Chinese Direct Investment in Europe

An analysis of patterns, motives and the applicability of existing FDI theories

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Executive Summary

Chinese outward foreign direct investment (FDI) in Europe has increased significantly in recent years and has often been met with suspicion in the host country. At the root of this uncertainty lies the fact that Chinese FDI in Europe is still poorly understood and academic literature not yet offers a definite answer as to which theoretical models are best suited to explain the behavior of Chinese investors. This thesis therefore seeks to provide a comprehensive picture on Chinese FDI activities in Europe and to compare results based on company-level data to existing theoretical concepts.

The thesis identifies three types of Chinese FDI in Europe, which differ with respect to their characteristics, investment motives and the factors that determine their location decision. The first kind of Chinese FDI, constituting the largest share, consists of small, privately owned Chinese investors that seek to expand their export activities by taking control over downstream activities. Such subsidiaries are typically small in size and are established as wholly owned greenfield projects. Consistent with its purpose, such FDI is located in countries characterized by a large domestic market and a high volume of imports from China.

The investors behind the second type of FDI are typically large in size and are active in technology-intensive industries. While successful at home, they lack the technological and innovative capabilities that are necessary to compete internationally. They therefore internationalize with the explicit goal of acquiring strategic assets that can help them overcome their competitive disadvantages. Investment of this kind proceeds stepwise with respect to resource commitment and targets locations or companies in which industry-specific expertise and international sales networks exist. In the short-term, the investors’ financial resources and low-cost manufacturing capabilities are combined with the know-how present in the host countries to increase revenues. The ultimate goal of the investor, however, is to slowly absorb knowledge and processes associated with effective innovative capabilities necessary for independent R&D activities.

The third investment type identified in the thesis is diverse with respect to the characteristics of both investors and subsidiaries. What the investments share is the motivation to take advantage of easy market entrance, as well as low costs and standards in Eastern European countries.

The thesis finds that conventional theories of FDI are well-suited to explain Chinese investment activities in Europe, as long as they are adapted to include the institutional environment and country-specific advantages. Newly developed theories constitute a very good and more detailed tool for the analysis only of FDI with the objective of acquiring strategic assets.
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# Abbreviations

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BRIC</td>
<td>Brazil, Russia, India and China</td>
</tr>
<tr>
<td>EFTA</td>
<td>European Free Trade Association</td>
</tr>
<tr>
<td>EMNE</td>
<td>Emerging market multinational enterprise</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational enterprise</td>
</tr>
<tr>
<td>MOFCOM</td>
<td>Ministry of Commerce People’s Republic of China</td>
</tr>
<tr>
<td>NAC</td>
<td>Nanjing Automobile Corporation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>SAIC</td>
<td>Shanghai Automotive Industry Corporation</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences, IBM’s statistical software</td>
</tr>
<tr>
<td>SYMTC</td>
<td>Shenyang Machine Tool Corporation</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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1. Introduction

China’s progression from one of the world’s largest recipients of foreign direct investment (FDI) to a major source of outward FDI has received much attention in the press. While still relatively low in total volume, rapidly increasing Chinese direct investment in Europe has generated ambiguous reactions.

The financial crisis that began in 2007 and the current European debt crisis have made several EU member states desperate for capital inflows. The wooing for Chinese investors in the hope of employment generation and tax revenues has resulted in an increased focus on the potential and implications of FDI originating in China. European policy makers and the media have raised concerns that Chinese FDI may not only be guided by commercial interests, but also by global economic and political strategies designed by the national government (Godement et al., 2011). Chinese companies, especially state-owned enterprises, are also frequently accused of being able to compete unfairly due to support from the Chinese government. Moreover, there is a growing apprehension that Chinese companies aim to acquire and exploit know-how and technology developed and accumulated in Europe. Politically, it has been argued that an increasing dependence on Chinese capital may undermine Europe’s bargaining power with respect to negotiations concerning both free trade and human rights issues. As a result, Chinese FDI projects have been met with an unusually high level of suspicion and scrutiny and there have been calls for increased control mechanisms on the origin and purpose of Chinese investment projects.

At the root of the skepticism and uncertainty towards Chinese investors lies the fact that Chinese direct investment into Europe is a relatively new phenomenon and still poorly understood. The discussion about Chinese investment in developed countries tends to be based on only a small number of cases, mainly involving sensitive areas such as the acquisition of renowned manufacturers or the natural resources sector. It is therefore evermore important to identify the motives behind Chinese investment on a broader scale, so that the necessity and characteristics of an appropriate policy response can become assessable.

While the literature on Chinese inward FDI is extensive, the country’s outward FDI has to date not been the topic of much research. Previous studies have used descriptive analysis, case studies and interviews of selected Chinese companies to explore the new phenomenon. While some of these draw on conventional FDI theories, others claim that new frameworks, specifically designed for investors from emerging markets, are necessary to account for the FDI patterns of Chinese companies. This controversy contributes further to the uncertainty surrounding Chinese outward FDI.
Existing quantitative studies on Chinese FDI in general and in Europe in particular almost exclusively analyze total investment volume and include little or no data at the company level. At the same time, qualitative research tends only to consider a small number of case companies and fails to reach generalizable conclusions. This thesis seeks to provide a more comprehensive overview over characteristics and motives of Chinese investment projects in Europe. By combining descriptive, regression and case analyses, a more decisive evaluation of existing FDI theories will be made possible. The results are not only of relevance to academia, but also to policy makers and an increasing number of European businesses, which has begun to face Chinese competitors at home. A more personal motivation for the choice of topic was an interest in China’s relationship with Europe, which the author acquired during an exchange semester at Tsinghua University in Beijing.

1.1. Research question

Why and how do Chinese companies engage in FDI into European countries and which implications arise for the applicability of existing theoretical concepts?

The principal research question is very broad and entails a number of subordinate questions that need to be answered in the course of this thesis. It structures the analysis into four main parts: (1) A description of the characteristics of Chinese subsidiaries in Europe, (2) a determination of host country factors that attract Chinese FDI in general, (3) a more detailed examination of Chinese FDI that seeks to acquire strategic assets, and (4) the comparison of the results to existing theoretical frameworks. The related subordinate research questions are described below.

Question 1:
How has Chinese FDI in Europe developed over time and how is it composed?

To answer this subordinate question, the characteristics of Chinese subsidiaries are examined through a descriptive analysis of both FDI volumes and collected company data. The purpose is to produce a better understanding of Chinese FDI with respect to characteristics such as volume, investor attributes,
size, sector, location, function and entry mode. Furthermore, this section seeks to identify common investment patterns and distinct FDI categories.

