the research philosophy and approach, then introduce the research design, and lastly give detailed information about the methodology for the different parts of the thesis.

4.1. Research Philosophy & Approach

The present thesis builds mainly on the research philosophy of positivism. In the positivist view, authentic knowledge can be derived only from positive verification, meaning that only observable phenomena can be used for an objective interpretation of the data (Blaikie, 2007). Research is thus seen as value-neutral, and the researcher is an independent and objective analyst (Blumberg, Cooper, & Schindler, 2011). However, as this thesis conducts a case study alongside the quantitative analysis, its positivism will be complimented by interpretivism, as the case study

involves some degree of subjectivity, which is not fully aligned with the independent and objective viewpoint of positivism.

In order to answer the research question, the thesis applies a deductive research approach, using theory as a basis to generate hypotheses and then proceeding to test these (Greener, 2008). This approach is used across all chapters of the thesis, including the descriptive analysis, the regression analysis, and the case study.

4.2. Research Design

As the subordinate questions vary in their perspectives, different methods are employed at various stages of the research process. Specifically, a quantitative as well as a qualitative analysis are conducted in a complementary manner, meaning that each set of data is selected, collected, and analyzed separately in order to draw ultimate conclusions and interpretations. The thesis further relies on so-called "fully integrated mixed methods research," as the two methodologies are used at every stage of the research process (Leech & Onwuegbuzie, 2009). Moreover, the research design can be identified as sequential explanatory, since the quantitative research is followed by the qualitative one (Creswell & Clark, 2007).

Based on the research question and its subordinate questions, this thesis follows a combination of descriptive and explanatory research, in which the description represents a precursor to explanation, meaning a so-called "descripto-explanatory" study is being conducted. On the one hand, the objective of the research is to gain an accurate profile (description) of events, in this case Indian direct investment in Europe; on the other hand, the study aims to establish causal relationships (explain the link) between variables, in this case various host country factors and the number of Indian direct investments (Saunders et al., 2012).

The research strategies applied in this thesis consist of the survey strategy, the experiment strategy, and the case study strategy. The survey strategy allows researchers to collect quantitative data to analyze it using descriptive statistics (Saunders et al., 2012). This strategy is thus needed mainly to answer sub-question one. The experiment strategy uses hypotheses to study the probability of change in a dependent variable caused by other independent variables (Hakim, 2000) and is therefore needed mainly to answer the second subordinate question. Lastly, the case study strategy enables researchers to gain a rich understanding of the processes behind a phenomenon (Eisenhardt
& Graebner, 2007). Thus, it will be the main foundation of the answer to sub-questions three and four. Sub-question five will finally be answered by a combination of the findings of all research strategies.

The next important choice in research design concerns the time horizon. Since this thesis studies Indian direct investment in Europe which existed at the time of data extraction, it will mainly be cross-sectional, meaning that it studies a particular phenomenon at a particular time rather than over a longer period. However, some longitudinal aspects are also involved, as the thesis sometimes examines development over time (Saunders et al., 2012).

Lastly, the research is solely based on secondary data, as sources of high quality already exist, especially for the quantitative analysis. Negotiating access to primary data on the other hand would have exceeded the time available for this thesis.

To provide an overview of these applied research design aspects, Figure 4 presents a Research Onion Diagram showing the methodological approach step by step.



Figure 4: Research Onion. Source: Own presentation based on Saunders et al. (2012).

4.3. Quantitative Analysis

In order to answer sub-questions one and two, a quantitative analysis is chosen by first conducting a descriptive analysis to describe the patterns underlying Indian subsidiaries in Europe and their investors, and then employing a regression analysis to identify the host country factors attracting Indian FDI. This section will present the selection criteria, data collection, and the evaluation process for both analyses.

4.3.1. Descriptive Analysis

To investigate the first sub-question, which asks about the patterns of Indian subsidiaries in Europe, a descriptive analysis is conducted. In this way, an accurate profile of Indian direct investment in Europe can be developed.

Data Selection & Collection

The aim of the descriptive analysis was to identify patterns in FDI of Indian MNEs in European countries in order to also answer the first sub-question. Therefore, the examined data set comprised all subsidiaries located in Europe with an Indian GUO.

The descriptive analysis is applied to the years between 2004 and 2016. The start date was chosen because it marks the end of restrictive Indian government policy before (see the subsection "OFDI Policy" in Chapter 3.2. above). Only since 2004 has liberal policy allowed Indian enterprises to invest up to 100% of their net worth in other countries (Nayyar, 2008). Thus, any previous data might be biased, as it would not show the unrestricted and hence unaffected FDI behavior of Indian firms. Consequently, only investments made after the governmental implementation of liberal OFDI policy were included. Furthermore, 2016 was used as an end date for the quantitative analysis as the necessary data were mostly available until then.

The analysis of Indian FDI in Europe took place at a company level. Therefore, a comprehensive collection of useful data (size, sector, function, host country etc.) was required in order to analyze respective company characteristics. Thus, a manual search appeared rather pointless, not only because of the different investigation aspects, but also due to the high amount of annual FDI from India (e.g. US\$5.1 billion in 2016 (UNCTAD, 2017)). Even though there are several statistics

regarding Indian OFDI, such as from UNCTAD or India's Ministry of Finance, these present only investment volumes and are thus of limited use for a company-level analysis. After all, the analysis of investment volumes alone can have the effect that some very large investments by a small number of companies may unreasonably skew actual patterns of the majority of Indian MNEs, distorting study results. Consequently, only India's official OFDI statistics were used for the description of global Indian OFDI volumes.

Individual subsidiary data for this study were extracted from Orbis, a global company database provided by Bureau van Dijk (HBS, 2018). It contains information on roughly 180 million companies across the world by using and combining information from 160 different information providers. Orbis offers the ability to extract companies that are registered in Europe and have a GUO in India, regardless of whether it is a direct level of ownership or indirect at the second or third level (cf. Appendices 1 & 2). However, third-level subsidiaries were only included when a majority share existed at at least one level of ownership. Since Orbis does not identify ownership levels of less than 25%, this level of ownership automatically sets the lower limit for minority equity-owned associates in the sample ("Definition of the Ultimate Owner," 2018).

Further, information about the company's name, its BvD ID number, its company size, its host country, its date of incorporation, its major sector, its NACE code, its ownership share, its revenue, and its number of employees were extracted from Orbis and compiled in a table. In addition, data of the corresponding parent company such as its name, its BvD ID, its size, its major sector, its NACE code, and its other foreign subsidiaries outside of Europe were included (cf. Appendix 3).

The first extract of all selected data consisted of 1,478 Europe-based companies with an Indian parent and incorporated between 2004 and 2016 (cf. Appendix 1). After checking the retrieved data from Orbis, some companies appeared to provide no information regarding important characteristics such as size, location, or NACE code and were excluded from the research population. Consequently, the final sample consisted of 1,123 subsidiaries in 32 European countries. However, Orbis did not cover all investigation aspects necessary for the analysis such as the subsidiary function, the investment behavior based on the location choice, or the entry mode. The first two aspects were calculated based on the authors' own approach, which is explained in detail in Chapter 5.1 and in Appendix 3. To gain information on entry modes, the database Zephyr, which provides detailed information about worldwide deals, was used. It contains information on M&A, venture capital deals, IPOs, and private equity (BvD, 2018c). Since Orbis and Zephyr are

both provided by the Bureau van Dijk, both assign BvD IDs as an identification number for respective companies. The original intention was to assign the deal type from Zephyr to the corresponding subsidiary retrieved from Orbis. This procedure proved problematic in that Zephyr shows only the BvD IDs of target companies before the corresponding deal has taken place. As many company names are changed after a deal is completed, the Bureau von Dijk assigns new BvD IDs, which led to the problem that many deals could not be matched with current subsidiaries. As a result, Orbis and Zephyr data could not be successfully combined to yield detailed information on deal types (i.e., entry mode). Nevertheless, the table from Zephyr still represented a good foundation for assumptions about the preferred entry modes of Indian MNEs in the selected period.

Data Evaluation

The final collected data were organized with respect to selected characteristics. Thus, the data were converted into interpretable graphics using the software tool tableau (Tableau, 2018). In tableau, the number of recorded investments was compared to several characteristics such as year of incorporation, company size, location, function(s), sectors, and ownership share. The resulting graphics were analyzed and described in order to identify patterns or certain characteristics in connection with Indian investments to Europe. The same process was repeated with the characteristics of the GUO, as the GUO is the initiator of the FDI process and accordingly GUO characteristics are also crucial for the analysis of overall patterns. Consequently, the number of recorded investments was compared to the GUOs' size, sectors, and investment behavior. The investment behavior of the subsidiaries' GUO was determined based on its total foreign subsidiaries using a measure described in more detail below (cf. Chapter 5.1.3).

After the description of the individual characteristics, a hierarchical agglomerative cluster analysis was conducted using the data analysis and statistical software Stata, in order to identify distinct groups of FDI with related characteristics. The purpose of a cluster analysis is to detect homogenous subsets in a heterogenous entirety of data points, starting with single elements and aggregating them into clusters. Though it is usually applied to group cases, it can also be used for variables. Thus, all selected variables, presented in more detail in Chapter 5.1.4, are initially considered as single elements and subsequently assigned to groups according to their similarity (Gammeltoft & Fasshauer, 2017).

In order to perform a cluster analysis, a measure of distance/similarity as well as a linkage method must be set. The distance/similarity measure depends on the scaling of the selected variables (Dillon & Goldstein, 1984). In the present thesis, the variables in question were converted into binary variables, indicating whether a certain characteristic is present (1) or not present (0), in order to obtain a few big and interpretable clusters, instead of several small ones. The exact conversion of the characteristics into binary variables is explained in the corresponding part of the descriptive analysis (cf. Chapter 5.1.4). While most cluster analyses include each characteristic only once, the special features of binary variables require a double inclusion of the characteristic. This is the case because possible similarities would not be identified if characteristics were covered only once. For instance, if both "small subsidiaries" and "service sector" were coded as 1, a hypothetical relationship between "small subsidiaries" and "RD/manufacturing" would not be identified due to the large distance between the two variable outcomes (1-0). Thus, every variable outcome received its own dummy variable for the cluster analysis in order to prevent a distortion of the relationships between the selected variables (Gammeltoft & Fasshauer, 2017).

Even though this is on the face of it a rather unusual approach, Gammeltoft and Fasshauer (2017) established its successful applicability. In the course of this, the Jaccard Coefficient, a measure of similarity introduced by Sneath (1957) was chosen, as it measures the relative share of common characteristics. Using this index, common missing values are excluded, and mismatches and matches are weighted equally.

The linkage method is not based on general rules, but rather recommendations due to its influence on the results. This thesis used Ward's method of cluster extraction, a common method for the determination of the cluster number for hierarchical cluster analyses and a well-established complement to the Jaccard Coefficient for cluster extraction (Finch, 2005; Hands & Everitt, 1987).

In summary, the cluster analysis was performed with the Jaccard Coefficient and Ward's method using Stata by displaying a respective dendrogram in order to illustrate the arrangement of the clusters and identify distinct FDI groups. The identified groups are described with respect to the presented characteristics and conclude the descriptive part of this thesis.

4.3.2. Regression Analysis

The second sub-question asked which host country characteristics attract Indian FDI in Europe. The question was approached using a regression analysis, since regression analyses are the best empirical methodology for defining the relationships between one dependent variable and various independent variables (Backhaus, 2008).

Data Selection & Collection

As stated above, the regression analysis was conducted to determine which host country factors attract Indian direct investment in Europe. Thus, the dependent variable should be chosen to accurately reflect Indian FDI, while the independent variables should be chosen to represent various relevant host country factors.

To ensure a connection between the descriptive analysis and the regression analysis, both analyses were based on the number of Indian FDI projects per year per country, as extracted from Orbis. To this end, the Orbis output was inserted into a pivot-table which could easily show the required data. However, to increase the overall significance of the regression model, the time frame was extended by five years to 1999–2016.

The independent variables each represent one host country factor which was chosen based on hypotheses reflecting the knowledge gained about FDI theories. These hypotheses and the independent variables are explained in detail in Chapter 5.2.1. To ensure that included data were substantial to the analysis, only those European countries were considered which received at least ten FDI projects from India in the time frame of the descriptive analysis (2004-2016). In total, 19 countries met this requirement⁴. Also, to fit the time frame of the dependent variable, all host country data was collected for the time frame 1999–2016.

In addition to the independent variables, a control variable was included in the analysis to control for the so-called push-effects⁵ from India. Following the logic that FDI from India is generally

⁴ The countries included in the regression analysis are: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Germany, Spain, France, Great Britain, Ireland, Italy, Luxembourg, Netherlands, Poland, Portugal, Romania, Slovakia, Sweden and Switzerland.

⁵ Push-effects are the opposite of pull-effects. Within the literature of FDI, pull-effects are *host* country effects attracting FDI and push-effects are *home* country factors pushing companies to exit the country (Makoni, 2015).

rising when push-effects from India are increasing, the authors decided to use the absolute stock of FDI from India as a proxy for all push-effects within the country.

All host country data as well as the control variable data are taken from secondary sources, since appropriate data already exist, and collection of primary data would have been impossible for the authors. Data was taken primarily from international and national statistics from renowned institutes like the World Bank, Eurostat, and country-specific statistical offices and/or ministries. Thus, the retrieved data can be considered high-quality. Details on the sources of each variable can be found in Appendix 4.

Furthermore, all countries showed missing values for some variables and some years. Most of these gaps were filled within Excel by detecting a trend over time and calculating the missing value based on the trend formula. Those trends were mainly linear, except for the variable "Indian population" which often showed an exponential trend. Moreover, some variables displayed a significant change of trend in some particular year, e.g. an increase until 2007 and a decrease from then on. This effect was taken into account when estimating the missing values by splitting the data when calculating trends. However, in a small number of cases, the missing value could not be estimated, for example when a variable was missing data for the very first or last year(s) and no trend could be detected. To prevent the effect of a biased variable, these gaps were simply treated as missing values.

Data Evaluation

Before any regression model was calculated, a correlation matrix was created to check for dependencies between the independent variables. If collinearity was present, one of the affected variables was changed to overcome it. For instance, a variable might be changed from an absolute number to a relative number. After this process, a new correlation matrix was created to repeat the process, if necessary, until no collinearity between the independent variables was present.

As the dependent variable is the number of Indian investments made per country and year, it takes the form of a directly observed count. Moreover, there was no reason to assume a linear relationship between the dependent and independent variables. Thus, conventional linear or loglinear models are not viable. More suitable models for count data are the Poisson regression model and the negative binomial regression model (Cameron & Trivedi, 2013; Gammeltoft & Fasshauer, 2017). The Poisson regression model uses the Poisson distribution to model the natural logarithm of the expected count (Dallal, 2009). The Poisson distribution was first developed by Simeon D. Poisson in 1837 and requires that the mean of the dependent variable equals its variance (Cameron & Trivedi, 2013). If this is not the case, the data are over-dispersed, meaning that it is more fluctuating than the distribution predicts. Using the Poisson regression model in a case of over-dispersion would result in biased and overly small standard errors, which in turn could lead to a false declaration of significance for variables.

An alternative to the Poisson regression model is the negative binomial regression model, which uses the negative binomial distribution developed by Greenwood & Yule (1920) and Eggenberger & Pólya (1923). This distribution is an extension of the Poisson distribution and allows more variability in the data. Additionally, it does not have the requirement that the mean of the dependent variable needs to be equal to the variance. To determine which of the two regression models fits better, a likelihood-ratio test for the negative binomial regression model was calculated. Based on this test, the authors decided which regression model to use for the present data.

4.4. Qualitative Analysis

The main difference between the quantitative analysis and the qualitative analysis is that the qualitative one focuses on the perspective of the Indian ultimate owner, not that of the European subsidiary. In order to answer sub-questions three and four, the authors decided to conduct a qualitative analysis by assessing the internationalization process and motives underlying internationalization of different Indian ultimate owners who directly invested in Europe. To do so, a case study was carried out. This section will present the selection criteria for the case companies, data collection, and the evaluation process of the qualitative analysis.

Case Company Selection & Data Collection

The research population of the qualitative part differs from the quantitative part in two ways. Aside from the fact that only four companies were assessed in detail, making the data set far smaller, the time frame is also different. To ensure that the whole internationalization process as well as the reasons behind the foreign expansion could be understood, case companies had to be incorporated before 2013. Moreover, data up to March 2018 was considered.

Non-probability sampling was used to create the sample. Even though the chosen variation of nonprobability sampling – purposive sampling – has a low likelihood of being representative, it allows the authors to utilize their judgement to select cases which are best suited to answer the research questions. Furthermore, the focus on heterogeneous variation sampling was chosen to ensure that the collected data explains and describes all potentially relevant key themes (Saunders et al., 2012). Assuring that the small sample is as diverse as possible ensures that the detected similarities are especially interesting and also increases the probability that the authors can identify possible common patterns (Patton, 2015). Therefore, Patton's (2015) technique of identifying various characteristics to select the sample was used.

The selected characteristics were based on data extracted from Orbis (see above). The companies were chosen to represent different major sectors and investment behavior. However, according to Patton (2002), convenience is always the last factor influencing the sample. Therefore, all case companies had to be very large in size, as such companies provide sufficient secondary data.

As in the quantitative analyses, data used in the qualitative analysis is secondary, as the time and volume available for this thesis would not have been sufficient for the collection of comprehensive primary data. As a result, most information was retrieved from company reports and websites, academic case studies as well as articles, and newspaper reports. This mixture of official company information and objective third party information ensures high-quality data while preventing a too positive picture.

Data Evaluation

FDI theories offer different perspectives on specific parts of the internationalization of firms. Therefore, the case study will assess three different areas of interest for each case company to contribute to the answer of the sub-questions and eventually the research question.

1) Initial Position of the MNE

A central question and difference between conventional and new FDI theories is whether a company possessed FSAs over foreign competitors before engaging in global business. While

conventional theories and especially the OLI model see the possession of ownership-specific advantages as a requirement for engaging in FDI, newer theories such as the LLL framework and the springboard perspective view FDI as a possible strategy to obtain FSAs. The case study will therefore assess the FSAs of Indian MNEs and their competitive position before internationalizing.

2) Internationalization Process

The Uppsala model states that resource commitment and FDI location follow an incremental internationalization depending on international experience and perceived distance to the host country. However, newer theories find that EMNEs do not follow such path dependencies, as they internationalize rather aggressively to overcome latecomer disadvantages. Thus, the case study will analyze the internationalization process of the case companies, including the regions and countries they invested in and the entry modes they used.

3) Motives underlying Internationalization

Finally, the LLL framework, the springboard perspective, and institutional arbitrage logic further identify why EMNEs choose to invest in foreign countries. It is therefore important to understand the reasoning behind an internationalization, and the case study will thus assess the motives of the case companies when going abroad.

4.5. Reliability

Reliability describes the extent to which data collection and analysis procedures yield consistent findings. In general, three questions are being evaluated. First, whether the techniques and procedures would yield the same findings on other occasions; second, whether other observers would reach the same results; and third, whether all processes are transparent for others (Easterby-Smith, Thorpe, & Jackson, 2012).

When answering these questions, it quickly becomes apparent that there is a difference between quantitative and qualitative analysis. Therefore, this section first discusses the reliability of each part to finally summarize both.

As all data used in the quantitative analysis is secondary and no subjective variables are included, the same findings should be observed on all occasions, indicating a high level of reliability. However, the extracted data from Orbis represent a cross-section of Indian subsidiaries registered in the database at the moment of data retrieval. Firms which have been shut down were excluded from the database. Thus, the sample differs based on the extraction date. Moreover, subjectivity was reduced to a minimum during the quantitative analysis as objective criteria were followed when choosing methods or categorizing data. Combined with the high transparency given by the detailed description of every measure and procedure in the text or appendix, the quantitative analysis generally presents a high level of reliability.

The qualitative analysis is also solely based on secondary data, which lays a foundation for high reliability. However, the selection of case companies followed a subjective method, meaning that other researchers might select other cases and thus attain different findings. On the other hand, every decision and technique is documented in this thesis, resulting in a high degree of transparency. Therefore, the qualitative analysis achieves the highest reliability possible under the circumstances.

In summary, the conducted techniques and procedures and their diligent documentation ensure a generally high level of reliability for this thesis.