**Question 2:**

**Which host country factors attract Chinese FDI?**

Which host country factors attract Chinese investors can indicate which motives are typically behind the decision to invest abroad. In order to give a representative picture of Chinese FDI, a quantitative approach was chosen to answer this subordinate research question. The collected data will hence be investigated using a regression analysis of count data with the number of Chinese direct investments made in a certain year and country as the dependent variable. This part of the thesis will distinguish between two different time periods in order to identify changes over time. Furthermore, Western European host countries and the new member states of the EU will be analyzed individually, as these two destinations can differ considerably in their attributes.

**Question 3:**

**Why and how do Chinese companies invest in strategic assets located in Europe?**

The acquisition of strategic assets by Chinese companies through FDI in Europe will be examined separately and in detail due to the considerable attention that it has received both in the media and in academic literature. Associated issues are for the most part very specific to the individual investment project and thus not quantifiable. A multiple case study will therefore used as the method of analysis.

**Question 4:**

**Which implications arise for the applicability of existing theoretical models?**

Based on the results found in the preceding analyses, existing theoretical concepts explaining FDI will be examined with respect to their conformity with the data and results. The objective is to point out which or under which circumstances the theories are best suited to explain Chinese investment activities in Europe.
1.2. Definitions and terminology

According to the OECD (Organisation for Economic Co-operations and Development), **foreign direct investment** is “a category of investment that reflects the objective by a resident enterprise in one economy (direct investor) of establishing a lasting interest in an enterprise (direct investment company) that is resident in an economy other than that of the direct investor. 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. 234). This thesis only analyzes direct investment. Therefore, when the term “investment” is mentioned, it includes only FDI and not portfolio investment.

A **foreign direct investor** can be any one of the following: (1) an individual, (2) a group of related individuals (3) an incorporated or unincorporated enterprise, (4) a public or private enterprise, (5) a group of related enterprises, (6) a government body, (7) an estate, trust or other societal organization, or (8) any combination of the above (OECD, 2008, p. 235). As this thesis only deals with strategic company decisions, European companies owned directly by Chinese individuals and with no other Chinese involvement (points 1 and 2) are excluded from the analysis. Also, since the available data only lists incorporated enterprises, no non-incorporated entities are included and are thus not encompassed by the term “foreign direct investor”, as it is used in this thesis.

The OECD differentiates incorporated direct investment enterprises by the distribution of ownership and levels of ownership. **Subsidiaries** are more than 50% owned by the direct investor or by an investor and its subsidiaries combined. According to the OECD (2008), “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”. As opposed to subsidiaries, associates are between 10% and 50% owned by an investor or by an investor and its subsidiaries. If an associate or an associate in combination with its subsidiaries owns more than 50% of an enterprise, this enterprise is regarded as an associate of the higher level investor. Some authors have criticized that the ownership of no more than 10% might not be enough to signify effective control (e.g. Luo & Tung, 2007). However, traditional literature on the entry mode of emerging market multinational enterprises (EMNEs) suggests that minority joint ventures are the preferred mode of entry (Wells, 1983, Yeung, 1994). Also, as Buckley et al. (2008) point out, minority equity shares in joint ventures (JVs) can have many benefits for investors from developing countries, as they may lack the capabilities or financial means to engage in majority or wholly owned FDI projects. Among others, minority JVs can reduce entry costs and offer opportunities both as listening posts to learn from foreign partners and to gain access to local distribution channels. Also, Chinese companies may later decide to expand their initial
investment once they have improved their knowledge of the local market (Pitelis & Teece, 2010). Due to this potential importance of minority joint ventures as entry mode for Chinese investors, they will be included in the analysis and, as they will not be distinguished in the analysis, also be referred to as subsidiaries.

Following UNCTAD’s (United Nations Conference on Trade and Development) definition, a multinational enterprise (MNE) is an incorporated or unincorporated enterprise consisting of parent enterprises and their foreign subsidiaries and associates (UNCTAD, 2009). All companies analyzed in this thesis are consequently regarded as part of an MNE.

In the course of this thesis, there will often be differentiated between Western and Eastern European host countries. These terms are to be regarded as a political rather than geographical distinction. Western Europe thus includes the 15 old member states\(^1\) of the European Union (EU) in addition to the four long-standing members of the European Free Trade Association (EFTA)\(^2\), which effectively make them part of the common market. Eastern Europe encompasses the 12 new member states\(^3\) of the EU.

1.3. Limitations

This thesis analyzes a number of existing theoretical concepts with respect to their appropriateness in explaining Chinese FDI in Europe. Hereby, important aspects of these theories are compared to the data and to the each other, but no in-depth exploration of the individual theories is included.

Focus of the thesis is to analyze the motives behind FDI decisions of Chinese companies. Whether or not their investment projects turn out to be successful, will not be discussed.

The only investment type included in the thesis is foreign direct investment made by Chinese companies. No portfolio investment will be considered. In addition, apart from a short description of common sectors, no detailed analysis will be conducted on the industries in which the Chinese investors or their subsidiaries are active, as the distinction between a large number of different industries would have made the analysis too confusing.

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\(^1\) Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom

\(^2\) Iceland, Liechtenstein, Norway and Switzerland

\(^3\) Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia
Since a large part of this thesis depends on quantitative secondary data, the extent of the analysis is limited by the availability of such data. Consequently, a number of potentially important influencing factors for the FDI decisions of Chinese companies might not have been taken into account.

This paper primarily analyzes which factors in European host countries influence Chinese companies’ FDI decisions and “pull” them into investing abroad. Conditions in the Chinese home market that “push” firms to internationalize (e.g. tough competition) will only be considered as part of the case studies, as domestic market information could not be collected for every individual company. For the same reason, the characteristics of the individual management executives and their role in FDI decisions will not be taken into consideration, although this aspect plays an important role in newly developed FDI theories. Furthermore, investment conditions offered by the host countries to specific sectors or companies are not included, as the data collection process otherwise would have become too extensive.

Concerning the regression analysis, the lack of relevant data restraints the type and number of independent variables contained in the model. Some host country characteristics that might be of importance in Chinese companies’ investment decisions (such as the presence of industry clusters, the cargo-handling capacity of ports, etc.) could not be included due to a lack of relevant data.

1.4. Chapters of the thesis

The second chapter of this thesis outlines the research design and explains the methodology chosen to answer the research question. Chapter three introduces both conventional and newly developed theoretical concepts of FDI. Chapter four summarizes the existing literature on Chinese outward FDI. The first subordinate research question is sought to be answered in the succeeding chapter five, which contains a detailed descriptive analysis of China’s FDI activities. Following this, chapter six focuses on the third subordinate research question and applies a regression analysis to identify the host country factors that attract Chinese investment. Chapter seven consists of a case study analysis of companies that invested in Europe in order to obtain strategic assets such as technology or brands. Chapter eight combines the findings of the three separate analyses and draws conclusions on the applicability of theoretical concepts. The last chapter concludes on the thesis.
2. Methodology

This chapter gives an overview over the methodologies employed in this thesis. The first section explains the choices made concerning research design and the second section goes into detail with regard to the data and research methods used in the quantitative analyses of this thesis. The third section contains similar information concerning the qualitative analysis, while the two following section evaluate the reliability and validity of the thesis.

2.1. Research design

The four subordinate research questions cannot be answered by the use of a single research method. The fourth subordinate research question alone, aiming to evaluate existing theoretical concepts, requires a diverse analysis of both quantitative and qualitative aspects of Chinese FDI in Europe. In accordance with Tashakkori & Teddlie (2003), a mixed-method was chosen, because it provides better opportunities to answer the research question.

The first objective of this thesis, outlined in research question one and two, is to reach generalizable conclusions as to the composition and motivation behind Chinese FDI in Europe. To secure a good level of generalizability, a quantitative approach is most appropriate for these parts of the thesis.

The third subordinate research question, however, concerns only the specific case of companies that invest in Europe in order to acquire strategic resources. A number of new theoretical concepts have been developed specifically for this type of investment. They include assumptions about why and how such companies invest in developed countries, which are difficult to analyze without taking the specific context of the individual companies into account. According to Yin (2003), case studies are the preferred research method in this situation. The use of multiple cases acknowledges that the conclusions derived may be unique to each specific case and makes it possible to estimate whether findings can be applicable to other cases (Eisenhardt, 1989).

The chosen research philosophy is positivism, i.e. only observable phenomena evident from the data are used for an objective interpretation of results. The thesis mainly employs a deductive and explanatory approach, as the research strategy was designed with the objective to test and evaluate already existing theoretical frameworks. The selection of subsidiary characteristics, host country factors and the focus of the case studies thus occurred on the basis of their ability to capture essential points of these theories. However, the descriptive section on subsidiary characteristics also includes
an inductive aspect, as common investment patterns are sought to be identified without the guidance of already pronounced theorems.

Only secondary data, i.e. data that was originally collected and published by others, will be used in the thesis. This decreases the level of subjectivity inherent in the data collection. While primary data would certainly have added to the case studies through first-hand statements from company executives, negotiating access was beyond the time-limit for the thesis.

The study is mainly cross-sectional, as it examines the Chinese subsidiaries that exist in Europe at the time of the data extraction. However, a temporal aspect is added in both the descriptive and regression analysis, the first of which examines the development of Chinese FDI over time, while the latter includes the comparison of two different time periods.

The research onion (Saunders, Lewis & Thornhill, 2008) provides a graphical overview over different aspects of a study’s research design. Figure 1 shows an adapted version that illustrates the choices made for this thesis.

**Figure 1: Adapted version of the research onion**

### 2.2. Data and methodology selection for the quantitative analyses

The quantitative part of this thesis consists of the descriptive and regression analysis in chapters five and six. This section begins with a definition of the research population. Afterwards, sources from
which both FDI and host country data will be retrieved and the selection criteria for such data will be described.

2.2.1. Data on Chinese subsidiaries

The research population of the quantitative analysis consists of all Chinese subsidiaries that are located in the member states of the European Union, and EFTA. The analysis will not include companies owned or invested in by Chinese individuals with no other ties to China, as their motives and decision processes are likely to differ substantially from those of companies. Heavy regulatory and institutional restrictions on outward FDI were in place before the “go global” (zou chu qu) policy of 1999, an extensive reform which was not fully implemented until 2002 (Buckley et al., 2007). Previously, an environment and requirements for Chinese outward FDI prevailed that are so different from those that persist today, that the underlying motivations of authorized FDI projects can hardly be compared to those of recently made investments. As this thesis concerns contemporary FDI, only investments made after the full implementation of the go global policy will be included. Since not all necessary data is available for 2002 and 2011, the quantitative analysis will focus on investments that were made in the years from 2003 to 2010.

Investment by financial companies will not be included in the analysis, because their business activities and therefore also their motivations are likely to differ substantially from other companies. While natural resource endowments have been found by various studies to positively influence Chinese investment decisions on a global scale, such research also concludes that natural-resources do not play any role for Chinese investment in the EU (e.g. Buckley et al., 2007; Cheung & Suny, 2009; Filippov & Saebi, 2008). Additionally, the scarcity of natural resources in most countries analyzed in this thesis renders the search for natural resources unlikely as a major investment motive. The list over Chinese subsidiaries in Europe compiled during the data collection process revealed that only a very small number of Chinese subsidiaries in Norway are active in the extraction of resources. They were excluded from the research population so as not to distort the analysis of investments in other sectors.

2.2.1.1. Data sources on Chinese subsidiaries

An omnipresent challenge when analyzing Chinese outward FDI is the lack of reliable data. China’s Ministry of Commerce (MOFCOM) is the best source for statistics on Chinese FDI activities and releases annual data on the value of Chinese outward investment stock and flow. However, the data tends to be inaccurate due to two main reasons: First, only outward FDI approved by national authorities is included in the data. This excludes both small investment flows that are only registered locally (Nicolas & Thomsen, 2008) and projects financed outside China, e.g. through Chinese companies registered outside of mainland China or by foreign loans (Milelli & Hay, 2008). This aspect is particularly important in light of the fact that a large amount of Chinese FDI flows into Hong
Kong or international tax heavens, from where it might re-invested abroad (Mork et al., 2007). Second, different and changing reporting standards, even between Chinese institutions, lead to a incongruent and confusing picture of Chinese FDI activities (Buckley et al., 2008). Furthermore, the FDI statistics published by MOFCOM do not contain any company specific data, which makes them inappropriate for the purpose of a company-level analysis. Using investment volumes as the object of examination, as most studies on Chinese FDI do, would mean that a few very large investments made by a small number of companies can distort the results. For instance, the acquisition of Volvo by the Geely Holding Group in 2010 put Sweden on a second place in terms of FDI stock among the analyzed European countries, although only a very small number of companies have a subsidiary in Sweden. For these reasons, China’s official FDI statistics will only be used to describe global Chinese FDI and FDI volumes in Europe.

The best source of individual company data that could be identified is the “Orbis” database. The database is compiled and constantly updated by the Bureau van Dijk, which is headquartered in Amsterdam. While not claiming to be complete, Orbis combines extensive company information from about 100 different sources and includes data on approximately 100 million companies worldwide in a single database. The main disadvantage of using Orbis as the primary source of information is the lack of data on companies that have been shut down or re-registered at the time the data is extracted. The earlier the year, the less accurate the retrieved data is thus likely to reflect the investments actually made in that year.

As Orbis did not contain all information necessary for the analyses, the retrieved list over companies was merely used as a starting point for research into the individual subsidiaries. Additional information was retrieved from company websites, annual reports, news articles and online company databases. When the data found on Orbis contradicted the information on company websites, the company’s declaration was recorded.