4.6. Validity

Validity indicates the suitability of a model, measuring-, or testing method and is hence the degree to which a research study measures what it intends to measure. Two main types of validity exist: internal and external. Internal validity refers to the validity of the measurement and the test itself, while external validity refers to the ability to generalize the results of a study to other contexts or situations (Greener, 2008).

Internal validity refers to causality, i.e. whether there is an impact of factor X on factor Y. In order to test this, it is important to question if the independent variable accounts completely for a change in a dependent variable or if there are other factors affecting this outcome (Greener, 2008). This is particularly important for the regression analysis applied in the present thesis, which seeks to find host country factors (X_n) that attract Indian FDI (Y = number of Indian subsidiaries).

For the regression analysis, specific proxies were chosen as independent variables according to their ability to accurately represent the underlying conditions which are not directly observable (e.g.: the degree of innovativeness of a country is reflected by its R&D expenditures and patent applications). Thus, the usage of other proxies could provide different results. Furthermore, identified relationships between host country factors and the number of Indian subsidiaries could be caused by other or additional factors which are not considered in the model of this thesis (omitted-variable bias). Such variables might for instance be weak institutional or competitive environments that companies face in the domestic market which push them to invest abroad. Since the inclusion of such country- or industry related push factors in the analysis is beyond the scope of this thesis, the explanatory power of the presented model is limited. However, the authors have tried to account for push factors in the analysis by including Indian OFDI stock as a control variable.

In addition, causal ambiguity is often the case when analyzing a causal relationship. However, since Indian investments in Europe are still at a very low level, causal ambiguity is unlikely to be present in this analysis to any meaningful degree, meaning it is unlikely that Indian subsidiaries have a significant impact on host countries' R&D expenditures or any other independent variable.

In the context of external validity, generalizability of the research study needs to be considered. The sample used in this thesis includes all Indian subsidiaries in Europe that could be extracted and for which all necessary data were available. Even though completeness cannot be guaranteed, the presented sample still reflects an extensive part of Indian FDI activities in Europe. In terms of the case study, only secondary data which were not published for the purpose of this thesis were used. This may lead to misinterpretation and limits the validity of the findings. Moreover, due to the dependence on secondary data, only very large companies could be investigated. Therefore, the findings of the case study may not reflect the FDI motives of smaller Indian companies. They are likely to be unique to the specific case companies, partly because the sample size applied in the case study is too small to generalize underlying motives. Consequently, more comprehensive and in-depth research needs to be conducted to be able to justify a generalization of Indian FDI motives.

5. Analysis

The following chapter comprises the three analyses conducted in this thesis in order to answer the subordinate questions and ultimately the research question. It begins with a descriptive analysis, which gives a comprehensive overview of the patterns and characteristics of Indian subsidiaries in Europe. The descriptive analysis is followed by a regression analysis, which provides insight into host country factors influencing the location choice of Indian MNEs in Europe. Finally, a case study is presented in order to identify motives underlying Indian FDI in Europe as well as to obtain a general picture of the investors' situation and internationalization process.

5.1. Characteristics of Indian Subsidiaries in Europe – A Descriptive Analysis

In this section, a descriptive analysis is conducted in order to answer the first sub-question of this thesis and to suggest possible answers to the remaining subordinate questions. First, Indian FDI and investment volumes over time are presented, followed by the illustration of patterns among Indian subsidiaries in terms of size, function, industry, and ownership share. In addition, characteristics of their Indian GUOs are presented to provide a comprehensive overview of Indian FDI in Europe. The cluster analysis in Chapter 5.1.4 serves as a summary of the descriptive section by providing distinct FDI groups which tend to have a number of related characteristics. Finally, the summary recapitulates from the data presented in this section.

5.1.1. Indian OFDI Development & Volumes

As stated in the above literature review, Indian OFDI flow has increased from an average of US\$37 million per year in the period of 1990–1995 to US\$8 billion from 2011 to 2016 (UNCTAD, 2002, 2017). Moreover, with an investment volume of US\$72 billion between 2004 and 2009, Indian OFDI, as a percentage of gross capital formation, rose constantly to a peak of 4.4% in 2008 (Singal & Jain, 2012).

When analyzing the data extracted from Orbis to assess Indian direct investment in Europe, the generally observed growth is confirmed. However, as it was not possible to extract data about investment volumes from the database, the number of subsidiaries incorporated per year was used to assess the development of Indian FDI in Europe over time. While this method does not consider

the investment volume and therefore might be susceptible to distortions, it still provides a good overview of OFDI development and allows the authors to avoid the bias which would have resulted from outsize investment in one particular year (Brennan & Bakir, 2016).

Figure 5 shows that the number of investments per year increased steadily between 2004 and 2007, peaking in 2007 and thereafter decreasing by nearly 14%. The decrease after 2007 can be explained by the financial crises in 2008 and 2009. Interestingly, Indian direct investment in Europe does not seem to follow a steady trend again after the crises, fluctuating between 66 and 102 projects per year (cf. Figure 5).

These observations mainly confirm the findings of Brennan and Bakir's (2016) study presented in the literature review. The general higher level of investments per year can be explained by differences in the data set, as this thesis excluded some data from analysis, such as subsidiaries shut down prior to the study date.



Figure 5: Number of absolute investment projects per year from 2004 to 2016. Source: Own presentation based on Orbis data.

As the decrease in 2008 and 2009 is explainable by external factors affecting the entire world economy, and the literature review showed that other scholars group the years 2004–2016 as one timeframe, this thesis will look at projects either in total or per year.

5.1.2. Composition of Subsidiary Characteristics

In the following, different characteristics regarding the European subsidiaries will be presented. This includes subsidiary location, size, and major sector, as well as function and sub-function.

Subsidiaries' Location

Indian FDI in Europe between 2004 and 2016 occurred in 28 out of 32 countries. The majority of Indian FDI in Europe took place in five countries, with Great Britain being by far the most important location, receiving 21.3% of all investment (352 projects). Germany ranks second with 19.3% (217 projects), the Netherlands third with 14.8% (166 projects), Italy fourth with 5% (57 projects), and Switzerland fifth with 4% (45 projects) (cf. Figure 6). This means that 64.4% of all FDI projects from India in Europe between 2004 and 2016 were located in just five countries. On the other hand, most of the remaining countries received either only one to nine projects or 13 to 24 projects over the total period of twelve years, meaning the first group of countries received less than one project per year on average and the latter received between one and two investments on average per year.



Figure 6: Absolute investment projects by country 2004-2016. Source: Own presentation based on Orbis data.

In the main, these findings correspond to the findings of other scholars presented in the literature review above. Great Britain is always found to be the most important recipient of Indian FDI,

which strengthens the statement that joint history plays an important role for Indian OFDI (Brennan & Bakir, 2016). Moreover, Brennan & Bakir (2016) also found Germany as the second most important country, and countries like Italy, the Netherland and Poland were also among the most common destinations of Indian OFDI in Europe. However, some countries, such as France and Romania take less important ranks in this study compared to Brennan & Bakir's study (2016). This may be due to the fact that Brennan & Bakir assessed a slightly different time frame, and the absolute number of investments for many countries only differs by one or two projects, which shows how close ranks six to 14 lie.

Interestingly, the absolute number of projects per country over time is quite steady for most countries. Only in Great Britain, Germany, the Netherlands, Italy, and Switzerland fluctuations in the number of Indian direct investments per year can be observed (cf. Appendix 5). Thus, the change in total investments per year might be explained mainly by these five countries.

Subsidiaries' Size

A subsidiary's size can be measured by various characteristics, such as revenue, number of employees or total assets. Orbis calculates its own classification of size based on all three aforementioned specifications and categorizes a company as either small, medium sized, large, or very large (BvD, 2018a). This classification scheme ensures a more holistic view of company size, as it considers a number of different characteristics to specify the size. The exact boundaries for each category can be found in Appendix 6.



Figure 7: Absolute number of Indian investment projects in Europe 2004–2016 according to subsidiary size. Source: Own presentation based on Orbis data.

The most common size by far is a small company. Nearly 50% of all subsidiaries of Indian companies in Europe are classed as small. The medium-sized companies in turn make up 24.6%, large companies 19%, and very large companies only approximately 7.8% of all subsidiaries (cf. Figure 7). Notably, the importance of small subsidiaries increased over the years surveyed. While the incorporation of medium-sized, large, and very large companies decreases both in terms of absolute numbers and in terms of percentage, the incorporation of small subsidiaries as a share of total incorporations per year increases from around 25% in 2004 to around 80% in 2016 (cf. Figure 8). Moreover, as Appendix 7 shows there is a clear increasing trend for small subsidiaries and a decreasing one for all other sizes, which is likely to continue in the coming years.



Figure 8: Absolute number of Indian investment projects in Europe by size from 2004 to 2016. Source: Own presentation based on Orbis data.

Subsidiaries' Major Sectors

To determine the sectors in which Indian-owned European subsidiaries are involved, Orbis' categorization of major sectors was used. Figure 9 shows that "other services" is by far the largest sector, comprising more than half of the companies from the sample, followed by "wholesale & retail trade" with less than 20%. The sectors "machinery, equipment, furniture, recycling"⁶ and

⁶ The Orbis sector "machinery, equipment, furniture, recycling" comprises mainly manufacturing firms.

"chemicals, rubber, plastics, non-metallic products"⁷ represent approximately 6% each of all Indian-owned subsidiaries, which is much less compared to the most important sectors. The sector "hotels & restaurants" is even less well represented with less than 4%. It appears that the main sectors presented here are similar to the sectors mentioned in the above literature review as the main sectors of Indian companies involved in FDI in Europe: namely services, manufacturing and pharmaceutics. Furthermore, it is noticeable that there are large gaps between the number of subsidiaries within each sector and that from the third major sector on ("machinery, equipment etc."), the number of companies is quite low considering the period of twelve years used for this sample.



Figure 9: Indian investment projects in Europe by major sector 2004-2016 as a percentage of total projects. Source: Own presentation based on Orbis data.

Subsidiaries' Function

To determine the function of a subsidiary, each was allocated to one function according to Hay & Milelli's (2010) segmentation: R&D, manufacturing, services. Even though subsidiaries often perform more than one function, using the core NACE code of the company to define the function ensured that the main function is displayed and a general overview can be obtained. Services are

⁷ The Orbis sector "chemicals, rubber, plastics, non-metallic products" includes pharmaceutical firms, among others.

further grouped into four subcategories: construction, logistics, support and others. Support activities include all kind of services which are performed on behalf of the parent company such as trade, wholesale, import, retail and administrative, business and holding services.

Figure 10 clearly shows that service activities are by far the most important function of Indian subsidiaries in Europe. Approximately 81.7% of all affiliates have the primary function of providing services. Within this group, construction and logistics services play a rather minor role, contributing 1.4% and 1.7% of the total service subsidiaries respectively. Most important are support activities (55.4%) and other services (41.4%). Moreover, 16% of all subsidiaries are mainly performing manufacturing activities and only 2.3% are mainly associated with R&D activities, again confirming the findings of the above literature review, which had noted that partnerships between European and emerging markets MNEs in the area of R&D are still elusive.

These quotas were nearly the same for every year with service subsidiaries the dominant function by far. Interestingly, service and manufacturing activities moved together over time while subsidiaries mainly performing R&D activities were incorporated at a steady level over the years (cf. Appendix 8).



Figure 10: Absolute number of Indian investment projects in Europe by function and sub-function 2004-2016. Source: Own presentation based on Orbis data.

Ownership Share

The literature review states that since the second period of Indian OFDI, the average ownership share has increased towards majority participation. This is also obvious from Figure 11, which

shows to what proportion the subsidiaries are owned by their investors. Over 98% of the subsidiaries are wholly owned by their investors, be it via greenfield or brownfield investment. However, the total number of subsidiaries differs in this sample, as information on the ownership share was not available for every company. The 289 companies for which no detailed information was available were excluded from this evaluation. Consequently, only 834 subsidiaries were considered in the analysis of ownership share.



Figure 11:Indian investment projects in Europe by ownership share 2004-2016 as a percentage of total projects. Source: Own presentation based on Orbis data.

5.1.3. Investor Characteristics

For every subsidiary included in the sample, certain characteristics of the subsidiaries' Indian investor were identified, namely the investor's size, major sector, entry mode, and investment behavior.

Investors' Size

The literature review revealed that Indian OFDI to Europe is driven mainly by large companies, but that SMEs are becoming more courageous in technology-intensive sectors such as ICT and pharmaceutics. This trend is also apparent in the sample chosen for this thesis. Figure 12 shows that approximately 70% of European subsidiaries are owned by very large Indian investors. The other three categories— "large company", "medium-sized company" and "small company"—are represented in relatively equal parts, with medium-sized companies making up the largest share

after very large companies (cf. Appendix 6 for Orbis' classification of size). Interestingly, approximately 8% of the 1,123 companies are owned by small investors with less than fifteen employees. Above all, Appendix 9 which shows the development of the subsidiaries' GUO size over time, it appears that subsidiaries with very large owners are decreasing in number, while all other sizes are increasing, which in turn is consistent with the findings discussed in the literature review above.

Moreover, it is important to keep in mind that very large investors most likely own several subsidiaries in the present data. Thus, they will be counted more often, meaning that the share of very large investors is likely to be somewhat smaller than 70%.



Figure 12: Absolute number of Indian investment projects in Europe by GUO's size 2004-2016. Source: Own presentation based on Orbis data.

Investors' Major Sectors

Figure 13 shows the sectors in which the subsidiaries' investors are primarily involved. These "investor sectors" are very much in line with the sectors in which the respective subsidiaries operate, as in both subsidiary and investor categories, the sector "other services" is represented by most companies. Indeed, the first five sectors have hardly changed; their order is slightly altered, and one major difference is the absence of the sector "hotels & restaurants," which was on position five of the list of subsidiary sectors.

Thus, the main sectors of the subsidiaries' owners are mostly in line with the ones mentioned in the literature review, as it says that the three main sectors of Indian investments in Europe are services (here "other services" and "wholesale & retail trade"), pharmaceutics (here "Chemicals, rubber, plastics, non-metallic products"), and engineered goods and metals (here "machinery, equipment, furniture, recycling", "metals & metal products").



Sum of Number of Records for each GUO - Major Sector. The view is filtered on GUO - Major Sector, which excludes Null.

Figure 13: Absolute number of Indian investment projects in Europe by GUO's major sector. Source: Own presentation based on Orbis data.

Entry Modes

To be able to draw a conclusion about preferred entry modes the Zephyr database was used. In this context, all deals with an Indian acquirer and European target were shown (cf. Appendix 10). The data from Zephyr showed that 565 Indian MNEs have acquired a European subsidiary from 2004 to 2016.⁸ This number suggests that approximately half of the deals (565 of 1,223) made during that period are acquisitions and the other half are greenfield investments. However, these numbers should be treated with caution, as Orbis data for example do not include companies that were closed or re-registered, potentially distorting the results. This finding is partly consistent with the findings of Brennan & Bakir (2016) presented in the literature review, as it states that the number of greenfield investments and M&A, performed by Indian companies in Europe, are quite similar.

⁸ Deal types displaying increasements of voting power already excluded

Investment Behavior

Theories such as the Uppsala model suggest that the internationalization process takes place gradually, not only in terms of the establishment of operations, but also in terms of the psychic distance from the home market. To assess whether this is the case for the given GUO data, information about the total number of subsidiaries was extracted from Orbis in order to see how large the share of existing subsidiaries in- and outside Asia is. The data were then arranged so that it was possible to see how many subsidiaries a GUO had within Asia and how many the GUO had outside of Asia, i.e. in Africa, Europe, America or Oceania. If the proportion of subsidiaries outside Asia to the total number of foreign subsidiaries is greater than 90%, the Indian MNE is considered to exhibit aggressive investment behavior, as most of their subsidiaries is located in countries with a rather high psychic distance. Figure 14 shows the results of the investment behavior of Indian MNEs over time (2004–2016). It appears that between 2005 and 2011, aggressive and non-aggressive behavior have similar movements. This changes in 2012, since when the aggressive behavior of EMNEs and away from non-aggressive behavior.



Figure 14: Absolute number of Indian investment projects in Europe by GUO's investment behavior from 2004 to 2016. Source: Own presentation based on Orbis data.

5.1.4. Two Groups of Indian FDI – A Cluster Analysis

The cluster analysis serves as a summary of the descriptive part of this thesis by revealing systematic relationships that may exist between the presented characteristics of subsidiaries and investors. This leads to a reduction of the variance in the sample and provides two distinct FDI groups which tend to have related characteristics (Gammeltoft & Fasshauer, 2017).

Therefore, five characteristics from the Orbis dataset were selected, namely the subsidiary's size, its function, and its ownership share, as well as the GUO's size and investment behavior. These were converted into binary variables, meaning two possible outcomes, as already explained in more detail in the methodology section above. Thus, the four categories of subsidiary size (small, medium, large, very large) were summarized in two categories, combining medium, large and very large subsidiaries in one category and small subsidiaries in another. This grouping was performed in order to achieve a uniform distribution, since more than 50% of the sample consists of small subsidiaries, while "very large" subsidiaries make up only a very small part of the sample (87 out of 1,123) and could thus be seen as outliers. The size of the GUO in turn was categorized by combining small, medium and large GUOs into one category, with very large GUOs in another, since "small" GUOs make up only a small part of the sample (89 out of 1,123) and could thus also be seen as outliers. Moreover, the subsidiary function also included more than two categories, namely "service activities", "R&D" and "manufacturing" and was thus also summarized in two categories, combining "R&D" and "manufacturing" in order to obtain two possible outcomes. Though this grouping inevitably leads to some loss of information, this grouping is justified by the close interaction between R&D and manufacturing. In addition, "ownership share" was grouped into two categories of wholly owned (100%) or not wholly owned (<100%). Since "investment behavior" was already a binary variable, it did not need additional grouping. After grouping, the cluster analysis was performed on the processed dataset using Stata. Table 2 gives an overview of the variables used, showing their frequency and share in the sample as well as the names used in Stata.

		Variable name in cluster	Number of	
Characteristics	Variable	analysis	observations	Share in %
Subsidiary size	Small subsidiary	SmallSub	547	48,71%
	Medium, large and very large	LargeSub	576	51,29%
Subsidiary function	Service activities	Service	917	81,66%
	R&D and manufacturing	ManuRD	206	18,34%
Ownership share	100.00	WhollyOwned	820	98,32%
	<100.00	NotWhollyOwned	14	1,68%
GUO size	Very large company	LargeGUO2	797	70,97%
	Small, medium and large	SmallGUO2	326	29,03%
	company			
Investment behavior	aggressive	Aggressive	528	47,02%
	non-aggressive	NonAggressive	595	52,98 %

Table 2: Overview of the variables used for the cluster analysis. Source: Own presentation.

The results of the cluster analysis are displayed in a dendrogram (cf. Figure 15), representing the groupings that were created during the clustering process. The Jaccard similarity measure can be seen on the y-axis (measure of closeness), which shows the distance at which the clusters merge, while the individual variables are placed along the x-axis. From there, the variables are connected according to their similarity or relatedness. The closer two connected variables or clusters are to 1 on the y-axis, the more they are linked to each other.



Figure 15: Dendrogram of the conducted cluster analysis. Source: Stata.

The dendrogram provides an approximate picture of two distinct clusters and thus two main groups of Indian companies in Europe, each with different FDI patterns. The first cluster represents the first FDI group, linking the variables "SmallSub" (=1), "Service" (=3), "WhollyOwned" (=5), "LargeGUO2" (=7), and "NonAggressive" (=10). It appears that the characteristics of this group's GUOs (size and investment behavior) are quite closely linked, much like the characteristics of the subsidiaries (size, function, and share of ownership); in both cases, their position on the y-axis suggests that these factors are likely to co-occur (i.e., very large GUO tend to invest non-aggressively).

Thus, the first main cluster (1,3,5,7,10) provides a picture of small subsidiaries that predominantly exercise a service function and are generally wholly owned. They are more likely to have very large investors that tend to invest non-aggressively, i.e. at least 10% of their subsidiaries are located in Asia, suggesting a preference for lower psychic distance. In sum, this FDI group appears to be rather risk-averse regarding their FDI. Even though the subsidiaries' investors are very large Indian MNEs with more than 1,000 employees and over EUR100 million in revenues (cf. Appendix 6), and are therefore in possession of sufficient capital, they are more likely to behave non-aggressively in terms of their location choice. They tend to invest in small subsidiaries with fewer than fifteen employees which are primarily in the service function, meaning sales, marketing, consulting etc. The investors also tend to prefer a majority stake, or in this case full ownership, possibly to protect their firm specific advantages, as suggested in the literature review.

The second group is marked by the variables "LargeSub" including the categories medium, large and very large (=2); "NotWhollyOwned" (=6); "ManuRD" including the categories manufacturing and R&D (=4); "SmallGUO2" including investor sizes small, medium, and large (=8); and "Aggressive" (=9), representing aggressive investment behavior. It becomes apparent that the subsidiary characteristics in this group are related differently compared to the first group. Here, unlike in the first group, subsidiary size and ownership share are more closely related than size and function. In addition, the subsidiary characteristics in this group characteristics in this group exhibit a much greater distance, indicating that these characteristics are distributed more diversely across all observations.

Thus, the second FDI group is not as straightforward as the first one (Gammeltoft & Fasshauer, 2017). However, this FDI group provides a picture of medium, large, and very large subsidiaries with a minimum of fifteen employees. The data suggest that such subsidiaries are more likely to

be not wholly owned, but the interpretation of the ownership share needs to be considered with caution, as the previous section and Table 2 show that wholly owned subsidiaries represent the main part of this sample (98%). The functions of these subsidiaries are more likely to be in the manufacturing or R&D area. Their GUOs tend to be small, medium, or large with a maximum of 1,000 employees, meaning that at least some small GUOs invest in subsidiaries which are larger than themselves. Moreover, the GUOs off this group display rather aggressive investment behavior, meaning at least 90% of their foreign subsidiaries are located outside of Asia, indicating that psychic distance is not influencing their market selection. Consequently, the second group appears to be less risk-averse, as the subsidiaries 'investors of this group tend to be smaller Indian MNEs investing aggressively in larger subsidiaries that tend to have a manufacturing or R&D function, which are associated with high investment volumes. However, this interpretation should be treated with caution as it is based on the assumption that it is riskier for small companies to invest abroad. This assumption does not always have to be true as the size categories used in this thesis only include revenue, number of employees and total assets and does not comprise other factors such as profit margin or equity ratio.

These group constellations with characteristics of Indian FDI in Europe are quite consistent with the content presented in the literature review, indicating that Indian direct investment in Europe is mainly driven by large MNEs, but also more and more by SMEs, particularly in technology-intensive sectors. This corresponds to the second FDI group presented here, including smaller investors who invest in larger subsidiaries that tend to have R&D or manufacturing as their main function.

5.1.5. Summary

This section provides an overview of the patterns relating to Indian FDI in Europe by describing its development over the years in accordance with the number of subsidiaries as well as the respective characteristics associated with European subsidiaries and their Indian investors. These characteristics include the subsidiaries' location, size, major sectors, main function, and ownership share as well as their GUOs' size, major sectors, preferred entry mode, and investment behavior.

The above presentation of developments in Indian OFDI showed a peak of investments in 2007 before financial crises caused a sharp slump. Since then, the number of investments has appeared to fluctuate, with another high point in 2014 and a sharp decrease in 2016. Furthermore, the

description of subsidiaries' characteristics revealed that their most frequent location is Great Britain with 21.3%; nearly half are small companies; the majority is involved in the service sector; their main function is in the service area (81.7%); and 98% of them are wholly owned. In addition, the investigation of subsidiaries' GUOs' characteristics showed that subsidiaries are owned mainly by very large investors (70%), who are primarily involved in the service sector, and are increasingly aggressive in their investment behavior. Lastly, acquisitions and greenfield investments are used as an entry mode in Europe almost equally often.

The cluster analysis illustrated two distinct FDI groups with a related set of characteristics in each group. The first group combines the variables of small subsidiaries fulfilling a service function and being wholly owned by very large GUOs with non-aggressive investment behavior by those GUOs. The second group in turn shows a relationship between the variables of smaller subsidiaries that are not wholly owned, are involved in a manufacturing or R&D function, and have larger GUOs that exhibit aggressive investment behavior. Therefore, the second FDI group is assumed to be less risk-averse than the first one.

5.2. Host Country Factors attracting Indian FDI – A Regression Analysis

After assessing the different patterns of Indian FDI in Europe, this section will look at host country characteristics influencing the location choice of Indian MNEs within Europe. To that end, a regression analysis is conducted examining every European country that received at least ten FDIs within the timeframe of the descriptive analysis (2004-2016). Moreover, the descriptive analysis showed that five countries especially showed fluctuations in receiving FDI projects across the analysis, while the rest presented quite steady numbers. Thus, a second regression analysis is performed analyzing these five countries, namely Great Britain, Germany, the Netherlands, Italy, and Switzerland.

The section first presents every hypothesis made and the reasoning behind it. Next, the model specification is being described in detail, and lastly the results of the analysis are presented.

5.2.1. Hypotheses Development

The following section provides hypotheses on host country factors that are thought to have an influence on the location choice of Indian MNEs. For each of these factors, the proxies used within the regression analysis are presented.

Market Opportunities

The eclectic paradigm, internalization theory, and the RBV all suggest that one of the main motivations behind foreign expansion is to take advantage of market opportunities in foreign countries. Moreover, the literature review clearly showed that FDI from emerging markets often has market-seeking motives. In general, GDP and GDP growth have been found to be highly significant for inward FDI flows (e.g. Buckley et al., 2007; Kolstad & Wiig, 2012), and specifically for Indian FDI in Europe (Brennan & Bakir, 2016). Therefore, market opportunities in terms of GDP and GDP growth may be a relevant factor affecting the allocation of Indian FDI in Europe.

The expected relationship between market opportunities and Indian direct investment in European host countries is presented in the following hypotheses:

H1a: Host country GDP is positively related to the number of Indian direct investments.

H1b: Host country GDP growth is positively related to the number of Indian direct investments.

In addition, the internationalization process theory (the Uppsala model) suggests that direct investment in a certain country follows exports to that same country. In general, the literature review suggests that Indian companies focus their internationalization towards countries which have already been key destinations for Indian imports. Thus, the final hypothesis regarding market opportunities reads as follows:

H1c: Host country imports from India are positively related to the number of Indian direct investments.

Strategic Assets

The springboard perspective and the LLL framework argue that EMNEs invest in developed countries to obtain strategic assets such as technology and knowledge. The literature supports this

view, finding that EMNEs are more likely to enter advanced economies in order to upgrade their technology (e.g. Cuervo-Cazurra, 2012; Luo & Tung, 2018; Mathews, 2006). While different variables can be used as proxies to examine the significance of strategic asset-seeking (e.g. capabilities, brands, technology or expertise) by Indian MNEs, this thesis follows the logic that strategic assets relate to innovation and the prevalence of higher education in a given country. Thus, R&D expenditures, patent applications, and the educational attainment of host countries will be assessed. The expected relationship(s) between strategic assets and Indian direct investment in European host countries is presented in the following hypotheses:

H2a: Host country R&D expenditures as a percentage of GDP are positively related to the number of Indian direct investments.

H2b: The number of patent applications within a host country is positively related to the number of Indian direct investments.

H2c: Educational attainment in a country, measured as a percentage of the population (25+) who completed at least an upper secondary degree is positively related to the number of Indian direct investments.

Psychic Distance

The original Uppsala model stresses the importance of the liability of foreignness during the process of internationalization. It states that companies prefer to enter countries with a low psychic distance (Johanson & Vahlne, 1977, 1990). Nevertheless, newer theories, including the 2009 version of the Uppsala model, argue that psychic distance does not play an important role for location choice. Moreover, India and Europe generally face large distances in terms of geography, language, culture, and institutions, and it can therefore be assumed that from an Indian perspective psychic distance will be high for all European countries. Thus, this thesis assumes that Indian MNEs entering Europe are willing to ignore psychic distance, and that psychic distance thus does not influence location choice within Europe.

As psychic distance is a subjectively perceived distance, it cannot be measured directly. However, the perceived distance is likely to be lower if a host country accommodates a large Indian community. In addition, the literature has also suggested that location choice for EMNEs and/or Indian subsidiaries specifically might be influenced by the existence of ethnic communities

(Brennan & Bakir, 2016; Cuervo-Cazurra, 2012). Therefore, the ethnic community within a host country can be used as a proxy for psychic distance: the bigger the community, the lower the psychic distance should be. However, as it proved impossible to determine the size of the ethnic Indian community in European countries, the Indian population was used as a proxy.

Due to the illustrated reasoning, the hypothesis regarding psychic distance is the following:

H3: Indian population within a host country has no significant influence on the number of Indian direct investments.

Host Country Institutions

Institutional arbitrage logic presents two different views on the effects of institutions on FDI from emerging markets. Either EMNEs follow an exit strategy and enter countries with better, more stable institutions to escape their own weak ones, or they follow an exploiting strategy, entering countries with similarly poor institutions to exploit the knowledge accumulated by dealing with weak systems at home (Boisot & Meyer, 2008; Cuervo-Cazurra & Genc, 2008; Witt & Lewin, 2007). As Europe generally has better institutions than India, it appears likely that those EMNEs entering Europe follow the exit strategy. While there are again different characteristics or indices that could be used as proxies for the quality and stability of institutions, this thesis employs an average of all six worldwide governance indicators of the world bank, namely voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (The World Bank Group, 2018). Therefore, the final hypothesis reads as follows:

H4: The average governance indicator is positively related to the number of Indian direct investments.

5.2.2. Model Specification

Table 3 summarizes the variables used in the analysis and their proxies as well as the codes used in Stata, the theoretical justification, and the expected relationship. Details about the sources of each variable can be found in Appendix 4.

#	Independent variable	Proxy	Code	Theoretical justification	Expected relationship
H1a	Absolute market size	GDP	GDPA	Market-seeking	+
H1b	Market size growth	GDP growth	GPDg	Market-seeking	+
H1c	Trade relationship	Imports from India to host country	ImpIn	Market-seeking & Incremental internationlization	+
		Imports from India to host country as a percentage of total imports	ImpInP		
H2a	Innovation & high technology	R&D expenditure as a percentage of GDP	RD	Strategic asset- seeking	+
H2b	Innovation & high technology	Patent applications per 1000 residents	PatAP	Strategic asset- seeking	+
H2c	Education / Knowledge	Educational attainment, Share of population (25+) with at least upper secondary degree	Edu	Strategic asset- seeking	+
Н3	Psychic distance	Indian population within host country	InPop	Liability of foreignness	None
H4	Institutional stability	Average of all 6 worldwide governance indicators	WWGI	Seeking of stable institutions	+
Control variable	Push effects from India	Indian OFDI stock	FDIO	./.	

Table 3: Overview of independent variables. Source: Own presentation.

Since the descriptive analysis in Chapter 5.1.2 showed that most countries do not show any change in the number of investments per year, but the five most important countries did, two regression models were tested. The first covers all 19 countries that met the requirement of at least ten investments during the time period, and the second covers only those five countries showing fluctuation in the number of direct investments per year, namely Great Britain, Germany, the Netherlands, Italy, and Switzerland. The regression models will be referred to as the "19-country-regression-model," or "full regression model", and the "5-country-regression-model," or "amended regression model", respectively.

The host country's imports from India were first included as an absolute number. However, as this variable showed a high correlation (80%) with absolute GDP in the full model, the variable was converted to a relative number by calculating Indian imports as a percentage of total imports. After

this conversion, the correlation decreased to roughly 40%, and thus the variable could be included in the analysis (cf. Appendices 12 & 13).

In addition, the number of patent applications was also first included as an absolute number, but showed a high correlation (85.5%) with absolute GDP in both models. Thus, the variable was converted to a relative number by calculating the number of patent applications per 1000 residents of the host country. After this conversion, the correlation decreased to roughly 60%, and the variable could thus be included in the analysis (cf. Appendices 12, 13, 14 & 15).

Based on the variables presented above, the full regression model is built as follows:

$$log \left(\lambda (Number of Investments_{Country})\right)$$

= $a + b_1 GDPA + b_2 GDPg + b_3 ImpInP + b_4 RD + b_5 PatAP + b_6 Edu$
+ $b_7 InPop + b_8 WWGI + b_p FDIO$

Since the variable "Indian imports" showed no correlation above 80% when assessing the top five countries, the model for the amended regression uses the variable in its absolute number and thus reads as follows:

$$log \left(\lambda (Number of Investments_{Country}) \right)$$

= $a + b_1 GDPA + b_2 GDPg + b_3 ImpIn + b_4 RD + b_5 PatAP + b_6 Edu$
+ $b_7 InPop + b_8 WWGI + b_p FDIO$

After building the general model for the regression (applicable for Poisson and negative binomial), the authors still needed to determine which regression is appropriate. As already stated in Chapter 4.3.2 the Poisson regression has the requirement of equidispersion, meaning that the Poisson regression model y_i has mean $\mu_i = \exp(x_i \cdot \beta)$ and variance μ_i . To test for this requirement, a conditional variance ω_i is calculated as a function of the mean:

$$\omega_i = \mu_i + \alpha \mu_i^p$$

Following this function, the conditional variance equals the mean μ_i if α equals zero. To test the hypothesis H₀: $\alpha = 0$, the typical procedure is to calculate both regression models and then to conduct a likelihood-ratio test (Cameron & Trivedi, 2013). Tables 4 and 5 present the LR-tests of both regression analyses of the present paper, which clearly show that α is significantly different from zero in both cases, meaning that the variance of the dependent variable is significantly different is thus not satisfied, the negative binomial regression model is used.

/lnalpha	7715233	.1657645				-1.096416 -	4466308
alpha	.4623083	.0766343				.3340663	.63978
Likelihood-ratic	test of a	alpha=0: c	hibar2(01)	=	160.81	Prob>=chibar2	= 0.000

Table 4: LR-Test of the full model. Source: Stata.

/lnalpha	-2.577641	.418478			-3.397843	-1.7574
alpha	.0759529	.0317846			.0334453	.172485
Likelihood-rat	tio test of a	lpha=0: ch	ibar2(01) =	15.76	Prob>=chibar2	= 0.00

Table 5: LR-Test of the amended model. Source: Stata.

5.2.3. Results of the Regression Analysis

Both regression models are significant, as the LR Chi Square has a significance level of 0.0000 (cf. Appendices 16 & 17), meaning that at least one of the coefficients used in the model is nonzero and the chosen model is appropriate. Table 6 presents an overview of the coefficients and pvalue for each variable of the full as well as the amended regression model. The table shows that four host country factors are significant in attracting Indian FDI in both regression models, with a significance level of 5%: imports from India, R&D expenditures, educational attainment and the average of the worldwide governance indicators. GDP and GDP growth are significant only in the full model, and patent applications and Indian population are significant in neither model.

	Full model			Amended model			
	Direction of			Direction of			
Variables	riables Coefficient influence P> z		Coefficient	influence	P> z		
GDPA	4.86e-13	+	0.000**	-2.00e-13		0.490	
GDPg	0.044564	+	0.043*	0.0471444		0.070	
Impin	./.		./.	3.05e-10	+	0.000**	
ImpInP	175.5915	+	0.000**	./.		./.	
RD	-0.4992181	-	0.000**	-1.477363	-	0.000**	
PatAP	1.47195		0.132	2.623107		0.146	
Edu	0.0110269	+	0.022*	0.0428925	+	0.001**	
InPop	2.04e-06		0.055	-2.22e-06		0.100	
WWGI	0.9504622	+	0.000**	0.5130014	+	0.038*	

Table 6: Overview of regression output. Source: Own presentation based on Stata.

* = significant at 5%, ** = significant at 1%

As stated above, GDP and GDP growth have a significant influence only in the 19-countries-model and not in the 5-countries-model. This is most likely explained by the fact that the countries assessed in the amended model are already among those European countries with the highest GDPs. Thus, market size has no significant influence and is not the decisive factor when choosing between one of these five countries. Other factors seem to play a greater role in this context. However, as both GDP and GDP growth are significant in the full model, with a positive influence on the number of Indian direct investments, hypotheses H1a and H2b can be conditionally confirmed: market size affects location choice when choosing which European country to enter, but is no longer the most relevant concern when it is already relatively large.

Imports from India have a significant positive effect on Indian investment projects in both regression models. Even though the variables differ in the two models, as the full model assesses the relative amount of imports while the amended model examines the absolute amount, the statement of significance for each variable shows that hypothesis H1c can be completely confirmed.

A more heterogeneous picture is present when assessing the variables used as proxies for strategic assets. Only one hypothesis can be confirmed, while another factor influences Indian direct investment in an unexpected direction, and the third factor is not significant at all. Research and development expenditures as a percentage of GDP are a significant variable in both models. Surprisingly, the coefficient shows a negative influence of R&D expenditures on the number of

Indian investment projects, meaning that an increased importance of R&D within an economy should generally result in less FDI from India. As hypothesis H2a suggests a positive relationship between R&D expenditures and Indian direct investment, H2a cannot be confirmed and must be rejected. On the other hand, patent applications per 1000 residents do not show a significant influence in either model. Therefore, H2b also must be rejected. The only hypotheses regarding strategic assets that can be confirmed is H2c: educational attainment has a significant positive influence in both regression models.

Indian population does not show a significant influence in either model, confirming hypothesis H3. This supports the idea that location choice within Europe is not influenced by the liability of foreignness, possibly because every European country already represents a high distance, and therefore other factors are more important when selecting the best European location.

Lastly, hypothesis H4 is confirmed, as the average worldwide governance indicator shows a significant positive influence in both models (level of significance = 5%). Interestingly, if the significance level was 1%, the indicator would be significant only in the full model. Thus, it can be assumed that the influence of the indicator is less important in the 5-countries-model than in the 19-countries-model. This can likely be explained by the same logic as above: the countries of the 5-countries-model already belong to those European countries showing high values in the indicator, representing strong institutions. Thus, once having selected one of these countries, the investor might already expect good institutional systems, and other factors might influence his choice to a higher extent.

5.2.4. Summary

In total, six out of eight hypotheses could be confirmed or at least conditionally confirmed. This shows that the understanding of Indian MNEs in Europe presented in the theoretical background and the literature review is largely confirmed by this regression analysis: the host country factors attracting Indian FDI in Europe are the market size of the host country, Indian imports to that country, the prevalence of educational attainment in that country, and strong institutional systems. On the other hand, R&D expenditures may discourage Indian direct investment, and patent applications as well as local Indian population have no influence on the number of investments.
5.3. Four illustrative Indian MNEs – A Case Study

The following section presents a case study of four selected Indian MNEs from different major sectors and with distinct FDI strategies. The purpose is to better understand the initial competitive situation of the investor as well as its international experience and to identify underlying motives for Indian FDI in Europe. Each company is first presented in detail to finally compare the companies in terms of their FSAs, internationalization process, and main motives.

5.3.1. The Case of Apollo Tyres Limited

With a turnover of US\$ 1.94 billion, backed by a global workforce of approx. 16,000 employees and a market share of 25.9% in its main segment (commercial vehicle tires), Apollo Tyres Limited (ATL) is one of the two largest tire manufacturers in India as well as the 17th largest worldwide (ApolloTyres, 2017a, 2018a; Cohen, 2017). The company owns four primary brands, including the flagship brands Apollo and Vredestein, which provide a full range of products such as passenger car, truck, bus, off-highway (tractor, mining vehicle), and bicycle tires, as well as the two specialized truck and bus tire brands Regal and Kaizan. Accordingly, ATL has several subsidiaries across the world, including their principal subsidiaries in South Africa, Switzerland, Singapore, Netherlands, France, and the UK (ApolloTyres, 2018b).

The now publicly listed company was founded in 1972 and initially manufactured only truck tires. In 1998, ATL became India's second-largest tire manufacturer (after MRF Limited), tempting them into further investments in factories and other areas of tire production (Cohen, 2017). As the tire market became increasingly globalized, ATL decided to look for a partner who would be able to support them technologically in order to remain competitive. Shortly after, it formed a JV with France's Michelin in India in the year 2003. Michelin offered technology support to ATL for manufacture of passenger cars radials and helped them become the first Indian tire manufacturer producing tubeless radial tires which met the H speed rating (HBL, 2017). However, due to the volatile Indian economy, the JV ended in 2005, which also led to a loss of access to Michelin's radial tire technology (Cohen, 2017).