2.2.1.2. Selection criteria for data on Chinese subsidiaries

Orbis offers a sophisticated search function, which made it possible to identify companies registered in Europe with a global ultimate owner located in China. The search results for companies that are owned by a global ultimate owner situated in China does not only render results on first level subsidiaries, but also identifies companies owned at the second or third level. This substantially improves the completeness of the dataset, since many European subsidiaries are directly funded by already existing foreign affiliates. Third level subsidiaries were only included, when a controlling share was present at at least one level of ownership. Since Orbis offers no search results for ownership shares below 25%, this level of ownership set the lower limit for minority equity owned subsidiaries included in the sample.
The initial search results included information about the subsidiary name, its owners, the date of incorporation and company size. However, some information essential to the analyses could not be accessed directly through Orbis’ data excerpt or turned out to be incorrectly or not at all stored in the database. For instance, ownership data for some companies was incomplete or did not include all levels of ownership, thus not displaying whether the Chinese owner was privately or government owned. Moreover, in case of restructuring of the subsidiary, neither the date of incorporation nor the stated entry mode was reliable. Orbis also does not always include all levels of ownership, thereby making it impossible to definitively determine if a company is ultimately state-owned by solely referring to the extracted data. The same problem appeared with respect to the categorization of the investing company’s size, the existence of foreign subsidiaries prior to the investment in Europe and the function of the subsidiary.

By completing the data retrieved from Orbis on an individual company basis, a high quality and accuracy of the data was ensured. Companies for which reliable information about essential data could not be found during this individual examination were excluded from the sample. A large number of companies turned out to be owned by an entity located in either Hong Kong or Taiwan, which are not a subject of this thesis. Acknowledging that much of Chinese outward FDI passes through Hong Kong, though, these companies were investigated with respect to whether they had any ties to firms in mainland China. To name one prominent example, the Lenovo Group Limited is incorporated in Hong Kong, but both the company’s origin, headquarter, main manufacturing facilities and largest owner are located in mainland China. The company and its European subsidiaries therefore remained in the sample. If no connection to mainland China could be found, the subsidiaries of companies registered in Hong Kong or Taiwan were not included and the sample size was thereby reduced further. As a last step, Chinese subsidiaries active in financial services and the extraction of natural resources as well as the investments made before 2003 were likewise removed from the company list.

In several cases, a Chinese company became the ultimate owner of more than one subsidiary through a single acquisition. The existence of a network across European countries and fields of activity could have been the very reason for the acquisition. Furthermore, one can assume that these subsidiaries would have been resolved or dissolved if they had been deemed useless. Accordingly, all of these companies are included in the analysis and categorized as “acquisition”.

After the final exclusion of host countries for which not sufficient data was available (see next section), the sample consists of 548 Chinese subsidiaries in 26 countries.
2.2.2. Host country data

All host country data used in the analysis is secondary, as appropriate data already exists and would be impossible to collect via primary data collection by the author. Statistics were retrieved from international and national databases that are compiled and administered by renowned institutions, thus guaranteeing a high level of data quality. Sources of host country data are: The World Bank, Eurostat, the National Bureau of Statistics of China and the European Commission.

For Liechtenstein, Cyprus, Malta and Luxembourg no values were available for many host country factors. Since only few non-financial subsidiaries were registered in these countries, they were removed from the sample instead of deleting variables that have the potential to improve the model. However, the remaining countries also exhibited a few missing values, which had to be estimated. To this purpose, the values of each variable with a missing value for a specific country were depicted in a scatter plot. If a linear trend was apparent, a simple linear regression formula was used to estimate the missing values. In general, values from 1996 to 2010 were used for these regressions when available. An exception was made, though, when the trend of development changed significantly during this period. For instance, if patent applications per resident fell between 2000 and 2000, but increased steadily after 2000, then only the data after 2000 was taken into account when estimating, for example, the value for 2009. In a small number of cases, no trend was apparent in the data. In these cases, a country in which the variable had developed in a similar manner was identified and the missing value calculated based on the relative value in the corresponding country.

2.2.3. Choice of econometrics and empirical methods

In order to answer the first subordinate research question on the development and patterns of Chinese FDI in Europe, the collected data will be described with respect to selected characteristics. In order to identify distinctive types of investment, a cluster analysis will be used to group characteristics that tend to occur simultaneously. An explanation of the specific methodological choices made with respect to the cluster analysis can be found in Appendix 3.

The second subordinate research question asks which host country factors attract Chinese FDI. The best empirical method to determine the relationship between several independent variables (host country factors) and one dependent variable (the number of Chinese direct investments) is a regression analysis (Backhaus et al., 2006). As the dependent variable in the regression is a count variable for which no linear relationship is to be expected, non-linear count models were chosen for the regressions. A detailed description of the chosen model can be found in Appendix 5.

All quantitative analysis will be conducted with IBM’s statistical software package SPSS.
2.3. Data and methodology selection for the case studies

This section gives an overview over the sources used to gather information on the case companies and the research population. Afterwards, the sampling method and criteria according to which the case companies are selected will be explained.

2.3.1. Data sources on case companies

Due to restrictions in both time and volume available for this thesis, the case studies will only use secondary data. Most information is retrieved from company websites and company reports. As information published by the case companies themselves is likely to be biased in their favor, though, other sources such as online databases and newspaper articles will also be consulted. Academic literature that has previously utilized the companies in examples and cases will also be used as a source.

2.3.2. Selection criteria for case companies

The qualitative part of the thesis adds two additional criteria to the research population. First, companies must have invested in Europe at least in part with the objective to acquire strategic assets such as technology, brands, or know-how. Second, the time frame of the case studies will differ from the quantitative analysis, as information up to May 2012 will be included. In order to be able to draw conclusions on the case companies’ European strategy, their initial investment must have taken place before 2010.

The list over Chinese subsidiaries extracted from Orbis served as the starting point in the identification of such companies. While the motive to obtain strategic resources is not directly apparent from this list, several indicators suggest the wish to acquire know-how and technology. Thus a subsidiary’s engagement in research and development (R&D), the location of a subsidiary close to an industry cluster, or the acquisition of manufacturing companies are likely to be associated with at least some transfer of strategic assets. The companies fulfilling at least one of these characteristics were examined more closely and those that directly stated the search for strategic assets as a motive for their investment on their website were categorized as possible case companies.

Thus having discovered appropriate companies, a small number of them had to be selected for the case analysis. Non-probability sampling was chosen for this purpose, as no statistical inferences will have to be made from the cases Sauner et al. (2008). In other words, as opposed to choosing random case companies, the sampling implied subjective judgment. Moreover, it is not possible to identify
relevant quota variables for the research population according to which a representative set of cases could be chosen and the sample size is very small. Patton (2002) and Neuman (2005) state that under such circumstances, cases should be selected subjectively according to their ability to answer the research question. This variation of non-probability sampling is called purposive sampling.

The purpose of the case studies is to identify and explain common patterns and key themes that are evident in a population that is likely to be diverse on many characteristics (e.g. sector of activity, year of investment and ownership). Using this so-called heterogeneous sampling, the case companies should show different characteristics, so that the similarities identified are of particular interest and value (Patton, 2002).

The characteristics that the case companies should reflect are outlined in Table 1. However, the final case selection occurred on the basis of convenience, as sufficient secondary data had to be available. This limited the case examples to very large investors, which provide much more extensive information online.

<table>
<thead>
<tr>
<th>Company characteristics</th>
<th>Distinctions that should be reflected by case companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>State-owned</td>
</tr>
<tr>
<td></td>
<td>Privately owned</td>
</tr>
<tr>
<td>Sector</td>
<td>Automobile</td>
</tr>
<tr>
<td></td>
<td>New energy</td>
</tr>
<tr>
<td></td>
<td>Machinery</td>
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<tr>
<td>Initial entry mode</td>
<td>Wholly owned acquisition</td>
</tr>
<tr>
<td></td>
<td>Joint venture (acquisition or greenfield)</td>
</tr>
<tr>
<td></td>
<td>Wholly owned greenfield investment</td>
</tr>
</tbody>
</table>

### 2.4. Reliability

Reliability refers to the extent to which data collection techniques and analysis procedures will yield consistent findings. Easterby-Smith et al. (2008:109) state that reliability can be evaluated through the following three questions: (1) whether the measures would yield the same result on other occasions,
(2) whether other observers would reach similar observations and (3) whether there is transparency in how sense was made from raw data.

Since the data used in the quantitative analysis is secondary and includes no subjective variables, the same results should be reached on all occasions, thus indicating a high level of reliability. However, the data retrieved from Orbis represent a cross-section of Chinese subsidiaries that were registered in the database at the moment of data extraction. Companies that have been shut down do not appear in a data search, which means that the sample differs depending on when the data is extracted.

In order to make data collection and processing as transparent as possible, all measures and procedures are described in detail either in the text or in the appendix. Objective criteria were followed in the categorization of the data and choice of methods, which could easily be repeated by others. However, concerning the cluster analysis, the choice of method, although explained in detail, was arbitrary and other researchers might have chosen differently.

The qualitative analysis included in this thesis is based solely on secondary data. While the obtained information might not be able to answer the affiliated questions as precisely a primary inquiry could, this approach increases the likelihood that other researchers would reach similar observations and results. This is because no contextual factors, such as the circumstances under which data was collected or the behavior of the researcher, influence the information gathered.

2.5. Validity

Validity refers to whether the findings are actually about what they appear to be about. This is especially important in connection with causal relationship in the regression analysis in chapter six (Robson, 2002). Since Chinese investment in Europe is still at a very low level (see chapter five), causal ambiguity is not an important issue in the analysis of country characteristics that attract Chinese FDI. For example, it is very unlikely that Chinese subsidiaries have a significant impact on host country gross domestic product (GDP) or expenditure on R&D. All in all, causal ambiguity is therefore not estimated to be a problem for the analysis.

One should keep in mind that the independent variables used in the regression analysis are only proxies for factors that could not be directly observed. While proxies were chosen according to their ability to accurately reflect the underlying variables, the use of other proxies could yield different results. Additionally, identified relationships could be caused by factors that are not included in the
model (omitted variables bias), in this paper especially conditions and institutions that companies face in the domestic market and push the companies to invest abroad. While several authors (e.g. Deng, 2004; Luo & Tung, 2007) have stated that Chinese ODI is primarily motivated by pull factors, certain push factors, among others the existence of a very competitive environment at home and the lack of developed intellectual property rights have been recognized in the literature to be some of the drivers behind the internationalization of Chinese companies (e.g. Yiu, Lau & Bruton, 2007; Luo & Tung, 2007; Liu & Tian, 2008). The analysis of such company- or industry-level push-factors will only be dwelt upon as part of the case studies, but the inclusion in the quantitative analysis is beyond the scope of this thesis. This is likely to weaken the explanatory power of the model and there is a possibility that relationships identified in the analysis are indeed influenced by quite different factors faced by the investors in the domestic market.

The sample includes all subsidiaries of Chinese companies that could be identified and for which all necessary data was available. While no claim of completeness is made, the sample should still represent a large part of Chinese FDI activities in Europe. The results of the quantitative analysis thus have a good generalizability.

The case study analysis uses only secondary data, which was collected and published for a different purpose than the one they are applied to in this thesis. This may result in the misinterpretation of the realities to be examined and may compromise the validity of the findings. Moreover, the requirement for secondary data limits the case examples to very large companies. The results do thus not reflect smaller companies’ FDI patterns or motives.

There is vast criticism for the generalization of results found through case studies, as it lacks standardized data necessary for generalization. In addition, the sample size is too small to justify statements on the entire population of asset-seeking investments. While prevalent tendencies discovered in the analysis of diverse cases can be an indicator of generalizability, it is therefore still important to remember that the findings of the case studies are unique to the specific companies. More research would have to be conducted, before general statements about asset-seeking FDI can be made.
3. Theoretical concepts

The following chapter summarizes existing theoretical concepts on FDI. They are divided into conventional and new theories, where the former were developed based on MNEs from industrialized countries and the latter have their origins in the study of investors from emerging markets.

3.1. FDI theories based on investors from developed countries

Conventional theories of FDI, developed on the basis of studies on companies from developed countries, generally focus on transaction costs, firstmover advantages, oligopolistic competition, barriers to entry and the existence of sustainable competitive advantages. The theories described below are the monopolistic advantages and life cycle theory, the oligopolistic reaction theory, the gravity approach and Uppsala model, internalization theory and, last but not least, the OLI paradigm, which combines several approaches in a single framework.

3.1.1. The monopolistic advantage and life cycle theory

The foundation of the monopolistic advantage theory, as well as the fundamentals of the theory on the multinational enterprise and foreign direct investment itself, was laid by Stephen Hymer in 1960 (published in 1976). He was the first to make the distinction between portfolio and direct investment based on the amount of control in the investment enterprise, the latter being characterized by an equity ownership of at least 25% in a foreign company. Hymer saw imperfect markets and the existence of monopolistic advantages as prerequisites for FDI. Accordingly, only companies already dominant in the domestic market would be motivated to consider FDI. Hymer presumed that in the absence of monopolistic advantages, local companies would always be more competitive due to the so-called liability of foreignness, which is the additional cost incurred by MNCs operating in a foreign country. These include costs incurred by spatial distance, unfamiliarity with the local market and culture, costs resulting from political-economic characteristics and costs from the home country environment (Zaheer, 1995). Caves (1982) extended the monopolistic advantages to include ‘intangible resources’ such as managerial and innovative skills as a source of product differentiation and thereby of monopolistic advantages. Vernon (1966) agreed on monopolistic advantages as a determinant of FDI, but defines such advantages as the ability to innovate and produce new products. He also found that internationalization follows stages in a product’s life-cycle: As a product becomes more and more
standardized and companies find it necessary to expand in size, manufacturing moves from the (developed) country of invention to more cost-efficient production locations. Vernon thus regarded it as a necessity that a higher level of technology is present in the home market relative to the host market in order for FDI to take place.