After this incident, ATL decided to reduce their dependence from India and to become technological self-reliant by going global (Srivastava, 2016). It therefore acquired the South African operations of Dunlop Tyres International in 2006, giving ATL access to their tire

technology and the opportunity to use Dunlop's brand across Africa (Srivastava, 2016). Supported by Dunlop's technology, ATL started building Indian factories with this tire technology in 2007. Thereafter, its expansion into the "far more technologically advanced" European market began with the acquisition of the Netherlands-based Vredestein Banden BV in 2009 (MOTORINDIA, 2017). Since ATL decided to focus on technology and marketing as the two key pillars for their next growth phase, further investments in Europe followed through the opening of a R&D Center at Vredestein's Enschede headquarters in 2013 and the acquisition of Germany's multi-brand distributor Reifencom in 2015 to further enhance distribution strength in Europe (Cohen, 2017; Srivastava, 2016). In the same year, ATL further increased its market presence in Europe by starting construction on its first European greenfield manufacturing facility in Hungary in order to be able to supply its tires to all the leading European original equipment manufacturers in the passenger car tire segment, thus becoming involved in the supply chains of world-leading carmakers such as VW, Ford, and SEAT (ApolloTyres, 2017b). Production at this plant launched in May 2017 (ApolloTyres, 2015; MOTORINDIA, 2017). Within this period, ATL also spotted other markets and thus continued to pursue its global growth journey by establishing a sales and marketing office in Thailand, opening a global marketing office in London, and entering Middle East markets such as Jordan (Cohen, 2017).

Consequently, ATL's international expansion continued to reduce its dependence on the Indian market, as 24% of ATL's revenue already comes from Europe (Srivastava, 2016).

5.3.2. The Case of Dr. Reddy's Laboratories Limited

Dr. Reddy's Laboratories Limited (DRL) is one of India's leading pharmaceutical companies with over 20,000 employees, revenues of Rs154.7 billion (US\$ 2,356 million) and a commercial presence in 26 countries in 2015–16 (Dr. Reddy's Laboratories, 2016). The company transformed itself from producing copies of patented drugs to developing drugs on its own (Cohen, 2004). Today DRL's business is built upon three pillars: global generics, pharmaceutical services, and active ingredients as well as proprietary products, with generic drugs⁹ being the most significant business driver (Dr. Reddy's Laboratories, 2016).

⁹ Generic drugs = "medication created to be the same as an existing approved brand-name drug in dosage form, safety, strength, route of administration, quality, and performance characteristics", but without carrying the brand name. A

While being a leader in the domestic market, DRL is also internationally active, with 85% of its revenue generated outside India. More precisely, 53% of its total revenues were contributed by North America, 11% by Europe, 9% by Russia and other CIS countries¹⁰ as well as 11% from the Rest of the World. The company is run by the founder's son Satish Reddy and son-in-law G. V. Prasad (Dr. Reddy's Laboratories, 2016).

DRL's predecessor was founded in the early 1970s and exclusively produced bulk actives—the basic ingredients of drug compounds. However, Dr. Anji Reddy aspired to higher things and founded DRL in 1984 to establish a manufacturer of finished drugs. Indian laws of the time decisive for the business model: since the early 1970s, laws protecting pharmaceutical patents were abrogated. DRL therefore followed the prevailing trend by producing copies of other drugs (Cohen, 2004).

In the following years, the company grew quickly and by taking advantage of the low production costs and wages in India, DRL expanded its production of bulk actives. In 1986, DRL exported bulk actives for the first time and also listed its stock on the Bombay exchange. In 1987, DRL achieved another critical milestone of its internationalization by gaining the U.S. FDA's approval for its ibuprofen formulation, which resulted in international exports of formulations. At the end of the 1980s, DRL was already India's leading exporter of drug ingredients and made its first acquisition by buying an Indian specialist for bulk actives (Cohen, 2004).

In the early 1990s, the company's portfolio listed several copied drugs which were increasingly sold internationally. International sales were further boosted by DRL's entry to the Russian market. In 1992, the company established a JV with Russia's leading pharmaceutical producer Biomed. While this partnership was broken up amid a scandal by 1995, DRL also entered another JV in the Middle East in 1993 and opened two formulation units—one in Russia and one in the Middle East (Cohen, 2004).

Business was running well during this period, but competition within the Indian sector of copied drugs was very high and Reddy recognized that India might soon reestablish the laws respecting international pharmaceutical patents. These factors led DRL to make a drastic strategic decision. In 1992, the company founded the Dr. Reddy's Research Foundation, transforming its business

generic might also differ in non-essential characteristics such as color, packaging, and/or taste (FDA, 2017; Scientific American, 2018)

¹⁰ CIS = Commonwealth of Independent States, including Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Armenia, Moldova, Russia, Tajikistan, and Uzbekistan (CIS, 2018).

model from copying drugs to developing drugs. While the Indian community was very skeptical of an Indian company actually inventing something on their own, DRL started with a standard approach popular among the largest pharmaceutical firms: the development of so-called analogue preparations of existing drugs. In this practice, the composition of a preparation or molecule is slightly alerted in a way that it is sufficiently different chemically to gain a new pharmaceutical patent (Cohen, 2004; Reddy, 2015).

Apart from DRL's efforts to transform itself into a pharmaceutical innovator, the firm also entered the generic drug market. In 1994, the company established its first foreign subsidiary in the US The purpose of the subsidiary was to produce generic drugs which met the legislative requirements of developed markets. During this time, DRL's efforts to become an innovator yielded their first success with a patent application filed in 1995 and successfully completed laboratory testing in 1997. However, DRL still lacked the funds to clinically test the drug and therefore had to license it to Novo Nordisk (Cohen, 2004; The Economist, 2018).

The next milestone of DRL's international expansion occurred in 1999, when the company set up a US R&D subsidiary in Atlanta, GA, to place part of its drug research close to the US market (Cohen, 2004). In the following years, the importance of international markets grew and DRL extended its business by acquiring different Indian firms.

The year 2002 marked DRL's first acquisition overseas. The company bought the British firm BMS Laboratory Limited as well as its subsidiary Meridian Healthcare Limited. This purchase paved the way for DRL's entry to the UK market for generic drugs and ultimately the European market (Cohen, 2004; Evaluate, 2002).

While the company had reached global scale by the early 2000s, it was still missing competencies within the field of drug discovery and clinical testing. To overcome these disadvantages, DRL set up its subsidiary Aurigene Discovery Technologies Limited in Bangalore, India and Boston, US in 2002. The subsidiary works as a contract researcher, performing research projects for pharmaceutical companies from the developed world, thus gaining knowledge which can be useful to DRL in general (Dr. Reddy's Laboratories, 2002; Gelli & Tummalapalli, 2003).

Alongside these actions, DRL continuously kept expanding its export portfolio, as well as setting up and acquiring new companies to strengthen its global presence in North America, Russia, and Europe. Moreover, it also started entering the South Asian market by acquiring established brands of the Belgian pharmaceutical company UCB SA in 2015 (Reuters, 2015).

5.3.3. The Case of Suzlon Energy Limited

Suzlon Energy Limited (Suzlon) is India's leading wind power company and a global leader in the field of wind power. The company is present in 18 countries across six continents, employs over 8,500 employees and generated a revenue of Rs125.14 billion (US\$ 1.94 billion) in 2016–17. A key strength of the firm is its unique end-to-end offering, which provides customers with any service connected to wind energy, from the acquisition of land to lifecycle asset management, design, production, construction, and maintenance (Suzlon, 2017, 2018a).

Tulsi Tanti founded Suzlon in 1995 after suffering under India's notoriously unpredictable and expensive power when managing his family's textile manufacturer. After commissioning two wind turbines to power the textile operations, Tanti found that many businesses were interested in alternative power solutions and that wind energy was a better business than textiles (Barton-Sweeney, Elias, Bagley, & Rae, 2008; Suzlon, 2018a).

When establishing the business, Tanti and his brothers had the advantage of knowing the customer's side, but while all of them were engineers, none had any expertise in the field of wind energy technology. Originally, they planned to buy turbine technology overseas and in the long-run manufacturer it themselves. However, as turbine manufacturers were reluctant to share their expensively developed knowledge and would not sell their technology to the Tanti brothers, the brothers established a partnership with the German turbine manufacturer Südwind GmbH Windkraftanlagen to distribute their wind machines (Swanson, 2012).

However, shortly after the beginning of the partnership Südwind filed for bankruptcy, and Suzlon purchased Südwind's R&D division. Instead of moving it to India, Suzlon hired former Südwind employees and created an R&D lab in Germany. This laboratory became the first of many training facilities for young Indian engineers who would study in Germany or other Western countries like Denmark and the Netherlands and come back to Suzlon in India with their technical expertise (Barton-Sweeney et al., 2008; Swanson, 2012).

In the following years, Suzlon's business grew and the company planned, sold and maintained many wind turbines in India. In 2003, the company was hired for its first job outside India – a wind turbine generator in the US. Since then, Suzlon repeatedly convinced North American as well as European customers of their services and beat competitors, as their completely vertically

integrated value chain was unique, and they could fulfill orders much faster than any other company (Suzlon, 2018b; Swanson, 2012).

Suzlon started to acquire Western companies along its value chain, such as the Belgian maker of turbine gearboxes Hansen Transmission Limited in 2006 and the German wind technology R&D company REpower in 2007. At the same time, the Chinese market became increasingly attractive as the government passed a new law to increase renewable energy generation. Suzlon therefore entered this market in 2006 by establishing a JV to produce different turbines (Barton-Sweeney et al., 2008; Swanson, 2012).

Even though the business struggled in the following years as the financial crises and a recall of turbine blades hit the company hard, Suzlon continued to strive for new assignments in Australia, South Africa, and China. Finally, the earthquakes that shook Japan in 2011 and damaged nuclear reactors led to renewed attention for renewable energies, positively affecting Suzlon's sales (Swanson, 2012).

Today, Suzlon offers end-to-end solutions not only for wind energy but also for solar energy. It holds 15 manufacturing units in India and China (JV), eight R&D facilities in Germany, India, Denmark, and the Netherlands, and service and maintenance facilities in the US and India (Suzlon, 2018a, 2018b).

5.3.4. The Case of HCL Technologies Limited

HCL Technologies Limited (HCLT) is a global IT services company engaged primarily in providing a range of software services, business process outsourcing services (BPO), and IT infrastructure services for several industries (HCL, 2016). The company was incorporated in India in 1991 and has been one of the fastest growing technology companies in the world (HCL, 2016, 2018a). Backed by a comprehensive global off-shore infrastructure and a network of offices in 32 countries (primarily in America and Europe), HCLT and its subsidiaries have over 120,000 employees worldwide and a consolidated revenue of US\$7.6 billion. HCLT is one of the four companies under HCL Corporation (HCL, 2018c).

Before HCLT became an independent entity, it was the R&D wing of HCL Corporation. However, due to the high demand for software-related services at that time, HCL Enterprise decided to establish an independent company in order to also cover the service segment in the IT segment. Thus, in 1991 HCLT was born. At the same time, the Indian government started to liberalize their economy by deregulating restrictions on foreign investments (L. A. Hill, Khanna, & Stecker, 2008; see also above). Therefore, competition in India became tougher due to new multinationals such as IBM entering the market. Accordingly, HCLT increasingly began to focus on growth by creating JVs with foreign MNEs to gain a foothold in the global IT service sector. Initially, HCLT's JV partners were primarily US firms such as Deluxe Corporation (JV in India), James Martin & Co (JV in the US) and Perot Systems (JV in India), all in 1996 (Malerba, Mani, & Adams, 2017).

Moreover, in 1999 HCLT issued its first IPO on the Indian Stock Exchange and raised substantial capital for its company in order to enter a new growth phase. However, HCLT was still lagging behind its competitors due to its late entry into the service sector. Its plan to focus on becoming global and catching up with already established firms such as Wipro and Infosys intensified accordingly (Malerba et al., 2017). Thus, HCLT pushed for more aggressive growth and started to acquire several companies, such as Apollo BT Contact Centre in 2001 in a bid to become Northern Ireland's largest BPO provider, or AnswerCall Direct Contact Centre, also in Northern Ireland, in order "to further expand its domain expertise into newer areas of functioning" (HCL, 2005a). Besides bringing new capabilities to the market, HCLT also performed acquisitions and JVs to gain new clients, such as the acquisition of Gulf Computers Inc. in the US with the goal of gaining access to its government clients (HCL, 2005b; Malerba et al., 2017).

Further investment in Europe was performed by the acquisition of a 51% stake in Deutsche Software (Deutsche Bank IT services subsidiary) in 2001 (Sachitanand, 2001), with the intention of gaining additional knowledge in the area of financial software. HCLT kept completing several acquisitions around the globe in order to expand business and markets as well as capability building (Malerba et al., 2017). One of the company's largest acquisitions was of the UK-based consultancy Axon Group Plc in 2008, which was the biggest acquisition in the tech space by an Indian company to that date and made HCLT one of the world's most important players in enterprise consulting (Livemint, 2008; Malerba et al., 2017). Another deal was conducted in South Africa in 2009 with the acquisition of UCS Group's Enterprise Solutions SAP Practice, not only to boost the company's market presence in South Africa, but also to further increase its global delivery capabilities by gaining access to a wider skills base as well as other leading retailers (SiliconIndia, 2009).

More current acquisitions have focused on the US, which remains HCLT's largest market (Vault, 2018), and on Europe, such as the acquisition of Volvo's external IT business in Sweden in 2016 (HCL, 2018d), the acquisition of the UK-based ETL Factory Limited in 2017 (Agarwal, 2017), and the acquisition of Urban Fulfillment Services in the US, also in 2017 (HCL, 2017). All of them involved in similar fields to HCLT. In addition, due to new business prospects and partnerships, HCLT has set up subsidiaries in Denmark (HCLT Denmark ApS) as well as in Norway (HCLT Norway AS) (HCL, 2018d).

To be able to provide the most efficient IT solutions to its customers, HCLT believes in a joint transformation of technology and hence is involved in an ecosystem of nearly 150 companies from different technology areas. With these companies it has formed alliances for market launches, specific partnerships for niche technologies and collaborative partnerships for specific customers. Examples of HCL's strategic alliances are Microsoft (over 15 years of cooperation), Cisco SAP, Oracle etc. (HCL, 2018b).

5.3.5. Comparison and Interpretation of the presented Cases

The analysis of the chosen Indian MNEs has revealed several insights into the procedure and motives of their FDI processes. In this context, the FSAs of the respective company compared to domestic and foreign competitors at the time of its internationalization play a crucial role. In the case of Apollo, its main FSAs were its knowledge of the Indian tire market, combined with its market standing and share, since it was India's second-largest tire manufacturer when it began its internationalization prompted by new global competition.

On the other hand, DRL profited from its quick growth and also had an advantageous position in its home market before it decided to internationalize through exports. In addition, it was able to offer low prices due to the low production costs and wages prevailing in India. Later on, another FSA emerged when the company became one of the first Indian pharmaceutical manufacturers to move from copying drugs to developing them.

Suzlon in turn had the significant advantage of being one of the first wind companies in India, and hence was not confronted with much competition when it internationalized. However, Suzlon's founding phase was simultaneously its internationalization phase, as it bought an R&D division from Europe in order to be able to pursue its business. During that phase, further FSAs emerged

as Suzlon decided to not only offer wind turbines, but provide full-service, turnkey solution, and hence came to own a fully vertically integrated value chain. Additionally, Suzlon sent Indian engineers to Europe for study and in order to bring technical expertise back to India. This procedure, in combination with the low wages in India, can be seen as another FSA of Suzlon.

HCLT, still lagging behind its competitors due to its late entry into the service sector, was in a fundamentally different position. Moreover, Indian government deregulation at the time led to competition from foreign MNEs. However, backed by HCL Corporation, HCLT did not have to build everything from scratch, but already possessed most of the resources it needed to go global, including HCL's good reputation.

Consequently, each company was more or less prepared to begin its global expansion, though for different reasons. Thus, Apollo started its internationalization process by creating a JV with a European firm in its home country before it decided to become technologically self-reliant and directly acquired operations in South Africa. Backed by new technology from this acquisition, Apollo began to enter the "far more technologically advanced" European market by first acquiring and then building new subsidiaries. Therefore, Apollo's internationalization process follows a rather progressive approach as the company internationalized gradually following the host countries' technological demands. In terms of its entry modes it has behaved rather aggressively, as it directly started with acquisitions when it first entered foreign territory.

DRL in turn behaved exactly the opposite, since its entry modes were far more incremental, with exports as a first internationalization step. Only after several years of experience in the export market, DRL started entering the foreign territory via a JV before performing its first acquisitions and greenfield investments in several countries. Regarding the country choice, an aggressive approach can be observed as it directly started exporting to developed countries and set up its first foreign subsidiary in the US.

The FDI process of Suzlon on the other hand is unusual and rather aggressive, since its business started immediately with the purchase of a European R&D division, i.e. the company went international while it was in its founding process. Afterwards, Suzlon grew by exporting its services to Europe and the US. It started to acquire companies along its value chain in Europe and formed a JV in China. Further assignments followed in Australia, South Africa and China.

HCLT's internationalization process is also rather aggressive in terms of its entry modes as well as its country choice. Although it began with JVs in India as well as in the US, it suddenly pushed

for more aggressive growth and started to acquire several companies in Europe and the US. In addition, it built up a large ecosystem and has formed several alliances in order to be omnipresent in the IT sector.

Based on these internationalization processes, different motives of the respective firms can be observed. These different motives bolster Dunning and Lundan's (2008) argument, mentioned above, that today's MNEs often pursue more than one motive concurrently. In the case of Apollo, a combination of strategic asset-seeking and market-seeking motives are in evidence. On the one hand, the cause for its internationalization was to reduce its dependence from India, although it had a good standing in the Indian market, being the second-largest tire manufacturer. This indicates a market-seeking motive. On the other hand, it intended to become technological self-reliant and thus directly sought technological assets in foreign countries, which in turn indicates strategic asset-seeking.

For DRL, the motivation is mainly market-seeking, as the company kept continuously expanding its export and acquisition portfolio. Only when it set up subsidiaries, such as in the US, in order to overcome their disadvantages within the field of drug discovery, is strategic asset-seeking present as a motive.

In turn, Suzlon's motive for FDI is clearer: the company was founded by directly acquiring a R&D division in Europe in order to be able to pursue its business despite lacking expertise. In addition, it continued acquiring companies along its value chain to expand its global portfolio and strengthen its export service. This indicates a strategic asset-seeking motive.

HCL's motive appears to be mainly market-seeking, as it was pushing for aggressive growth and was gaining new clients by acquiring several companies around the globe. Its continuously growing ecosystem of companies as well as its countless alliances are a further indication of a market-seeking motive.

In summary, market-seeking appears to be the primary motive for EMNEs to directly invest abroad. This finding is surprising, as prior to their internationalization, most of the presented MNEs appeared to possess rather weak FSAs compared to foreign competitors. Only one out of four (DRL) companies appeared to possess FSAs over foreign competitors prior to going abroad. Therefore, strategic asset-seeking could have been suspected as the companies' main motive to engage in FDI. However, the case of Suzlon—the youngest example presented here—shows that strategic asset-seeking is becoming popular in the context of FDI activities of Indian MNEs. This also confirms the research findings presented in the literature review above (e.g. Gammeltoft & Hobdari, 2017). In addition, it appears that case companies transfer the strategic assets obtained abroad to their Indian operations.

Moreover, even though the presented companies tend to possess rather weak FSAs compared to their foreign competitors, the case study suggests that Indian MNEs might exploit country-specific ownership advantages. Specifically, the cases of Suzlon and DRL showed that they took advantage of the generally low wages and production costs prevailing in India.

In terms of country- and entry mode choices, it appears that the internationalization processes of Indian MNEs generally involved a certain level of aggressiveness, as three out of four case companies directly acquired an existing company when entering the European market. This corresponds to the findings in the literature review, which indicated that entry strategies of EMNEs tend to be more radical than those of traditional MNEs, meaning high-risk, high-control entry modes, particularly acquisitions (Luo & Zhang, 2016).

6. Discussion

This thesis aimed at understanding why Indian MNEs directly invest in Europe and to what extent these investments can be explained by existing theoretical frameworks. To answer this question, complementary mixed method research was conducted, consisting of a quantitative as well as qualitative part. In the introduction, five sub-questions were subordinated to the actual research question, which will be answered in this chapter based on the findings presented in the previous analysis.

What are the patterns of Indian subsidiaries in Europe in terms of size, function, industry, and degree of ownership?

The patterns of Indian affiliates in Europe were presented in the descriptive analysis as it provided an overview of the characteristics of the European subsidiaries. It revealed that their size is mainly small (50%) and that there are only few very large companies (7.8%). Additionally, an increasing trend towards small subsidiaries is shown, which is in line with the presented literature review. Moreover, the descriptive analysis pointed out that the Indian subsidiaries mainly fulfill a service function (81.7%), which comprises sales, marketing, consulting, etc. Only 16% pursue a manufacturing and only 2.3% a R&D function. The main sectors of subsidiaries and GUOs appeared to be very similar, which suggests that Indian investors seem to stay within their sector. Last, but not least, it was shown that nearly all subsidiaries are wholly owned, which indicates a high degree of commitment on the part of Indian investors when entering Europe.

Moreover, the cluster analysis illustrated two distinct FDI groups with common characteristics in each group. The first group comprises small subsidiaries executing a service function which are wholly owned by very large GUOs with a non-aggressive investment behavior. The second group in turn consists of larger subsidiaries that are partially owned, are involved in a manufacturing or R&D function, and notably have smaller owners exhibiting aggressive investment behavior, meaning that subsidiaries of this group are often larger than their parent companies.

What host country characteristics attract Indian FDI in Europe?

To answer this sub-question, the regression analysis was used to establish which host country factors have a statistically significant effect on the number of Indian direct investments in European countries. It was found that Indian investors are mainly searching for countries with large market size, a good trade relationship with India, low R&D expenditures, high educational attainment, and stable institutions. In addition, it was shown that psychic distance does not affect the country choice for Indian investors, as the regression analysis revealed that the Indian population within a European country as a proxy for psychic distance has no significant influence on Indian investment.

Why do Indian companies invest in Europe?

To answer this sub-question, evidence from all three analyses was considered. While the descriptive analysis already provides a first impression about the motives underlying Indian direct investment in Europe, the regression analysis as well as the case study present deeper insights.

First, the descriptive analysis showed that service activities (sales, marketing, consulting etc.) is by far the most common function of the subsidiaries with 81.7% of the total European subsidiaries. Sales and marketing services stand for market exploitation activities, which themselves can be related to market-seeking motives. Consulting activities are generally associated with highly knowledge-based activities and thus strategic asset-seeking motives. However, it can be assumed that consultancies make up only a minor share of service-focused subsidiaries. In addition, 16% of subsidiaries pursue a manufacturing function. This may be related to both market-seeking and strategic asset-seeking motivations for FDI, as production might be set up in a host country either to be close to the ultimate customer or to sophisticated technology. Lastly, R&D activities, which are the most obvious function associated with strategic asset-seeking, account for only 2.3% of all Indian subsidiaries in Europe. Therefore, based on the subsidiaries' functions, market-seeking seems to be the predominant motivation for Indian FDI in Europe, with strategic asset-seeking representing a subordinate motivation.

On top of that, the cluster analysis confirms the existence of market- as well as strategic assetseeking motives. The first FDI group consists of small subsidiaries which execute service functions and are owned by large, non-aggressive GUOs. The combination of these characteristics can be interpreted as market-seeking, since large Indian companies are investing risk-aversely in small service subsidiaries mainly associated with market exploitation. On the other hand, the second FDI group comprises larger subsidiaries which execute manufacturing or R&D activities and are owned by smaller, aggressive GUOs. The fact that small Indian companies aggressively invest in R&D or manufacturing firms which are likely to be larger than themselves shows that these investors are rather willing to take risks. This indicates that the investor is likely to lack FSAs and thus is searching for strategic assets abroad.

In turn, the regression analysis presented a different picture. While market opportunities (GDP, GDP growth and imports from India) were found to be significant factors positively influencing the number of Indian direct investments in Europe, the analysis of strategic assets provided a mixed picture. In total, three host country characteristics were assessed as proxies for strategic assets, namely patent applications, R&D expenditures, and educational attainment. Patent applications showed no significant influence, suggesting that especially innovative assets are not important. The investigation of R&D expenditure draws an even worse picture regarding innovative assets. The regression model unexpectedly displayed a significant negative impact of R&D expenditures on Indian direct investment in Europe. This means that Indian investors prefer countries with a lower level of innovation. On the other hand, educational attainment positively influences Indian FDI, providing evidence that knowledge as a strategic asset is actively being pursued by Indian investors. Moreover, another motive underlying Indian investment in Europe is to escape weak institutions as investors seek stable institutional environments. Therefore, the regression analysis

exposed market-seeking as one motive, seeking stable institutions as another motive and strategic asset-seeking as a motive only in terms of knowledge-seeking but not in terms of innovation-seeking.

Finally, the case study presented a more detailed picture as the importance of individual motives was determined. Based on the four examined case companies, market-seeking and strategic asset-seeking appeared as motives underlying Indian direct investment in Europe, with market-seeking as the predominant motivation and strategic asset-seeking playing a subordinate role.

In summary, market-seeking appears to be the prevailing motive behind Indian FDI in Europe. However, the analyses showed that strategic asset-seeking can also be a motive for Indian MNEs investing in Europe, although surprisingly, R&D expenditures seem to have a negative influence on Indian FDI. In addition, escaping the home market to search for stable institutions is another motive that appeared in the analysis.

What kind of Indian companies invest in Europe?

After discussing the types of Indian subsidiaries in Europe, factors influencing their location choices as well as the motives underlying them, this sub-question focusses on the Indian investor. To further understand the ultimate owners of Indian subsidiaries in Europe, their FSAs compared to foreign competitors and their international experience prior directly investing in Europe are assessed.

Possession of FSAs over foreign competitors

In assessing what FSAs Indian investors enjoy over foreign competitors before their internationalization, the descriptive analysis gives a first indication, which is then further specified by the case study. In general, the Indian investor data presented in the descriptive analysis cannot give any direct information about the FSAs in question. This is because the investigated data includes only those Indian companies which own at least one European subsidiary and therefore had already expanded internationally. However, the cluster analysis can suggest tendencies in the data. It has been shown that the second FDI group consists of subsidiaries which are mainly of large size, execute R&D or manufacturing functions, and have small, aggressively investing GUOs (investors with >90% of foreign subsidiaries outside Asia). Based on this FDI group, one can

assume that these small investors possess no or only little FSAs over foreign competitors and therefore follow a rather aggressive strategy to obtain R&D and/or manufacturing facilities outside Asia to win competitive advantages.

Furthermore, the case study confirms this picture. It showed that only one out of four companies possessed FSAs over foreign competitors prior to going abroad. The other three companies had little to no FSAs when directly investing in foreign countries. However, the qualitative analysis also showed that Indian MNEs might be utilizing country-specific ownership advantages, as they exploit India's low production costs and wage levels to be able to compete internationally.

In sum, it can thus be captured that a considerable amount of Indian companies directly investing in Europe are likely to possess little to no FSAs over foreign competitors when internationalizing.

International Experience

When assessing the international experience of MNEs, two different dimensions should be examined. First, the targeted locations for international expansion as well as their order, and second, the choice of entry modes.

The first dimension can be assessed by all the analyses performed above. The descriptive analysis examined the location choice of Indian MNEs by differentiating so-called aggressive and non-aggressive investors. It showed that the share of FDIs conducted by an aggressive investor increased over time and has exceeded the share of projects realized by non-aggressive investors since 2012. This means that Indian investors that focus their foreign subsidiaries outside Asia always played an important role and have predominated in recent years. Thus, psychic distance does not seem to be an important factor for most Indian investors when choosing their FDI location in Europe. In addition, the regression analysis showed that Indian population as a proxy for liability of foreignness has no significant influence on the location choice. The case study further confirms these findings as three out of four MNEs directly invested in developed regions (Europe and US) without gaining experience in other emerging countries. Only one firm began its internationalization process in Africa before entering the more technically challenging European market. Therefore, psychic distance has little to no influence on the location choice of Indian direct investment in Europe.

The second dimension can be assessed only via qualitative analysis within this thesis. The case study showed that Indian MNEs investing in Europe tend to select aggressive entry modes, as three out of four entered Europe by acquiring companies and only one firm exported its products before directly investing.

In summary, we find that in terms of both international experience in a country and entry mode level, Indian MNEs are willing to take risks by directly entering distant countries with highly committing entry modes.

To what extent can existing theoretical frameworks explain Indian direct investment in Europe?

Based on the combination of the theoretical frameworks introduced in Chapter 2 and the answers of the four previous sub-questions, the fifth and last subordinate question is answered. Therefore, each of the seven presented theories and their extensions are assessed individually to ultimately reach a final conclusion for this question.

The first theory in question is the internalization theory. This theory states that companies invest abroad if the benefits of exploiting FSAs outweigh the relative costs of the operation abroad. Therefore, the theory sees the possession of FSAs as a requirement, and as it focuses on the exploitation of these advantages, it suggests market-seeking behavior as the main motivation for FDI. The present thesis found that the main motivation underlying Indian direct investment in Europe is indeed market-seeking, which therefore fits the logic of the internalization theory. However, the thesis also showed that there is a considerable amount of Indian FDI originating from investors who possess little or no FSAs. Thus, the internalization theory in its presented form fails to fully explain the presented data.

The second theory, the Uppsala model, argues that firms invest abroad based on gradual learning and the development of market knowledge. The process of internationalization is seen as a progressive establishment chain of entry modes and market selection based on the liability of foreignness. As the fourth sub-question showed that Indian MNEs do not follow any incremental steps concerning entry modes or market selection, the Uppsala model also does not fit as a theoretical explanation of the presented data. Moreover, the revised Uppsala model from 2009 also does not fit to describe the given data. In this extension, the liability of foreignness was replaced by the liability of outsidership, meaning that being part of a network is much more important than entering countries with a low psychic distance. However, the model still presents the process of internationalization as a progressive establishment chain of entry modes, which contradicts the above findings.

The third presented theory is the eclectic paradigm, also known as the OLI model. The paradigm considers three different aspects which need to be fulfilled to justify FDI, namely ownership-specific advantages (O), location-specific advantages (L), and internalization advantages (I). While L advantages were not analyzed in this thesis, O and I advantages refer to the beneficial internal exploitation of FSAs. Thus, like the internalization theory, the OLI requires companies to possess FSAs and suggests market-seeking as the main motive underlying FDI. Comparing these aspects to the presented data, it becomes apparent that the original OLI paradigm is not applicable, as it appears that many Indian companies invest in Europe without possessing ownership-specific advantages.

Nevertheless, the OLI paradigm was revised in 2008 to fit the internationalization of EMNEs. The revised version acknowledged that many EMNEs do not own FSAs, but rather exploit so-called country-specific ownership advantages. The case study offered some indications in this direction, as Indian companies seem to leverage low home country production costs and wage levels. However, since these country-specific O advantages were not intended to be a part of the analysis, no comprehensive conclusions on the applicability of the extended OLI can be drawn.

The fourth introduced theory, which is the last conventional theory presented, is the RBV. In this view, successful companies are built solely upon competitive resources and capabilities. Companies thus internationalize if they are better at transferring resources across borders than others. Again, the theory sees FSAs as a general requirement for FDI. Like other conventional theories, it is therefore unable to fully explain the presented data. This finding confirms the common view in the IB literature that the traditional RBV model needs to be adjusted to fit EMNEs, as EMNEs seem to often develop capabilities and internationalize in a co-evolutionary manner.

The fifth theory in question, the LLL framework, is the first presented model of the newly developed theories. In contrast to the previously assessed frameworks, this theory argues that EMNEs often do not possess FSAs, but rather internationalize to obtain these and thereby

overcome their latecomer disadvantages. The framework further suggests that EMNEs obtain FSAs by forming various external partnerships and networks with western MNEs. Comparing these statements with the presented data, it becomes apparent that while the theory does not conflict with the above data by positing preexisting FSAs, the applicability of the theory cannot be fully assessed, as this thesis did not include the role of partnerships in the analysis.

The sixth theory, the springboard perspective, is also a newly developed theory. It states that EMNEs use FDI as a springboard to overcome latecomer disadvantages. It argues that MNEs from emerging markets are often in possession of few or no FSAs, suffer from weak home country institutions, and aim to grow rapidly in order to be able to compete with superior DMNEs. Thus, the perspective sees different motives underlying FDI, with strategic asset-seeking being the predominant motivation, and market-seeking and the search for stable institutions as subordinate drivers. Moreover, the model argues that EMNEs acquire FSAs in developed countries to eventually transfer these to their home countries. Their ultimate goal is to be innovative by themselves. The springboard perspective therefore explains the presented data to a high degree, as nearly all aspects apply. The only mismatch is the fact that the given analyses identified market-seeking rather than strategic asset-seeking as the predominant motive for Indian FDI.

The last theory in question is the institutional arbitrage logic. It comprises two different perspectives, as it argues that EMNEs enter foreign markets either to escape the weak institutional environment of the home country (exit view) or to exploit their knowledge gained by dealing with these weak institutions (exploitation view). As Europe is generally associated with stable institutions, the exploitation view is unsuitable for the question of Indian FDI in Europe. On the other hand, the exit view cannot be fully supported, as the findings showed that seeking stable institutions is only a subordinate motive for Indian direct investment in Europe. Moreover, the authors agree with the presented literature's critical view towards the institutional arbitrage logic, as in the light of the empirical study, the internationalization of EMNEs is revealed as a complex process which cannot be described by institutions alone. Thus, this thesis further argues that institutional arbitrage logic cannot be considered as an entire theoretical framework.

Consequently, the springboard perspective is the only theory which is able to adequately explain the given dataset to any significant degree. Moreover, the extended OLI paradigm as well as the LLL framework call for further research regarding the role of country-specific ownership advantages and existing partnerships before a final conclusion on their applicability can be made. Lastly, the internalization theory, the Uppsala model and its revised version, the original OLI paradigm, the RBV, and institutional arbitrage logic are not applicable to the presented data.

7. Conclusion, Limitations and future Research

This chapter will summarize the findings to each sub-question in order to ultimately answer the research question. Afterwards, limitations of the thesis are presented, based on which further research aims are suggested.

7.1. Conclusion

The emergence of EMNEs has become an often-discussed topic within the IB literature. Especially the desire to understand why and how these MNEs expand across domestic borders has stimulated a discussion yielding three different opinions on EMNEs' compatibility with existing theoretical concepts. Scholars disagree over whether conventional theoretical frameworks are sufficient to explain FDI from EMNEs in developed regions. This thesis therefore aimed at understanding Indian FDI in Europe at a company level as an example of the internationalization of EMNEs, thus assessing the applicability of conventional and newly developed theories to the presented data.

To answer the research question, several sub-questions were established, which were answered by conducting and interpreting three different analyses: a descriptive analysis, a regression analysis and a case study.

First, the patterns of Indian subsidiaries in Europe were assessed, showing that most subsidiaries are of small size (50%) and exercise a service function (80%). Moreover, nearly 100% of the subsidiaries are wholly owned by their Indian investors, reflecting a high commitment on the part of those investors. Furthermore, approximately 70% of the subsidiaries belong to very large investors. Based on the descriptive exploration, two groups of FDI could be identified by a cluster analysis. Although the findings can show only an approximate picture, they still offer a useful overview. Results showed that very large investors who follow a rather risk-averse market selection (represented by more than 10% of their foreign subsidiaries' being located within Asia) possess small subsidiaries, which are wholly owned and execute a service function. On the other hand, the second FDI group is composed of the opposite profile: smaller investors with rather

aggressive internationalization behavior (>90% of foreign subsidiaries outside Asia) partly own larger subsidiaries which perform manufacturing or R&D functions.

The investigation of the second sub-question, asking which host country factors attract Indian FDI in Europe, showed that Indian investors tend to prefer countries with large market size, a good trade relationship with India, low R&D expenditures, high educational attainment, and a stable institutional environment. Moreover, the regression analysis revealed that psychic distance, measured by the size of the Indian community within the host country, has no significant influence on Indian direct investment in Europe.

The analysis of the third sub-question, asking which motivation underlies Indian direct investment in Europe, revealed that Indian companies mainly invest in Europe to pursue market-seeking motives. In addition, strategic asset-seeking and escaping weak and unstable institutions appear to be secondary reasons underlying Indian direct investment in Europe. However, due to their low occurrence these motivations are rather subordinate.

The fourth sub-question asked what kind of Indian companies invest in Europe. To connect this question with the relevant theories, the authors were mainly interested in existing FSAs of these companies as well as their international experience prior to their internationalization. The results show that while there are Indian companies that possess FSAs over their foreign competitors, a considerable number of the companies entering Europe do not enjoy marked competitive advantages over foreign firms. Moreover, Indian enterprises are rather willing to take risks during their internationalization as most of them choose highly committing entry modes such as acquisitions instead of exports when entering new countries and are not influenced by psychic distance in their location choice.

The last sub-question assessed to what extent existing theoretical frameworks can explain Indian direct investment in Europe by examining seven different theories and their extensions. The analysis showed that most conventional theories in their original form, namely the internalization theory, the OLI paradigm, and the RBV, are not suited to explain the presented data since they all see the possession of FSAs over foreign competitors as a requirement for going global. However, the analysis revealed that the extended OLI paradigm from 2008 may be applicable, as it acknowledges that EMNEs often do not possess FSAs, but rather exploit country-specific ownership advantages. A full evaluation of the compatibility of this extension with EMNEs, however, requires more in-depth research on country-specific ownership advantages. In addition,

the fourth conventional theory in question, the internationalization process theory (Uppsala model), cannot be applied to the given data either, as Indian companies clearly do not follow incremental steps in terms of entry modes or market selection.

Moreover, two of the newly develop theories, namely the LLL framework and institutional arbitrage logic, could not be verified by the analysis. The two theories state that the main reasons for EMNEs to go global are strategic asset-seeking and a search for stable institutions, respectively, neither of which could be satisfactorily confirmed as the main motive in the presented case. In addition, the LLL model is largely based on networks, which were not included in the analysis. Thus, no exact conclusions on the applicability of the LLL framework can be drawn.

Nonetheless, the analysis showed that the springboard perspective offers a theory which is able to explain Indian direct investment in Europe to a high degree, as nearly all aspects of the framework apply. The only mismatch is the fact that this thesis identified market-seeking as the predominant motive for Indian FDI in Europe, whereas the springboard perspective sees strategic asset-seeking as EMNEs' most important motivation.

In summary, the research question "Why do Indian multinational enterprises directly invest in European countries and to what extent are existing theoretical frameworks applicable in the light of the empirical analysis?" can be answered as follows: Indian MNEs invest in Europe primarily for market-seeking reasons. On a subordinate level, they also pursue strategic assets and stable institutions. Existing theoretical frameworks largely fail to explain their behavior, with the notable exception of the springboard perspective, of which nearly every aspect turned out to be applicable to the given dataset.

7.2. Limitations

When reflecting on the present thesis, there are a number of limitations which need to be considered. First of all, the thesis relied entirely on secondary data. The qualitative analysis especially could have gained greater depth and validity if primary data, for instance through interviews, could have been taken into account. However, even though only secondary data was used, and two quantitative analyses were conducted, it is still critical to generalize the findings as the rather subjective case study influences most final results.

Moreover, the thesis did not present an in-depth analysis of any specific theory, but rather broadly assessed whether theoretical frameworks are applicable in the case of Indian direct investment in Europe. The same applies for the industry sectors under consideration, as an overall picture was prioritized over a focus on one industry. In addition, all currently existing Indian subsidiaries were taken into account for the analysis, independent of their success. Thus, the performance of the subsidiaries was not part of the analysis.

In addition, the regression analysis was limited to those independent variables which could be represented by available data. Some host country factors, such as the presence of industry or innovation clusters, could have been of interest, but could not be displayed because of the lack of relevant data.

Lastly, the thesis was not able to fully assess the applicability of the extended OLI paradigm from 2008 or of the LLL framework, as additional research in the field of country-specific ownership advantages and the role of partnerships within the internationalization process of EMNEs would have been beyond the scope of what was possible here.