3.1.2. The oligopolistic reaction theory
Knickerbocker (1973) observed that FDI with the objective of international production is a company’s reaction to the anticipated actions of its oligopolistic competitors. Based on his analysis of American firms in the 1948 – 1967 period, he states that when one member of an oligopolistic industry invests in manufacturing facilities in a foreign market, the risk-avoiding members of that industry will ‘follow the leader’. Knickerbocker postulates that this behavior is of a defensive nature and serves to maintain the balance in a certain industry. He argues that the degree to which such a reaction occurs depends on several industry characteristics, such as concentration, product diversity, market growth and the intensity of R&D and advertising. Although developed for US companies, corresponding conduct has also been observed for raw material industries of developing countries and semiconductor industries in south-east Asia (Vernon, 1983).

3.1.3. The gravity approach and the Uppsala model
The gravity approach emphasizes the importance of geographical and cultural proximity between investors and host countries. It was first developed by Tinbergen in 1962 to predict bilateral trade flows between two countries, but it can also be applied to FDI. It states that the closer two countries are with respect to their geographical distance, their culture and their level of economic development, the higher are the FDI flows between these countries. The underlying reason are transaction costs caused by the liability of foreignness, which increase the farther two countries are from each other.

Closely related to the gravity approach is the Uppsala model. Originally developed on the basis of Scandinavian firms by Johanson and Vahlne (1977), it has more recently also been applied to developing countries (e.g. Beausang, 2003). The Uppsala model states that firms internationalize in stages, first investing in countries nearby and afterwards moving to increasingly distant countries as their experience with foreign operations grows. As in the gravity approach, distance cannot only be measured geographically, but also in terms of e.g. culture and institutions. Similarly, companies follow stages in terms of asset commitment, starting at the initial exporting stage and slowly moving to FDI as their market knowledge improves. In other words, the choice of FDI location depends on the
perceived distance to the host country and the degree of resource commitment depends on the investor’s international experience.

3.1.4. The internalization theory

The internalization theory made the multinational enterprise as an institution to the subject of examination. Researchers tried to explain why companies chose to become involved in international production themselves, instead of using licensing or supply agreements with local businesses in the foreign market (Barclay, 2000). The focal point is the existence of market failure, which can cause the intra-firm exploitation of advantages to be more efficient than market-based transactions. FDI is thus explained mainly by lower transaction costs, the basic idea being that a company will internalize markets until the costs of doing so will outweigh the benefits (Casson, 1979; Buckley, 1983). In cases where such functions are carried out in a foreign country, internalization theory can explain the existence of FDI (e.g. Buckley & Casson, 1976; Teece, 1977; Casson, 1979). By replacing imperfect external markets in inputs or knowledge, companies can gain an advantage over competitors who rely on open market transactions to obtain the corresponding resource. The internalization theory sees internationalization as a dynamic process, where foreign investors will protect their company-specific advantages by maintaining control over the functions that amount to these advantages.

3.1.5. The eclectic paradigm (OLI)

Dunning’s eclectic paradigm (1977, 1980, 1993) combines various theoretical perspectives, including internalization theory and monopolistic advantage theory, in a single framework. Originally, Dunning’s focus was on explaining international production (Pitelis & Teece, 2010), but the framework has since also been applied to FDI with other characteristics. Dunning specifies three conditions that determine whether or not a company will internationalize through FDI: ownership-specific advantages (O), location-specific advantages (L) and internalization-specific advantages (I). The framework is therefore also referred to as the OLI paradigm.

Ownership-specific advantages build on the concept of monopolistic advantages. They are unique to the individual firm and represent a competitive advantage over incumbent firms in the foreign market. Such assets can take many forms, including know-how, processes, skills, technologies, low costs, physical assets and the ability to coordinate assets across national borders. In order to be sustainable, ownership-specific advantages have to be scarce and difficult to imitate by competitors. More recently, organizational learning capabilities, human and social capital and relational assets, such as
networking skills, have been added to the list of possible ownership specific advantages to update the OLI paradigm and to make it more dynamic. (Dunning, 2001; Erdener and Shapiro, 2005).

Location-specific advantages refer to host country characteristics which can affect the performance of a foreign investor in the market. The source of location-specific advantages of one country over another can be superior market opportunities, natural resources, low-cost labor, a skilled workforce, the possibility to gain access to valued inputs, or a favorable institutional, legal and cultural environment. Location-specific factors also include the potential investment risk associated with a certain market.

Internalization advantages are based on the idea of transaction costs and stem from the internalization of stages in the value chain outside of the home country. If an activity can be carried out cheaper or more effectively within a company than outside of it, transaction costs are reduced and the function should be internalized. Internalization advantages primarily concern the degree of control over foreign operations, e.g. over production, marketing and proprietary knowledge.

Recently, Dunning & Lundan (2008) illustrated how the OLI framework can be enlarged to include both domestic and host country institutions as determinants of ownership-, location- and internalization-specific advantages.

Motives for FDI

Four motives for FDI are derived from Dunning’s eclectic paradigm: market-seeking FDI, natural resource-seeking, efficiency seeking FDI and strategic-asset seeking FDI (e.g. Dunning & Lundan, 2008).

Market-seeking FDI

The objective of market-seeking FDI is to explore foreign markets. It is essentially a horizontal expansion and can concern production, marketing or sales (Dicken, 2007). One differentiates between defensive and offensive market-seeking FDI (Buckley et al., 2007). Defensive market-seeking FDI includes import-substituting investment as well as those that serve the goal of evading trade barriers and escaping tight competition and access capacity at home. Offensive market-seeking FDI stems from the desire to utilize attractive opportunities abroad to develop new markets and reach sustained company growth. It includes investments with the purpose of serving trade supporting functions, to facilitate exports or to enhance exports from the host country into other markets (BusinessWeek, 2005).
Strategic asset-seeking FDI
Strategic asset-seeking FDI has the objective of acquiring both tangible and intangible firm-specific assets, such as managerial capabilities, proprietary advanced technologies, technological know-how, cutting-edge manufacturing know-how, marketing skills and practices, brands, patents, and capacity for R&D and innovation. Access to strategic resources can be gained by several tactics. For instance, the location of a subsidiary close to clusters in foreign markets gives access to a knowledgeable workforce and collaborative partnerships can potentially lead to the mutual transfer of knowledge and technologies. Alternatively, the acquisition of a company gives access to all its assets and resource systems at once (Rui & Yip, 2007).

Efficiency-seeking FDI
Efficiency-seeking FDI is based on transaction costs. It takes advantage of different factor endowments in order to reorganize and rationalize a company’s activities. Companies engage in efficiency-seeking FDI when certain functions can be performed more efficiently, i.e. cheaper, in the host country than at home. Among others, efficiency-seeking FDI can take advantage of low wages or government incentives, or seek to establish production or marketing activities close to customers.