7.3. Future Research

While this thesis provides detailed insights into Indian direct investment activities in Europe, a number of questions remain unanswered. First, future research should aim to provide more generalizable results by conducting for instance studies solely based on quantitative data or studies based on a much higher number of case companies. Moreover, also primary qualitative data can provide more detailed insights, specifically about the motivation underlying Indian direct investment in Europe or FDI from EMNEs in general.

In addition, future research is needed to fully assess the applicability of the extended OLI paradigm and the LLL-framework. In this context, it is especially important to assess the country-specific ownership advantages that might be possessed by Indian companies and might influence their internationalization process as well as research the role of networks and their impact on the internationalization of EMNEs.

8. List of References

- Agarwal, S. (2017). HCL acquires UK-based data management platform Datawave. Retrieved May 2, 2018, from https://economictimes.indiatimes.com/tech/ites/hcl-acquires-uk-baseddata-management-platform-datawave/articleshow/60381911.cms
- Amighini, A., Cozza, C., Giuliani, E., Rabellotti, R., & Scalera, V. G. (2015). Multinational enterprises from emerging economies: what theories suggest, what evidence shows. A literature review. *Economia e Politica Industriale*, 42(3), 343–370. http://doi.org/10.1007/s40812-015-0011-8
- ApolloTyres. (2015). Construction of Apollo Tyres' Greenfield facility in Hungary begins. Retrieved May 2, 2018, from https://corporate.apollotyres.com/en-in/pressmedia/news/construction-of-apollo-tyres-greenfield-facility-in-hungary-begins/

ApolloTyres. (2017a). Apollo Tyres Limited: Annual Report 2016-2017.

- ApolloTyres. (2017b). Apollo Tyres starts OE supplies in Europe. Retrieved May 2, 2018, from https://corporate.apollotyres.com/press-media/news/apollo-tyres-starts-oe-supplies-in-europe/?subsection=Announcements
- ApolloTyres. (2018a). Apollo Tyres Overview. Retrieved May 2, 2018, from https://corporate.apollotyres.com/about-us/overview/
- ApolloTyres. (2018b). Apollo Tyres Office Locations. Retrieved May 2, 2018, from https://corporate.apollotyres.com/about-us/our-locations/
- Aulakh, P. S. (2007). Emerging multinationals from developing economies: Motivations, paths and performance. *Journal of International Management*, 13(3), 235–240. http://doi.org/10.1016/j.intman.2007.05.001
- Aulakh, P. S., & Kotabe, M. (2008). Institutional changes and organizational transformation in developing economies. *Journal of International Management*, 14(3), 209–216. http://doi.org/10.1016/j.intman.2008.04.001
- Backhaus, K. (2008). *Multivariate Analysemethoden : Eine Anwendungsorientierte Einführung* (12. Aufl.). Berlin: Springer.
- Bangara, A., Freeman, S., & Schroder, W. (2012). Legitimacy and accelerated internationalisation: An Indian perspective. *Journal of World Business*, *47*(4), 623–634.
- Barclay, L. A. A. (2002). The motivations for foreign direct investment. In *Foreign direct investment in emerging economies: Corporate strategy and investment behaviour in the Caribbean* (pp. 18–28). Routledge.

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.
- Barton-Sweeney, A., Elias, J., Bagley, C. E., & Rae, D. W. Suzlon An Indian Wind Energy Company Goes Global (2008).
- Behrman, J. N. (1972). The role of international companies in Latin American Integration. *The International Executive*, *14*(3), 18–20.
- Bhasin, N., & Jain, V. (2015). Outward FDI from India : An Examination into the Role of Host Country Factors. *Transnational Corporations Review*, 7(3), 316–334.
- Blaikie, N. (2007). *Approaches to social enquiry : advancing knowledge* (2. ed., re). Cambridge: Polity Press.
- Blumberg, B., Cooper, D. R., & Schindler, P. S. (2011). Business research methods. Berkshire: McGraw-Hill. Berkshire: McGraw-Hill.
- Boisot, M., & Meyer, M. W. (2008). Which way through the open door? Reflections on the internationalization of Chinese firms. *Management and Organization Review*, 4(3), 349–365.
- Bonaglia, F., Goldstein, A., & Mathews, J. A. (2007). Accelerated internationalization by emerging markets' multinationals: The case of the white goods sector. *Journal of World Business*, 42(4), 369–383. http://doi.org/10.1016/j.jwb.2007.06.001
- Brennan, L., & Bakir, C. (2016). Emerging Market Multinationals in Europe (Vol. 28). Routledge.
- Buckley, P. J. (1989). New theories of international business: Some unresolved issues. In *The Multinational Enterprise* (pp. 3–23). Springer.
- Buckley, P. J., & Casson, M. (1976). *The future of the multinational enterprise*. London: Macmillan.
- Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38(4), 499–518. http://doi.org/10.1057/palgrave.jibs.8400277
- Buckley, P. J., & Tian, X. (2017). Internalization theory and the performance of emerging-market multinational enterprises. *International Business Review*, 26(5), 976–990. http://doi.org/10.1016/j.ibusrev.2017.03.005
- BvD. (2018a). Company Size Categories.
- BvD.(2018b).UltimateOwner.Retrievedfromhttps://help.bvdinfo.com/mergedProjects/WHDOTNETOWNERSHIP_EN/Home.htm
- BvD. (2018c). Zephyr. Retrieved April 21, 2018, from https://www.bvdinfo.com/en-gb/our-

products/data/specialist/zephyr

- Cameron, A. C., & Trivedi, P. K. (2013). *Regression Analysis of Count Data* (2nd ed.). New York, N.Y.: Cambridge University Press. Retrieved from http://assets.cambridge.org/97811070/14169/cover/9781107014169.jpg
- Cantwell, J., & Narula, R. (2001). The eclectic paradigm in the global economy. *International Journal of the Economics of Business*, 8(2), 155–172.
- Casson, M., & Buckley, P. J. (1983). *The growth of international business*. London: George Allen & Unwin.
- Chari, M. D. R. (2013). Business groups and foreign direct investments by developing country firms: An empirical test in India. *Journal of World Business*, 48(3), 349–359. http://doi.org/10.1016/j.jwb.2012.07.019
- CIS. (2018). Commonwealth of Independent States. Retrieved April 17, 2018, from http://www.cisstat.com/eng/cis.htm
- Coase, R. H. (1937). The Nature of the Firm. *Economica*.
- Cohen, M. L. (2004). Dr. Reddy's Laboratories Ltd. In J. P. Pederson & M. H. Ferrara (Eds.), *International Directory of Company Histories* (59th ed., pp. 166–169). St. James Press.
- Cohen, M. L. (2017). Apollo Tyres Ltd. International Directory of Company Histories, 197, 27– 30. Retrieved from http://go.galegroup.com.escweb.lib.cbs.dk/ps/retrieve.do?tabID=T003&resultListType=RESULT_LIST&searchResults Type=SingleTab&searchType=AdvancedSearchForm¤tPosition=1&docId=GALE% 7CCX3657300015&docType=Topic+overview&sort=RELEVANCE&contentSegment=&p rodId=GVRL&contentSet=GALE%7CCX3657300015&searchId=R1&userGroupName=cb s&inPS=true
- Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research.
- Cuervo-Cazurra, A. (2012). Extending theory by analyzing developing country multinational companies: Solving the Goldilocks debate. *Global Strategy Journal*, 2(3), 153–167. http://doi.org/10.1111/j.2042-5805.2012.01039.x
- Cuervo-Cazurra, A., & Genc, M. (2008). Transforming disadvantages into advantages: developing-country MNEs in the least developed countries. *Journal of International Business Studies*, 39(6), 957–979. http://doi.org/10.1057/palgrave.jibs.8400390
- Cuervo-Cazurra, A. (2003). Transforming the Firm through the Co-evolution of Resources and Scope. *Strategy Process: Shaping the Contours of the Field*, 17–43.

- Da Rocha, A., Cotta de Mello, R., Pacheco, H., & De Abreu Farias, I. (2012). The international commitment of late-internationalizing Brazilian entrepreneurial firms. *International Marketing Review*, 29(3), 228–252.
- Dacin, M. T., Goodstein, J., & Scott, W. R. (2002). Institutional Theory and Institutional Change : Introduction to the Special Research Forum. *Academy of Management Journal*, 45(1), 45– 56. http://doi.org/10.2307/3069328
- Dallal, G. E. (2009). The little handbook of statistical practice, 2007.
- Definition of the Ultimate Owner. (2018). Retrieved from https://help.bvdinfo.com/mergedProjects/WHDOTNETOWNERSHIP_EN/Home.htm
- Deng, P. (2009). Why do Chinese firms tend to acquire strategic assets in international expansion? *Journal of World Business*, 44(1), 74–84. http://doi.org/10.1016/J.JWB.2008.03.014
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, *35*(12), 1504–1511.
- Dillon, W. R., & Goldstein, M. (1984). Multivariate analysismethods and applications.
- Dr. Reddy's Laboratories. (2002). Annual Report 2001-2002. Hyderabad.
- Dr. Reddy's Laboratories. (2016). Annual Report 2015-2016. Hyderabad.
- Dunning, J. H. (1981). International production and the multinational enterprise. London: Allen & Unwin.
- Dunning, J. H. (1988). Explaining international production. London: Unwin Hyman.
- Dunning, J. H. (1994). {R}e-evaluating the {B}enefits of {F}oreign {D}irect {I}nvestment. *Transnational Corporations*, 3(1), 23–52. http://doi.org/doi:10.4324/9780203016527.pt3
- Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: Past, present and future. *International Business and the Eclectic Paradigm: Developing the OLI Framework*, 8(2), 21–39. http://doi.org/10.4324/9780203576427
- Dunning, J. H. (2006). Comment on Dragon multinationals: New players in 21 st century globalization. *Asia Pacific Journal of Management*, 23(2), 139–141.
- Dunning, J. H., Kim, C., & Park, D. (2008). Old wine in new bottles: A comparison of emergingmarket TNCs today and developed-country TNCs thirty years ago. *The Rise of Transnational Corporations from Emerging Markets: Threat or Opportunity*, 158–180.
- Dunning, J. H., & Lundan, S. M. (2008a). Institutions and the OLI paradigm of the multinational enterprise. Asia Pacific Journal of Management, 25(4), 573–593. http://doi.org/10.1007/s10490-007-9074-z

- Dunning, J. H., & Lundan, S. M. (2008b). *Multinational enterprises and the global economy*. Edward Elgar Publishing.
- Dunning, J. H., & Narula, R. (1996). The investment development path revisited. *Foreign Direct Investment and Governments: Catalysts for Economic Restructuring*, 1–41.
- Easterby-Smith, M., Thorpe, R., & Jackson, P. (2012). *Management Research* (4th ed.). London: Sage publications ltd.
- EFTA. (2018). The EFTA States. Retrieved May 1, 2018, from http://www.efta.int/about-efta/theefta-states
- Eggenberger, F., & Pólya, G. (1923). Über die statistik verketteter vorgänge. ZAMM-Journal of Applied Mathematics and Mechanics/Zeitschrift Für Angewandte Mathematik Und Mechanik, 3(4), 279–289.
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, *50*(1), 25–32.
- Eurostat. (2018). Glossary: EU enlargements. Retrieved May 1, 2018, from http://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:EU_enlargements
- Evaluate. (2002, March 12). Dr Reddy\'s Signs Definitive Agreement To Acquire BMS Laboratories And Meridian Healthcare UK. Retrieved from http://www.evaluategroup.com/Universal/View.aspx?type=Story&id=29657
- Fabian, F., Molina, H., & Labianca, G. (2009). Understanding Decisions to Internationalize by Small and Medium-sized Firms Located in an Emerging Market. *Management International Review*, 49(5), 537. http://doi.org/10.1007/s11575-009-0007-6
- FDA. (2017). Generic Drugs Generic Drug Facts. Retrieved April 17, 2018, from https://www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/Ge nericDrugs/ucm167991.htm
- Finch, H. (2005). Comparison of Distance Measures in Cluster Analysis with Dichotomous Data. Journal of Data Science, 3, 85–100. http://doi.org/10.1111/j.1469-7793.1998.677bd.x
- Gammeltoft, P. (2008). Emerging multinationals: outward FDI from the BRICS countries. *International Journal of Technology and Globalisation*, 4(1), 5. http://doi.org/10.1504/IJTG.2008.016184
- Gammeltoft, P., & Fasshauer, K. (2017). Characteristics and host country drivers of Chinese FDI in Europe: a company-level analysis. *International Journal of Technology Management*, 74(1/2/3/4), 140. http://doi.org/10.1504/IJTM.2017.083605

- Gammeltoft, P., & Hobdari, B. (2017). Emerging market multinationals, international knowledge flows and innovation. *International Journal of Technology Management*, 74(1/2/3/4), 1. http://doi.org/10.1504/IJTM.2017.083619
- Gaur, A., & Kumar, V. (2015). The Past, Present and Future of International Business & Management Internationalization of emerging market firms: a case for theoretical extension. Advances in International Management (Vol. 23). Elsevier. http://doi.org/10.1108/S1571-5027(2010)00000230031
- Gelli, N., & Tummalapalli, C. Aurigene Discovery Technologies, London Business School 1–19 (2003).
- Gloria, L. G., & Ding, D. Z. (2008). A strategic analysis of surging Chinese manufacturers: The case of Galanz. *Asia Pacific Journal of Management*, 25(4), 667–683.
- Greener, S. (2008). *Business Research Methods*. Ventus Publishing ApS. http://doi.org/9781285401188
- Greenwood, M., & Yule, G. U. (1920). An inquiry into the nature of frequency distributions representative of multiple happenings with particular reference to the occurrence of multiple attacks of disease or of repeated accidents. *Journal of the Royal Statistical Society*, 83(2), 255–279.
- GS. (2018). Joint-Venture Definition | Gründerszene. Retrieved April 13, 2018, from https://www.gruenderszene.de/lexikon/begriffe/joint-venture
- Guillén, M. F. (2002). Structural inertia, imitation, and foreign expansion: South Korean firms and business groups in China, 1987–1995. *Academy of Management Journal*, 45(3), 509–525.
- Hakim, C. (2000). Research design: Successful designs for economic and social research. NY: Routledge.
- Hands, S., & Everitt, B. (1987). A Monte Carlo study of the recovery of cluster structure in binary data by hierarchical clustering techniques. *Multivariate Behavioral Research*, 22(2), 235– 243.
- Hattari, R., & Rajan, R. S. (2010). India as a source of outward foreign direct investment. *Oxford Development Studies*, *38*(4), 497–518. http://doi.org/10.1080/13600818.2010.524695
- Hay, F., & Milelli, C. (2010). Chinese FDI in Europe: Analysis from individual company data. In 2nd Copenhagen Conference" Emerging Multinationals".
- HBL. (2017). Michelin picks up 14.9% stake in Apollo Tyres Ties up to set up joint venture.RetrievedMay2,2018,from

https://www.thehindubusinessline.com/2003/11/18/stories/2003111803090100.htm

- HBS. (2018). Orbis. Retrieved April 21, 2018, from https://www.library.hbs.edu/Find/Databases/Orbis
- HCL. (2005a). HCL acquires AnswerCall Direct Contact Centre in Northern Ireland.
- HCL. (2005b). HCL Technologies Limited: Annual Report 2004-2005.
- HCL. (2016). HCL Enterprise Overview. Retrieved May 2, 2018, from http://www.hcl.com/sites/default/files/company_presentation.pdf
- HCL. (2017). HCL to acquire Mortgage BPO Provider Urban Fulfillment Services, LLC. Retrieved May 2, 2018, from https://www.hcltech.com/press-releases/business-processservices/hcl-acquire-mortgage-bpo-provider-urban-fulfillment
- HCL. (2018a). About HCL Technologies. Retrieved May 2, 2018, from https://www.hcltech.com/de/node/205039
- HCL. (2018b). Global Alliances and Partnerships | HCL Technologies. Retrieved May 2, 2018, from https://www.hcltech.com/about-us/alliances
- HCL. (2018c). HCL Technologies: Fast Facts. Retrieved May 2, 2018, from https://www.hcltech.com/investors/fast-facts
- HCL. (2018d). HCL Technologies: Overview. Retrieved May 2, 2018, from https://www.hcltech.com/geo-presence/denmark
- Herzer, D. (2011). The long-run effect of outward FDI on domestic output in developing countries.AppliedEconomicsLetters,18(14),1355–1358.http://doi.org/10.1080/13504851.2010.537620
- Hill, L. A., Khanna, T., & Stecker, E. A. HCL Technologies (A), Harvard Business School Case 1–19 (2008).
- Hoskisson, R. E., Tihanyi, L., White, R. E., & Kim, H. (2004). A FRAMEWORK FOR UNDERSTANDING INTERNATIONAL DIVERSIFICATION BY BUSINESS GROUPS FROM EMERGING ECONOMIES. In *"Theories of the Multinational Enterprise: Diversity, Complexity and Relevance"* (Vol. 16, pp. 137–163). Emerald Group Publishing Limited. http://doi.org/doi:10.1016/S0747-7929(04)16008-3
- Hymer, S. (1968). La grande « corporation » multinationale. *Revue Économique*, *19*(6), 949–973. http://doi.org/https://doi.org/10.3406/reco.1968.407842
- Hymer, S. H., & Technology, M. I. of. (1976). *The international operations of national firms : a study of direct foreign investment*. Cambridge, Mass: MIT Press.

- International Monetary Fund. (2003). *Foreign Direct Investment Trends and Statistics*. Washington. Retrieved from https://www.imf.org/external/np/sta/fdi/eng/2003/102803.htm
- Jindra, B., Hassan, S. S., & Cantner, U. (2016). What does location choice reveal about knowledge-seeking strategies of emerging market multinationals in the EU? *International Business Review*, 25(1), 204–220. http://doi.org/10.1016/j.ibusrev.2014.11.008
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Johanson, J., & Vahlne, J.-E. (1990). The mechanism of internationalization. *International Marketing Review*, 7(4), 11–24.
- Johanson, J., & Vahlne, J.-E. (2003a). Building a model of firm internationalization In: Blomstermo. *A.*, & *Deo*.
- Johanson, J., & Vahlne, J.-E. (2003b). Business relationship learning and commitment in the internationalization process. *Journal of International Entrepreneurship*, *1*(1), 83–101.
- Johanson, J., & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411–1431.
- Jormanainen, I., & Koveshnikov, A. (2012). International activities of emerging market firms. *Management International Review*, 52(5), 691–725.
- Kalotay, K., & Sulstarova, A. (2010). Modelling Russian outward FDI. Journal of International Management, 16(2), 131–142. http://doi.org/10.1016/J.INTMAN.2010.03.004
- Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business*, 47(1), 45–53. http://doi.org/10.1016/J.JWB.2010.10.019
- Kimura, Y., & Lee, H. K. (1998). Korean direct investment in manufacturing: Its patterns and determinants—an empirical analysis. *Journal of International Management*, 4(2), 109–127.
- Kittilaksanawong, W., & Dai, W. (2015). Globalization of Latecomer Asian Multinationals and Theory of Multinational Enterprise. In B. Christiansen (Ed.), *Handbook of Research on Global Business Opportunities* (pp. 103–130). Hershey. http://doi.org/10.4018/978-1-4666-6551-4.ch005
- Kogut, B., & Zander, U. (1993). Knowledge of the firm and the evolutionary theory of the multinational corporation. *Journal of International Business Studies*, 24(4), 625–645.