Natural resource-seeking FDI
Natural resource seeking FDI has the objective to gain access to raw materials that are not or not as efficiently available in the home market.

3.2. FDI theories based on investors from emerging markets
It has been argued that conventional theories cannot adequately explain FDI flows from emerging markets into developed economies. Consequently, a number of new theories have recently been developed on the basis of EMNEs. These new theories stress the importance of knowledge, networks, learning and the institutional environment as factors that influence a company’s foreign activities.

The main new theory that will be used in this thesis is the latecomer theory (Mathews, 2002), as it is one of the most prevalent approaches in the literature. On the basis of the latecomer theory more specific concepts have been developed. One of these is the springboard view (Luo & Tung, 2007), which differs from the latecomer theory in a few important assumptions. The third model to be included in the analysis is the institutional theory, as institutions are generally considered an important aspect in the Chinese economy (e.g. Child & Tse, 2001).
3.2.1. The latecomer theory

The first notions of “late development” appeared several decades ago. They were initially applied to Japan (Dore, 1973) and later to the emergent economies of East Asia, mainly South Korea, Hong Kong, Taiwan and Singapore (Child & Rodrigues, 2005). These countries were described as having to “catch up” to early industrialized countries in terms of technology, know-how and a supportive business environment.

More recently, the latecomer theory was formulated by Mathews (2002) to explain how companies from developing countries successfully compete with Western firms, although they initially lack competitive advantages. A latecomer firm is not the same as a late entrant in the traditional sense, as its late entry is not determined by strategy, but by historical necessity brought about by the political and economic development restraints of the home country.

Initially, latecomer firms are resource-poor, although they do possess some competitive advantages mainly derived through their home country environment, e.g. cost effectiveness, flexibility and a knowledge-based business model (Buckley, Wang & Clegg, 2007). These country-specific advantages are exploited to enable the latecomer firm to establish a position in the international market (Mathews, 2002).

An important characteristic of latecomer firms is their rationally and systematically designed strategy to move out of the latecomer category as fast as possible. According to Mathews, latecomer firms strive to overcome their competitive disadvantages through the following strategic means: linkage with advanced companies, leveraging resources from such linkages and learning. Networks play an important role for latecomer firms, as they can be helpful in overcoming information asymmetries in connection with regulations, policies, ODI opportunities, information about foreign markets and financial support.

Especially in knowledge-intensive high-technology industries, linkages to companies with complementary assets may only be accessible through internationalization, because the necessary know-how might not be available in the home market (Dicken, 2007). Therefore, opposite to conventional theory, internationalization is a way to address competitive disadvantages. The internationalization of latecomer firms is thus seen as the means, rather than the end, of international success. Nicolas & Thomsen (2008) argue that FDI activities might actually be a sign of weakness, not strength. Rios-Morales & Brennan (2010) furthermore postulate that the acquisition of technology can occur in order to improve competitiveness in the home market instead of internationally.
Several entry strategies enable latecomer firms to gain access to strategic resources through FDI. First, the acquisition of a company gives quick access to an entire knowledge base and enables a company to overcome constraints for the internal development of new resources (Rui & Yip, 2007). Such acquisitions are seen as the result of a committed search for strategic assets. An alternative and less costly strategy for gaining access to technology is to create listening posts in high-tech regions or industry clusters through greenfield investment (Mathews, 2002). Resources are thus usually acquired through firm-to-firm contractual connections or through spillover effects, instead of from the open market.

Contrary to traditional theory and the concept of ownership-specific advantages, latecomer firms do not usually seek sustainable competitive advantages, but instead target resources belonging to incumbent firms that are most transferable, least rare and most imitable. Mathews (2002) describes the products that are easiest to imitate as those that are the least path dependent and do not require much tacit knowledge. Correspondingly, the theory suggests that targeted industries are usually those where standardization has occurred and products are turning into commodities.

Latecomer firms can derive advantages from leveraging incumbent firm’s resources, because they have fewer deeply embedded routines and therefore face fewer constraints when integrating new ideas and innovations (Luo & Rui, 2009). Moreover, they can combine advanced technology with a low-cost base and do not have to replicate the previous technological trajectory (Mathews, 2002). The liability of foreignness is offset by the advantages gained from the acquisitions of strategic assets and the reliance on host country management teams to organize and manage sophisticated activities, if local management is in charge (Luo & Tung, 2007). Thus the investor companies remain dependent on technological support developed countries, since they are unable to innovate independently (Wu & Callahan, 2005).

3.2.2. The Springboard view

In their springboard view, Luo & Tung (2007) assert many aspects of the latecomer theory, such as the systematical internationalization of latecomer firms as a springboard to overcome latecomer disadvantages and competitive weaknesses. However, they stress that the acquisition of strategic resources occurs recursively and has a long-term perspective. Acquired assets thus not only serve to build a more solid global competitive position and reputation, but are also relied upon to generate future growth. According to them, the ultimate goal of investors from emerging markets is to become able to be innovative themselves, as they cannot rely on acquired assets forever. The authors
furthermore argue that long-term success depends on the ability to simultaneously exploit core competences at home and explore new opportunities abroad.

3.2.3. **Institutional theory and the government steward logic**

As attention on companies from emerging countries increased, scholars turned their attention to the importance of institutions on strategy. North (1990) laid the foundation by observing that informal and formal institutions, including governmental institutions as well as norms and cognitions, heavily influence the environment and context in which decisions are made. Institutional theory sees companies as embedded in the social and economic relations within a society (Scott, 1995).

The government steward logic developed by Deng (2004) extends the institutional theory by declaring that in developing countries, governmental institutions often have a strong influence on the activities of domestic companies. This influence is both direct, through administrative control and indirect through economic policies and close links between top-ranking business executives and government authorities (Milelli & Hay, 2008). Companies thus do not make independent decisions, but instead tend to follow the country’s political agenda, which in turn is discernible in company strategy. This influence is likely to be largest in companies with significant government control.

Apart from the influence of home country institutions, the quality of the institutional environment in the host country can influence the location of FDI. Institutional theory thus states that companies will prefer arms-length transactions to substantial sunk costs in the form of FDI in countries that are characterized by high political risk (Buckley & Casson, 1981, 1999) Everything else equal, high political risk is therefore negatively associated with FDI inflows, which has been confirmed by a number of studies (e.g. Chakrabarti, 2001; Alfaro, Kalemli-Ozcan & Volosovych, 2008; Globerman & Shapiro, 2002).

3.3. **Summary and outlook**

From the perspective of traditional FDI theories, one would expect only little FDI from China to Europe. The gravity approach predicts only little FDI flows between China and Europe compared to China’s total FDI, due to the large cultural and geographical distance. In addition, China lacks both the superior technology and international experience that are regarded to be a prerequisite for foreign investment in Europe. Neither can Chinese investors reduce their costs by investing in Europe. When
such FDI does occur, traditional theories therefore explain it by advantages that are generic to the country as opposed to firm specific, by the impulse to follow competitors, or by the argument that inter-firm transactions are better than market transactions for a reason other than costs. The acquisition of strategic assets is only believed to be of interest, if such assets contribute to increasing company-specific advantages.