- Kolstad, I., & Wiig, A. (2012). What determines Chinese outward FDI? Journal of World Business, 47(1), 26–34.
- Kotabe, M., & Kothari, T. (2016). Emerging market multinational companies' evolutionary paths to building a competitive advantage from emerging markets to developed countries. *Journal* of World Business, 51(5), 729–743. http://doi.org/10.1016/j.jwb.2016.07.010
- Kumar, N. (1998). Emerging outward foreign direct investment from Asian developing countries: prospects and implications. *Globalization, Foreign Direct Investment and Technology Transfers*, 177–194.
- Kumar, N. (2007). Emerging TNCs: trends, patterns and determinants of outward FDI by Indian enterprises. *Transnational Corporations*, 16(1), 1–26. http://doi.org/10.1142/9789812793119_0006
- Kumar, N. (2008). Internationalization of Indian enterprises: Patterns, strategies, ownership advantages, and implications. *Asian Economic Policy Review*, 3(2), 242–261. http://doi.org/10.1111/j.1748-3131.2008.00109.x
- Kumaraswamy, A., Mudambi, R., Saranga, H., & Tripathy, A. (2012). Catch-up strategies in the Indian auto components industry: Domestic firms' responses to market liberalization. *Journal* of International Business Studies, 43(4), 368–395.
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality & Quantity*, 43(2), 265–275.
- Li, J., & Yao, F. K. (2010). The role of reference groups in international investment decisions by firms from emerging economies. *Journal of International Management*, *16*(2), 143–153.
- Li, P. P. (2003). Toward a geocentric theory of multinational evolution: The implications from the Asian MNEs as latecomers. *Asia Pacific Journal of Management*, 20(2), 217–242.
- Li, W., Guo, B., & Xu, G. (2017). How do linking, leveraging and learning capabilities influence the entry mode choice for multinational firms from emerging markets? *Baltic Journal of Management*, 12(2), 171–193. http://doi.org/10.1108/BJM-10-2016-0218
- Livemint. (2008). HCL completes acquisition of UK's Axon. Retrieved May 2, 2018, from https://www.livemint.com/Companies/CkXYm8CnfTVl7lPXGCtF6O/HCL-completes-acquisition-of-UK8217s-Axon.html
- Lu, J., Ma, X., Taksa, L., & Wang, Y. (2017). From LLL to IOL 3 : Moving dragon multinationals research forward. *Asia Pacific Journal of Management*, *34*(4), 757–768.
- Luo, Y., & Rui, H. (2009). An ambidexterity perspective toward multinational enterprises from

emerging economies. The Academy of Management Perspectives, 23(4), 49-70.

- Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, *38*(4), 481–498.
- Luo, Y., & Tung, R. L. (2018). A general theory of springboard MNEs. Journal of International Business Studies, 49(2), 129–152. http://doi.org/10.1057/s41267-017-0114-8
- Luo, Y., & Wang, S. L. (2012). Foreign direct investment strategies by developing country multinationals: A diagnostic model for home country effects. *Global Strategy Journal*, 2(3), 244–261. http://doi.org/10.1111/j.2042-5805.2012.01036.x
- Luo, Y., Xue, Q., & Han, B. (2010). How emerging market governments promote outward FDI: Experience from China. *Journal of World Business*, 45(1), 68–79. http://doi.org/10.1016/J.JWB.2009.04.003
- Luo, Y., & Zhang, H. (2016). Emerging Market MNEs: Qualitative Review and Theoretical Directions. *Journal of International Management*, 22(4), 333–350. http://doi.org/10.1016/j.intman.2016.05.001
- Makino, S., Lau, C.-M., & Yeh, R.-S. (2002). Asset-Exploitation Versus Asset-Seeking: Implications for Location Choice of Foreign Direct Investment from Newly Industrialized Economies. *Journal of International Business Studies*, 33(3), 403–421. http://doi.org/10.1057/palgrave.jibs.8491024
- Makoni, P. L. (2015). An extensive exploration of theories of foreign direct investment. *Risk Governance & Control: Financial Markets & Institutions*, 5(2), 77–83. http://doi.org/10.22495/rgcv5i2c1art1
- Malerba, F., Mani, S., & Adams, P. (2017). The Rise to Market Leadership New Leading FirmsfromEmergingCountries.Cheltenham,UK.http://doi.org/https://doi.org/10.4337/9781783476794
- Mathews, J. A. (2002). Competitive advantages of the latecomer firm: A resource-based account of industrial catch-up strategies. *Asia Pacific Journal of Management*, *19*(4), 467–488.
- Mathews, J. A. (2003). Competitive dynamics and economic learning: an extended resource-based view. *Industrial and Corporate Change*, *12*(1), 115–145.
- Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23(1), 5–27. http://doi.org/10.1007/s10490-006-6113-0
- Meyer, K. E., & Thaijongrak, O. (2013). The dynamics of emerging economy MNEs: How the internationalization process model can guide future research. *Asia Pacific Journal of*

Management, 30(4), 1125–1153. http://doi.org/10.1007/s10490-012-9313-9

- Michailova, S., & Ang, S. H. (2008). Institutional explanations of cross-border alliance modes: The case of emerging economies firms. *Management International Review*, 48(5), 551–576.
- Moosa, I. A. (2015). Theories of Foreign Direct Investment: Diversity and Implications for Empirical Testing. *Transnational Corporations Review*, 7(3), 297–315. http://doi.org/10.5148/tncr.2015.7304
- Morck, R., Yeung, B., & Zhao, M. (2008). Perspectives on China's outward foreign direct investment. *Journal of International Business Studies*, 39(3), 337–350. http://doi.org/10.1057/palgrave.jibs.8400366
- MOTORINDIA. (2017). Apollo Tyres becomes first Indian tyre maker to set up greenfield facility overseas. Retrieved May 2, 2018, from http://www.motorindiaonline.in/component/apollotyres-becomes-first-indian-tyre-maker-to-set-up-greenfield-facility-overseas/
- Narula, R. (2006). Globalization, new ecologies, new zoologies, and the purported death of the eclectic paradigm. *Asia Pacific Journal of Management*, 23(2), 143–151.
- Nayak, D., & Choudhury, R. N. (2014). A selective review of foreign direct investment theories. *ARTNeT Working Paper Series*, 143.
- Nayyar, D. (2008). The internationalization of firms from India: Investment, mergers and acquisitions. *Oxford Development Studies*, *36*(1), 111–131. http://doi.org/10.1080/13600810701848219
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. In *Knowledge, groupware and the internet* (pp. 3–42). Elsevier.
- North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- OECD. (2008). OECD Benchmark Definition of Foreign Direct Investment'. Oecd (Vol. 4). http://doi.org/10.1787/9789264045743-en
- Patton, M. Q. (2015). *Qualitative research & evaluation methods : integrating theory and practice* (Fourth edi). Thousand Oaks, California: SAGE Publications, Inc.
- Peng, M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal*, 2(2), 97–107. http://doi.org/10.1002/gsj.1030
- Penrose, E. (1959). The theory of the growth of the firm. Mansfield: Martino Fine Books.
- Perez-Batres, L. A., & Eden, L. (2008). Is there a liability of localness? How emerging market firms respond to regulatory punctuations. *Journal of International Management*, *14*(3), 232–

251. http://doi.org/10.1016/J.INTMAN.2007.10.004

- Pradhan, J. P. (2004). The determinants of outward foreign direct investment: A firm-level analysis of Indian manufacturing. Oxford Development Studies, 32(4), 619–639. http://doi.org/10.1080/1360081042000293371
- Pradhan, J. P. (2005). *Outward Foreign Direct Investment from India: Recent Trends and Patterns* (Vol. 153).
- Pradhan, J. P. (2007). Growth of Indian Multinationals in the World Economy: Implications for Development.
- Pradhan, J. P. (2008). The evolution of Indian Outward Foreign Direct Investment : changing trends and patterns Jaya Prakash Pradhan. *International Journal of Technology and Globalisation*, 4(1), 70–86.
- Pradhan, J. P., & Singh, N. (2009). Outward FDI and Knowledge Flows. *International Journal of Institutions and Economies*, 1(1), 156–87.
- PTI. (2017). India to overtake Japan to become third largest economy by 2028: Report. Retrieved April 10, 2018, from https://timesofindia.indiatimes.com/business/india-business/india-to-overtake-japan-to-become-third-largest-economy-by-2028-report/articleshow/61631681.cms
- Raff, H., Ryan, M., & Stähler, F. (2005). Economics Discussion Papers The Choice of Market Entry Mode: Greenfield Investment, M&A and Joint Venture, (0513).
- Ramamurti, R., & Singh, J. V. (2009). *Emerging multinationals in emerging markets*. Cambridge University Press.
- Ramasamy, B., Yeung, M., & Laforet, S. (2012). China's outward foreign direct investment: Location choice and firm ownership. *Journal of World Business*, 47(1), 17–25. http://doi.org/https://doi.org/10.1016/j.jwb.2010.10.016
- Rasiah, R., Gammeltoft, P., & Jiang, Y. (2010). Home government policies for outward FDI from emerging economies: lessons from Asia. *International Journal of Emerging Markets*, 5(3/4), 333–357. http://doi.org/10.1108/17468801011058415
- Reddy, A. (2015). An unfinished agenda: My life in the pharmaceutical industry. *Indian Journal of Pharmacology*, 47(5), 576.
- Reuters. (2015, April 1). Dr Reddy's to buy some UCB brands for \$128 million. Retrieved from https://in.reuters.com/article/ucb-sa-dr-reddys-deals/dr-reddys-to-buy-some-ucb-brands-for-128-million-idINKBN0MS3HK20150401

- Rienda, L., Claver, E., & Quer, D. (2013). The internationalisation of Indian multinationals: Determinants of expansion through acquisitions. *Journal of the Asia Pacific Economy*, 18(1), 115–132. http://doi.org/10.1080/13547860.2012.742705
- Rugman, A. M., & Verbeke, A. (1992). A Note on the Transnational Solution and the Transaction Cost Theory of Multinational Strategic Management Author (s): Alan M. Rugman and Alain Verbeke Source : Journal of International Business Studies, Vol. 23, No. 4 (4th Qtr ., 1992), pp. 761. *Journal of International Business Studies*, 23(4), 761–771.
- Rugman, A. M., & Verbeke, A. (2003). Extending the theory of the multinational enterprise: Internalization and strategic management perspectives. *Journal of International Business Studies*, 34(2), 125–137. http://doi.org/10.1057/palgrave.jibs.8400012
- Rugman, A. M., & Verbeke, A. (2004). A perspective on regional and global strategie of multinational enterprises. *Journal of International Business Studies*, 35(1), 3–18.
- Rui, H., & Yip, G. S. (2008). Foreign acquisitions by Chinese firms: A strategic intent perspective. *Journal of World Business*, 43(2), 213–226. http://doi.org/10.1016/J.JWB.2007.11.006
- Sachitanand, N. N. (2001). HCL Tech, Deutsche Bank form JV. Retrieved May 2, 2018, from http://www.thehindu.com/2001/09/27/stories/06270009.htm
- Santangelo, G. D., & Meyer, K. E. (2011). Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies. *Journal of International Business Studies*, 42(7), 894–909. http://doi.org/10.1057/jibs.2011.25
- Satta, G., Parola, F., & Persico, L. (2014). Temporal and Spatial Constructs in Service Firms' Internationalization Patterns: The Determinants of the Accelerated Growth of Emerging MNEs. Journal of International Management, 20(4), 421–435. http://doi.org/10.1016/J.INTMAN.2014.05.001
- Saunders, M., Lewis, P., & Thornhill, A. (2012). Research methods for business students. Harlow, England: Pearson. Retrieved from http://escweb.lib.cbs.dk/login?url=http://lib.myilibrary.com/detail.asp?id=385301
- Scientific American. (2018). What's the difference between brand-name and generic prescription drugs? - Scientific American. Retrieved from https://www.scientificamerican.com/article/whats-the-difference-betw-2004-12-13/
- Scott, W. R. (1995). Institutions and organizations. Thousand Oaks, Calif.: Sage.
- SiliconIndia. (2009). HCL Axon buys UCS Group's SAP operation. Retrieved May 2, 2018, from https://www.siliconindia.com/shownews/HCL_Axon_buys_UCS_Groups_SAP_operation-

nid-59517-cid-7.html

- Singal, A., & Jain, A. K. (2012). Outward FDI trends from India: emerging MNCs and strategic issues. *International Journal of Emerging Markets*, 7(4), 443–456. http://doi.org/10.1108/17468801211264342
- Smith, A. 1937, The wealth of nations [1776], na.
- Sneath, P. H. A. (1957). Some thoughts on bacterial classification. *Microbiology*, 17(1), 184–200.
- Srivastava, S. (2016). Apollo Tyres' quest for a global grip. Retrieved May 2, 2018, from http://www.forbesindia.com/article/northen-giants/apollo-tyres-quest-for-a-globalgrip/44429/1
- Suneja, K. (2018). India, EU to decide fate of trade agreement next month. Retrieved April 10, 2018, from https://economictimes.indiatimes.com/news/economy/foreign-trade/india-eu-to-decide-fate-of-trade-agreement-next-month/articleshow/63278269.cms
- Surdu, I., Mellahi, K., & Glaister, K. (n.d.). Emerging market multinationals' international equitybased entry mode strategies: review of theoretical foundations and future directions. *International Marketing Review*. http://doi.org/10.1108/EL-01-2014-0022
- Suzlon. (2017). ANNUAL REPORT, 2016-17.
- Suzlon. (2018a). Company Profile. Retrieved April 18, 2018, from http://www.suzlon.com/about/profile
- Suzlon. (2018b). Suzlon Worldwide. Retrieved April 18, 2018, from http://www.suzlon.com/about/suzlon-worldwide
- Swanson, A. P. (2012). Suzlon Energy Limited. In K. Hill (Ed.), International Directory of Company Histories (Vol. 128, pp. 440–444). St. James Press.
- Tableau. (2018). Mission | Tableau Software. Retrieved April 22, 2018, from https://www.tableau.com/de-de/about/mission
- Tallman, S., & Fladmoe-Lindquist, K. (2002). Internationalization, globalization, and capabilitybased strategy. *California Management Review*, 45(1), 116–135.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- The Economist. (2018). Generic genius, 15–17.
- The World Bank Group. (2018). Worldwide Governance Indicators. Retrieved May 2, 2018, from http://info.worldbank.org/governance/wgi/#home
- Thite, M., Wilkinson, A., Budhwar, P., & Mathews, J. A. (2016). Internationalization of emerging
Indian multinationals: Linkage, leverage and learning (LLL) perspective. *International Business Review*, 25(1), 435–443. http://doi.org/10.1016/j.ibusrev.2015.06.006

- Tolentino, P. E. (2010). Home country macroeconomic factors and outward FDI of China and India. Journal of International Management, 16(2), 102–120. http://doi.org/10.1016/j.intman.2010.03.002
- UNCTAD. (2002). World Investment Report 2002: Transnational Corporations and Export Competitiveness. Geneva. Retrieved from http://unctad.org/en/Docs/wir2002_en.pdf
- UNCTAD. (2005). World Investment Report 2005: Transnational Corporations and the Internationalization of R&D. New York and Geneva. Retrieved from http://linkinghub.elsevier.com/retrieve/pii/S0969593106000849

UNCTAD. (2010). World Investment Report 2010: Investing in a Low-Carbon Economy.

- UNCTAD. (2017). World Investment Report 2017: Investment and the Digital Economy. Retrieved from http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf
- UNCTAD. (2018a). World Investment Report: Annex Tables. Retrieved May 1, 2018, from http://www.unctad.org/en/Pages/DIAE/World Investment Report/Annex-Tables.aspx
- UNCTAD. (2018b). Foreign Direct Investment. Retrieved April 7, 2018, from http://unctad.org/en/Pages/DIAE/Foreign-Direct-Investment-%28FDI%29.aspx
- UNCTAD. (2018c). Transnational corporations (TNC). Retrievd May 18, 2018, from http://unctad.org/en/Pages/DIAE/Transnational-corporations-%28TNC%29.aspx
- Vault. (2018). HCL Technologies Limited|Company Profile. Retrieved May 2, 2018, from http://www.vault.com/company-profiles/tech-consulting/hcl-technologies-limited/companyoverview
- Verbeke, A., & Hillemann, J. (2013). Internalization Theory as the General Theory of International Strategic Management. In C. R. Thomas & W. Shughart (Eds.), *The Oxford Handbook of Managerial Economics* (Vol. 26, pp. 325–353). http://doi.org/10.1108/S1571-5027(2013)0000026007
- Welch, C., Nummela, N., & Liesch, P. (2016). The Internationalization Process Model Revisited: An Agenda for Future Research. *Management International Review*, 56(6), 783–804. http://doi.org/10.1007/s11575-016-0302-y
- Witt, M. A., & Lewin, A. Y. (2007). Outward foreign direct investment as escape response to home country institutional constraints. *Journal of International Business Studies*, 38(4), 579– 594.

- Wright, M., Filatotchev, I., Hoskisson, R. E., & Peng, M. (2005). Strategy Research in Emerging Economies: Challenging the Conventional Wisdom. *Journal of Management Studies*, 42(1), 1–33. http://doi.org/10.1111/j.1467-6486.2005.00487.x
- Yamakawa, Y., Peng, M. W., & Deeds, D. L. (2008). What drives new ventures to internationalize from emerging to developed economies? *Entrepreneurship Theory and Practice*, 32(1), 59– 82.
- Zhao, H., & Hsu, C.-C. (2007). Social ties and foreign market entry: An empirical inquiry. *Management International Review*, 47(6), 815–844.
- Zhao, W., Liu, L., & Zhao, T. (2010). The contribution of outward direct investment to productivity changes within China, 1991–2007. *Journal of International Management*, 16(2), 121–130. http://doi.org/https://doi.org/10.1016/j.intman.2010.03.003

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Appendix 1: Search Strategy for European Companies (Orbis)

Produ	ct name	Orbis		
Updat	e number	169		
Softw	are version	129.00		
Data u	ıpdate			
Userna	ame	Birgit Brejneboel-50093		
Export	date	11/03/2018		
			Step result	Search result
1.	All active companies a	228,831,961	228,831,961	
2.	Year of incorporation:	109,603,817	86,616,589	
3.	World region/Country	80,767,887	25,491,392	
4.	Subsidiaries with Ulti	mate Owners by profile: UO located in India (IN), of one of the following types: Corporate	22,469	1,478
	companies; GUO and D	000;Def. of the UO: min. path of 50.01%, known or unknown shareholder		
	Boolean search : 1 A	nd 2 And 3 And 4		
			TOTAL	1,478
Fiscal y	/ear end:31/03			
Curren	t search settings:			
- priori	ty given to the most rea	cent accounts available		
- exclu	sion of companies with	no recent financial data and Public authorities/States/Governments		

Definition of the Ultimate Owner:

- minimum percentage that must characterise the path from a subject Company up to its Ultimate owner: 50.01%





Appendix 2: Definition of Ownership by Orbis

Note that only the highest shareholder at each step is displayed in this example.



Source: BvD (2018b)

Appendix 3: Details of Company Data

Variables	Categorization	Source
Company name	The name of the respective subsidiary	Extracted from Orbis by selecting firms
		located in Europe with an Indian GUO
BvD ID number	Each business's national company number	Extracted from Orbis by selecting firms located in Europe with an Indian GUO
Orbis' size category	Very large company: Operating revenue >= 100 million EUR (130 million USD); total assets >= 200 million EUR (260 million USD); employees>=1,000; listed. Large Company: Operating Revenue >= 10 million EUR (13 million USD); total assets >= 20 million EUR (26 million USD); employees >= 150; Not Very Large. Medium-sized company: Operating Revenue >= 1 million EUR (1.3 million USD); total assets >= 2 million EUR (2.6 million USD); employees >= 15;Not Very Large or Large. Small company: When not belonging to another category	Extracted from Orbis (Orbis' own categorization)
ISO Country-Code	Country Code of the firms location	Extracted from Orbis
Incorporation year	Year of incorporation	Extracted from Orbis
BvD Major sector	Other services; metals & metal products; banks; chemicals, rubber, plastics, non-metallic products; wholesale & retail trade; machinery, equipment, furniture, recycling; post & telecommunications; hotels & restaurants; gas, water, electricity; primary sector; publishing, printing; textiles, wearing apparel, leather; insurance companies; construction; food, beverages, tobacco; wood, cork, paper; transport; education, health; public administration & defense	Extracted from Orbis (Orbis' own categorization)
Products & Services	The products and service the respective company is dealing with	Extracted from Orbis (Orbis' own categorization)
NACE Rev. 2 Core Code (4 digits)	Statistical classification of economic activites in the European Community	Extracted from Orbis
Subsidiary function	manufacturing; R&D service activities	Based on the NACE codes
Subsidiary subfunction	division of the "service activities" function: construction; logistics; others; support	Based on the NACE codes
GUO - Name	The name of the global ultimate owner (GUO) of the respective firm	Extracted from Orbis
GUO - BvD ID	The national company number of the GUO	Extracted from Orbis
GUO - Major Sector GUO - Products & Services	See the categorization of sectors above The products and service the GUO of the respective company is dealing with	Extracted from Orbis (Orbis' own categorization) Extracted from Orbis (Orbis' own
GUO - NACE,	Statistical classification of economic activites in the European Community	categorization) Extracted from Orbis
Core code	Percentage of ownership share of the respective subsidiary / firm	Extracted from Orbic
GUO - Orbis' size category	See the categorization of sizes above	Extracted from Orbis (Orbis' own
		categorization)
GUO - Subsidiaries in India	Number of firms in India	Locations of the subsidiaries were extracted from Orbis
GUO - Subsidiaires in rest of Asia	Number of firms in the rest of Asia (India excluded)	Locations of the subsidiaries were extracted from Orbis
GUO - Subsidiaries in Africa	Number of firms in Africa	Locations of the subsidiaries were extracted from Orbis
GUO - Subsidiaries in Europe	Number of firms in Europe	Locations of the subsidiaries were extracted from Orbis
GUO - Subsidiaires in America	Number of firms in America	Locations of the subsidiaries were extracted from Orbis
GUO - Subsidiaires in Oceania	Number of firms in Oceania	Locations of the subsidiaries were extracted from Orbis
GUO - Total foreign subsidiaries	Sum of "subsidiaries in rest of Asia, in Africa, in Europe, in America and in Oceania"	Calculated manually
GUO - Total subsidiaries	Sum of "subsidiaries in India" and "total foreign subsidiaries"	Calculated manually
GUO - Total subsidiaries categorized	1-50 subsidiaries; 51-100 subsidiaries; 101-150 subsidiaries; 151-200 subsidiaries; more than 200 subsidiaries	Own categories for the GUO's number of total subsidiaries
GUO - Categorization of investment behavior	"aggressive" vs. "non-aggressive"	"aggressive" when the proportion of subsidiaries "outside of Asia" to the "total foreign subsidiaries" is >90%; "non-aggressive" when the proportion is <90%

Appendix 4: Details of Host Country Data

Independent variable	Proxy	Abbreviati on	Unit	Source	Link	Details for the Link
Absolute market size	GDP	GDPA	Constant 2010 US\$	World Bank	http://databank.worldbank.org/data/re ports.aspx?source=2&country=AUT#	./.
Market growth	GDP growth	GDPg	Annual %	World Bank	http://databank.worldbank.org/data/re ports.aspx?source=2&country=AUT#	./.
Trade openness towards India	Imports from India	Impin & ImpinP	Value in euros	Eurostat	http://ec.europa.eu/eurostat/data/dat abase https://www.gate.ezv.admin.ch/swissi mpex/index.xhtml	Eurostat: Database by themes - International trade - International trade in goods - detailed data (detail) - EU Trade since 1988 by CN8
Innovation and high technology	R&D expenditures Annual number of patent applications, residents	RD PatAP	% of GDP Absolute number	World Bank World Bank	http://databank.worldbank.org/data/re ports.aspx?source=2&country=AUT# http://databank.worldbank.org/data/re ports.aspx?source=2&country=AUT#	./. ./.
Liability of foreigness	Indian population	InPop	% of population	Eurostat, Cyprus statistical office, articles	http://ec.europa.eu/eurostat/data/dat abase http://www.cystat.gov.cy/mof/cystat/s tatistics.nsf/populationcondition_22ma in_en/populationcondition_22main_en ?OpenForm⊂=2&sel=2 http://nriol.com/indiandiaspora/statistic cs-indians-abroad.asp	Eurostat: Database by themes - Population and social conditions - Demography and migration (demo) - Population (demo_pop) - Population on 1 January by age group, sex and citizenship
Political Stability	Worldwide Governance Indicators	WWGI	Value	World Bank	http://info.worldbank.org/governance/ wgi/index.aspx#home	./.
Education	Educational attainment, at least completed upper secondary school, population 25+	Edu	% of population 25+	World Bank	http://databank.worldbank.org/data/re ports.aspx?source=2&country=AUT#	./.
Control variable	Total FDI outflows from India	FDIO	Millions of dollars	UNCTAD	http://unctad.org/en/Pages/DIAE/Worl d%20Investment%20Report/Annex- Tables.aspx	Annex table 02. FDI outflows, by region and economy, 1990-2016



Appendix 5: Indian direct Investments per Year per Country





Source: Own presentation based on Orbis data.

Appendix 6: Definition of Size Classifications by Orbis

General remark: the criteria for a company to be included in one of the categories below are always based on values expressed in EUR (values in USD are given for information purposes only and may vary depending on current exchange rate).

Very large Companies (VL)

Companies on Orbis are considered to be very large when they match at least one of the following conditions:

- Operating Revenue >= 100 million EUR (130 million USD)
- Total assets >= 200 million EUR (260 million USD)
- Employees >= 1,000
- Listed

Notes:

- Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (130 USD) are excluded from this category.
- Companies for which Operating Revenue, Total Assets and Employees are unknown but have a level of Capital over 5 million EUR (6.5 million USD) are also included in the category.

Large Companies (L)

Companies on Orbis are considered to be large when they match at least one of the following conditions:

- Operating Revenue >= 10 million EUR (13 million USD)
- Total assets >= 20 million EUR (26 million USD)
- Employees >= 150
- Not Very Large

Notes:

• Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (130 USD) are excluded from this category.

 Companies for which Operating Revenue, Total Assets and Employees are unknown but have a level of Capital comprised between 500 thousand EUR (650 thousand USD) and 5 million EUR (6.5 million USD) are also included in the category.

Medium sized Companies (M)

Companies on Orbis are considered to be medium sized when they match at least one of the following conditions:

- Operating Revenue >= 1 million EUR (1.3 million USD)
- Total assets >= 2 million EUR (2.6 million USD)
- Employees >= 15
- Not Very Large or Large

Notes:

- Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (130 USD) are excluded from this category.
- Companies for which Operating Revenue, Total Assets and Employees are unknown but have a level of Capital comprised between 50 thousand EUR (65 thousand USD) and 500 thousand EUR (650 thousand USD) are also included in the category.

Small Companies (S)

Companies on Orbis are considered to be small when they are not included in another category.

Source: (BvD, 2018a)



Appendix 7: Subsidiaries' Size over Time with Trendlines

Source: Own presentation based on Orbis data.



Appendix 8: Subsidiaries' Function over Time

Source: Own presentation based on Orbis data.



Appendix 9: GUO Size over Time with Trendlines

Source: Own presentation based on Orbis data.

Appendix 10: Search Strategy for Entry Modes (Zephyr)

Product name	Zephyr							
Update number	30							
Software version	30.0							
Data update	24/04/2018 (n° 30205494)	24/04/2018 (n° 30205494)						
Username	Birgit Brejneboel-51387							
Export date	25/04/2018							
Cut off date	31/03							
		Step result	Search result					
1. World regions: E	FTA, European Union enlarged (28) (Target)	586,301	586,301					
2. Country (primar	y adresses): India (IN) (Acquiror)	26,994	928					
3. Time period: on including 31/12 completed-assu	and after 01/01/2004 and up to and 2/2016 (rumoured, completed-confirmed, med, announced)	1,402,543	818					
4. Current deal sta	tus: Completed	1,445,389	652					
Boolean search	: 1 And 2 And 3 And 4							
		TOTAL	652					

Source: Zephyr abstract.



Appendix 11: Investment Behavior over Time with Trendlines

Source: Own presentation based on Orbis data.

Appendix 12: First Correlation Matrix of the full Model

	Inv	GDPA	GDPg	PatA	RD	Edu	ImpIn	InPop	WWGI	FDIO
Inv	1.0000									
GDPA	0.6061	1.0000								
GDPg	-0.0404	-0.1741	1.0000							
PatĂ	0.5902	0.8552	-0.1040	1.0000						
RD	0.1192	0.2479	-0.1774	0.2732	1.0000					
Edu	0.2152	-0.0171	0.0882	0.1694	0.3660	1.0000				
ImpIn	0.7078	0.8072	-0.1912	0.6485	0.2280	0.0297	1.0000			
InPop	0.7628	0.5802	-0.1095	0.3892	0.0261	0.1059	0.7067	1.0000		
WWGI	0.1872	0.0470	-0.0527	0.1105	0.7154	0.2612	0.0912	0.0391	1.0000	
FDIO	0.0700	0.0417	-0.1265	0.0479	0.0661	0.1120	0.1021	0.0339	0.0202	1.0000

4 . corr Inv GDPA GDPg PatA RD Edu ImpIn InPop WWGI FDI0
 (obs=293)

Source: Stata.

Appendix 13: Second Correlation Matrix of the full Model

5 . corr Inv GDPA GDPg PatAP RD Edu ImpInP InPop WWGI FDIO

Inv	GDPA	GDPg	PatAP	RD	Edu	ImpInP	InPop	WWGI	FDIO
1.0000									
0.6070	1.0000								
-0.0431	-0.1778	1.0000							
0.4644	0.6239	-0.1205	1.0000						
0.1237	0.2546	-0.1842	0.6698	1.0000					
0.2170	-0.0132	0.0841	0.3942	0.3695	1.0000				
0.3972	0.4021	-0.2805	-0.0218	0.0549	-0.1888	1.0000			
0.7631	0.5807	-0.1113	0.2713	0.0303	0.1075	0.4685	1.0000		
0.1885	0.0494	-0.0549	0.5058	0.7131	0.2626	-0.1146	0.0403	1.0000	
0.0738	0.0484	-0.1322	0.0489	0.0789	0.1168	0.1407	0.0370	0.0237	1.0000
	Inv 1.0000 0.6070 -0.0431 0.4644 0.1237 0.2170 0.3972 0.7631 0.1885 0.0738	Inv GDPA 1.0000 0.6070 1.0000 -0.0431 -0.1778 0.4644 0.6239 0.1237 0.2546 0.2170 -0.0132 0.3972 0.4021 0.7631 0.5807 0.1885 0.0494 0.0738 0.0484	Inv GDPA GDPg 1.0000 0.6070 1.0000 -0.0431 -0.1778 1.0000 0.4644 0.6239 -0.1205 0.1237 0.2546 -0.1842 0.2170 -0.0132 0.0841 0.3972 0.4021 -0.2805 0.7631 0.5807 -0.1113 0.1885 0.0494 -0.0549 0.0738 0.0484 -0.1322	Inv GDPA GDPg PatAP 1.0000 0.6070 1.0000 -0.0431 -0.1778 1.0000 0.4644 0.6239 -0.1205 1.0000 0.1237 0.2546 -0.1842 0.6698 0.2170 -0.0132 0.0841 0.3942 0.3972 0.4021 -0.2805 -0.0218 0.7631 0.5807 -0.1113 0.2713 0.1885 0.0494 -0.0549 0.5058 0.0738 0.0484 -0.1322 0.0489	Inv GDPA GDPg PatAP RD 0.6070 1.0000 0.6070 1.0000 0.4644 0.6239 -0.1205 1.0000 0.1237 0.2546 -0.1842 0.6698 1.0000 0.2170 -0.0132 0.0841 0.3942 0.3695 0.3972 0.4021 -0.2805 -0.0218 0.0549 0.7631 0.5807 -0.1113 0.2713 0.0303 0.1885 0.0494 -0.0549 0.5058 0.7131 0.0738 0.0484 -0.1322 0.0489 0.0789	Inv GDPA GDPg PatAP RD Edu 1.0000 0.6070 1.0000 - <t< td=""><td>Inv GDPA GDPg PatAP RD Edu ImpInP 1.0000 0.6070 1.0000 -0.0431 -0.1778 1.0000 0.4644 0.6239 -0.1205 1.0000 0.1237 0.2546 -0.1842 0.6698 1.0000 0.2170 -0.0132 0.0841 0.3942 0.3695 1.0000 0.3972 0.4021 -0.2805 -0.0218 0.0549 -0.1888 1.0000 0.7631 0.5807 -0.1113 0.2713 0.0303 0.1075 0.4685 0.1885 0.0494 -0.0549 0.5058 0.7131 0.2626 -0.1146 0.0738 0.0484 -0.1322 0.0489 0.0789 0.1168 0.1407</td><td>Inv GDPA GDPg PatAP RD Edu ImpInP InPop 1.0000 0.6070 1.0000 -</td><td>Inv GDPA GDPg PatAP RD Edu ImpInP InPop WWGI 1.0000 0.6070 1.0000 -</td></t<>	Inv GDPA GDPg PatAP RD Edu ImpInP 1.0000 0.6070 1.0000 -0.0431 -0.1778 1.0000 0.4644 0.6239 -0.1205 1.0000 0.1237 0.2546 -0.1842 0.6698 1.0000 0.2170 -0.0132 0.0841 0.3942 0.3695 1.0000 0.3972 0.4021 -0.2805 -0.0218 0.0549 -0.1888 1.0000 0.7631 0.5807 -0.1113 0.2713 0.0303 0.1075 0.4685 0.1885 0.0494 -0.0549 0.5058 0.7131 0.2626 -0.1146 0.0738 0.0484 -0.1322 0.0489 0.0789 0.1168 0.1407	Inv GDPA GDPg PatAP RD Edu ImpInP InPop 1.0000 0.6070 1.0000 -	Inv GDPA GDPg PatAP RD Edu ImpInP InPop WWGI 1.0000 0.6070 1.0000 -

Appendix 14: First Correlation Matrix of the amended Model

	Inv	GDPA	GDPg	PatA	RD	Edu	ImpIn	InPop	WWGI	FDIO
Inv	1.0000									
GDPA	0.5203	1.0000								
GDPg	0.1997	-0.0666	1.0000							
PatA	0.4328	0.8769	0.0161	1.0000						
RD	-0.1145	-0.1612	0.1612	0.2432	1.0000					
Edu	0.4166	-0.0024	0.2221	0.2864	0.7563	1.0000				
ImpIn	0.6986	0.7615	-0.0865	0.5545	-0.2310	0.0912	1.0000			
InPop	0.6714	0.4816	-0.0370	0.1573	-0.3947	0.1441	0.7032	1.0000		
WWGI	0.2231	-0.2852	0.2980	0.0170	0.6063	0.7026	-0.1289	-0.1655	1.0000	
FDIO	0.0899	0.1487	-0.1394	0.1244	0.0492	0.0954	0.2350	0.0753	0.0139	1.0000

4 . corr Inv GDPA GDPg PatA RD Edu ImpIn InPop WWGI FDIO
 (obs=78)

Source: Stata.

Appendix 15: Second Correlation Matrix of the amended Model

I	Inv	GDPA	GDPg	PatAP	RD	Edu	ImpIn	InPop	WWGI	FDIO
Inv	1.0000									
GDPA	0.5203	1.0000								
GDPg	0.1997	-0.0666	1.0000							
PatAP	0.3709	0.6981	0.1017	1.0000						
RD	-0.1145	-0.1612	0.1612	0.4883	1.0000					
Edu	0.4166	-0.0024	0.2221	0.5048	0.7563	1.0000				
ImpIn	0.6986	0.7615	-0.0865	0.3600	-0.2310	0.0912	1.0000			
InPop	0.6714	0.4816	-0.0370	0.0212	-0.3947	0.1441	0.7032	1.0000		
WWGI	0.2231	-0.2852	0.2980	0.1910	0.6063	0.7026	-0.1289	-0.1655	1.0000	
FDIO	0.0899	0.1487	-0.1394	0.0770	0.0492	0.0954	0.2350	0.0753	0.0139	1.0000

5 . corr Inv GDPA GDPg PatAP RD Edu ImpIn InPop WWGI FDI0
 (obs=78)

Appendix 16: Regression Model Output of the full Model

7 . nbreg Inv GDPA GDPg PatAP RD Edu ImpInP InPop WWGI FDIO Fitting Poisson model: log likelihood = -2131.413 Iteration 0: Iteration 1: log likelihood = -1092.8353 Iteration 2: log likelihood = -738.23322 Iteration 3: log likelihood = -684.99398 Iteration 4: log likelihood = -684.77695 Iteration 5: log likelihood = -684.77689 Fitting constant-only model: Iteration 0: log likelihood = -750.11706 Iteration 1: log likelihood = -728.33178 Iteration 2: \log likelihood = -728.32202 Iteration 3: log likelihood = -728.32202 Fitting full model: Iteration 0: log likelihood = -671.13734 Iteration 1: log likelihood = -622.53666 log likelihood = -606.59723 Iteration 2: Iteration 3: \log likelihood = -604.37459 log likelihood = -604.37276 log likelihood = -604.37276 Iteration 4: Iteration 5: Negative binomial regression LR chi2(8)=295Prob > chi2=0.0000Pseudo R2=0.1702 Number of obs = 295 Dispersion = mean Log likelihood = -604.37276 Inv | Coef. Std. Err. z P>|z| [95% Conf. Interval]

 GDPA
 4.86e-13
 1.26e-13
 3.86
 0.000
 2.39e-13
 7.33e-13

 GDPg
 .044564
 .0220544
 2.02
 0.043
 .0013381
 .0877898

 PatAP
 1.47195
 .976602
 1.51
 0.132
 -.4421543
 3.386055

 RD
 -.4992181
 .1287714
 -3.88
 0.000
 -.7516054
 -.2468307

 Edu
 .0110269
 .0048154
 2.29
 0.022
 .001589
 .0204648

 ImpInP
 175.5915
 31.66833
 5.54
 0.000
 113.5227
 237.6602

 InPop
 2.04e-06
 1.06e-06
 1.92
 0.055
 -4.09e-08
 4.13e-06

 WWGI
 .9504622
 .1905602
 4.99
 0.000
 .5769711
 1.323953

 FDIO
 .0000261
 8.57e-06
 3.04
 0.002
 9.27e-06
 .0000428

 _cons
 -1.8395
 .364138
 -5.05
 0.000
 -2.553197
 -1.125802

 _____ -+---ImpInP | _cons | _____ -----____+ /lnalpha | -.7715233 .1657645 -1.096416 -.4466308 _____+ .63978 alpha | .4623083 .0766343 .3340663 _____ _____

Likelihood-ratio test of alpha=0: chibar2(01) = 160.81 Prob>=chibar2 = 0.000

Appendix 17: Regression Model Output of the amended Model

9 . nbreg Inv GDPA GDPg PatAP RD Edu ImpIn InPop WWGI FDIO Fitting Poisson model: \log likelihood = -224.98792 Iteration 0: Iteration 1: log likelihood = -224.54317 Iteration 2: log likelihood = -224.54292 Iteration 3: log likelihood = -224.54292 Fitting constant-only model: \log likelihood = -275.46481 Iteration 0: \log likelihood = -274.97962 Iteration 1: \log likelihood = -274.97931 Iteration 2: Iteration 3: \log likelihood = -274.97931 Fitting full model: log likelihood = -250.08621 log likelihood = -227.31405 log likelihood = -222.45103 Iteration 0: Iteration 1: Iteration 2: Iteration 3: log likelihood = -217.95562 Iteration 4: log likelihood = -217.84087 Iteration 5: log likelihood = -216.68159 Iteration 6: log likelihood = -216.66493Iteration 7: \log likelihood = -216.66493 Number of obs = 78 LR chi2(7) = 116.63 Prob > chi2 = 0.0000 Negative binomial regression Dispersion = mean Pseudo R2 = Log likelihood = -216.66493 0.2121 Inv | Coef. Std. Err. z P>|z| [95% Conf. Interval]

 GDPA
 -2.00e-13
 2.89e-13
 -0.69
 0.490
 -7.66e-13
 3.67e-13

 GDPg
 .0471444
 .0260293
 1.81
 0.070
 -.0038721
 .0981608

 PatAP
 2.623107
 1.802345
 1.46
 0.146
 -.9094246
 6.155638

 RD
 -1.477363
 .2006908
 -7.36
 0.000
 -1.87071
 -1.0844016

 Edu
 .0428925
 .0130076
 3.30
 0.001
 .0173981
 .0683868

 ImpIn
 3.05e-10
 5.35e-11
 5.71
 0.000
 2.01e-10
 4.10e-10

 PatAP ImpIn | -1.64 0.100 -4.86e-06 InPop | -2.22e-06 1.35e-06 4.28e-07 .5130014 .2477304 2.07 0.038 .0274588 WWGI | .998544 FDIO | 1.50e-06 8.51e-06 0.18 0.860 -.0000152 .0000182 _cons | .1929422 .6427002 0.30 0.764 -1.066727 1.452611 -3.397843 -1.75744 /lnalpha | -2.577641 .418478 _____ .0334453 .1724859 alpha | .0759529 .0317846

Likelihood-ratio test of alpha=0: chibar2(01) = 15.76 Prob>=chibar2 = 0.000