The latecomer theory implicates that FDI in Europe is attractive for initially resource-poor Chinese investors who wish to acquire strategic assets of a different kind. It states that resources that are easy to be copied and transferred are targeted, since they can be absorbed by the investor without difficulty. Through their ability to learn from their partners in Europe, Chinese companies can thus improve the competitive position both at home and abroad. In contrast to the latecomer approach, the springboard view sees the long-term absorption of innovative capabilities as the ultimate goal of such FDI activities. Institutional theories point out that the Chinese government and other institutional factors are likely to be an influencing factor in the FDI decisions of Chinese companies.

As mentioned, three different types of analysis will be used in order to be able to evaluate all of them with respect to Chinese FDI in Europe. Table 2 provides an overview over which theories or which aspects of the theories the three research methods are capable of drawing conclusions on.

Table 2: Overview over the theory analysis

<table>
<thead>
<tr>
<th>Theory/Paradigm</th>
<th>Descriptive analysis</th>
<th>Regression analysis</th>
<th>Case analysis</th>
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<tbody>
<tr>
<td>Monopolistic advantages theory</td>
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<td>Oligopolistic reaction theory</td>
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<td>Gravity approach</td>
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<tr>
<td>Uppsala model</td>
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<tr>
<td>Geographical</td>
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<td>Resources</td>
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<td>Internalization theory</td>
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<td>Eclectic paradigm</td>
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<tr>
<td>Ownership-specific advantages</td>
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<td>Location-specific advantages</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Internalization advantages</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Investment motives</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Latecomer theory</td>
<td></td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Springboard view</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Institutional theory</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
4. Literature Review

The remarkable increase in outward FDI activities by companies from emerging markets has given rise to a new research field. Research on the motives for Chinese global outward FDI will be summarized in the first section of this chapter, while the second section presents literature on Chinese FDI in Europe. Section three focuses on studies that have tried to evaluate the relevance of the various FDI theories. Section four concludes on this chapter.

4.1. Literature on global Chinese outward FDI

To date, much of the literature on Chinese outward FDI is highly descriptive and only during the last couple of years has the analysis become more sophisticated (Cheung & Suny, 2009). On a global scale, several quantitative studies have been conducted to determine which host country factors attract Chinese FDI and consequently, which motives stand behind it. Such research generally concludes that Chinese outward FDI tends to be located in large, geographically close host countries with a sizable Chinese population, high levels of risk and abundant natural resources (e.g. Cheung & Suny, 2009; Buckley et al., 2007; Deng, 2004; Ramasamy et al., 2010). The finding that Chinese companies are attracted to high levels of risk is puzzling and it has been argued that Chinese companies are attracted to high risk, because they are used to operate under uncertain conditions and are familiar with a system in which there are many informal ways of getting things done (He & Lyles, 2008).

The literature finds evidence that investment projects in developed and developing countries are motivated by different factors. The general consensus is that Chinese companies are attracted by both markets and strategic assets when investing in developed economies (e.g. Cheung & Suny, 2009).

4.2. Literature on Chinese outward FDI in Europe

Chinese FDI in Europe has not been analyzed until recently. Due to the newness of the field, methods used to discover what motivates Chinese companies to invest in Europe have almost exclusively been qualitative, i.e. case studies, interviews and surveys. An exception is the study by Shi, Hay & Milelli (2010), who use individual company data in their analysis. They find that companies from mainland
China came into Europe mostly after 2002, prefer Greenfield investment in Western Europe and focus on sectors like chemistry, steel and automobile equipment.

Research applying Dunning’s OLI paradigm revolves around the question whether market-seeking or strategic asset-seeking is the main driver for Chinese FDI in Europe. Deng (2004) argues that asset-seeking motives are most likely to guide Chinese investment decisions in Europe. Rugman & Li (2007) take the opposing view by arguing that only few EMNEs go abroad to gain access to knowledge and technology. By reviewing existing literature, Nicolas (2009) finds that market-seeking motives are most important for Chinese investment in Europe, followed by strategic asset-seeking considerations.

Due to the prevailing differences between Eastern and Western European states, it has been suggested that different motivations lie behind Chinese investment into these two regions. Several authors (e.g. Zhang & Filippov, 2009; Nicolas & Thomsen, 2008; Mathieu, 2006), have analyzed the composition of Chinese investments in Eastern Europe and come to the conclusion that companies may use Eastern Europe as a manufacturing hub for products for sale in Western European markets. The consensus is that the establishment of subsidiaries in Eastern European countries stems from a desire to avoid tariffs for manufactured goods, as trade barriers can be avoided by locating e.g. manufacturing processes within the common market.

4.3. Literature on the relevance of existing FDI theories

As mentioned previously, much of the current literature revolves around the question whether or not traditional theories can explain FDI flows from emerging markets into developed countries, or whether they need to be extended or replaced by new frameworks. Advocates of conventional theories on the one hand explain the ability of Chinese firms to compete through country specific advantages (e.g. Rugman & Li, 2007; Nguyen, Okrend & Tang, 2010) or state that the main difference between FDI from developed and emerging economies lies in the weighting of motives (Nicolas & Thomsen, 2008). Proponents of new theoretical concepts on the other hand argue that Chinese firms are in the process of creating a new form of business organization, which internationalizes in order to overcome competitive disadvantages both at home and abroad (e.g. Child & Rodrigues, 2005; Nicolas & Thomsen, 2008; Luo & Tung, 2007; Parmentola, 2011; Ramasamy, et al., 2010). In their case study on Chinese FDI in Denmark, Torp, Hansen and Schaumburg-Müller (2011) find evidence for the applicability of both old and new concepts, while Nolan (2001) states that in accordance with new
theories of FDI, large Chinese companies were in a weak competitive position at the time of the go
global policy in terms of R&D, marketing capabilities and brand development.

Furthermore, Luo & Tung (2007) point out that Chinese FDI in developed countries is in many cases
not path dependent in terms of entry mode or location decision, thus contradicting the Uppsala model
of internationalization. Both findings support the applicability of the latecomer theory to Chinese
outward FDI.

Several studies have shown that Chinese FDI used to be deliberately directed by the government
(Zhan, 1995; Ye, 1992; Liu & Li, 2002). The objective was to support the export function of state-
owned manufacturers, providing stability to natural resource access and the acquisition of information
and learning about how to operate on an international level. Evidence on how much influence on
strategic decisions by domestic companies the Chinese government still has today is ambiguous. Deng
(2004) postulates that government priorities guide company decisions both directly and indirectly and
Ramasamy et al. (2010) deduce that such influence is largest in state-owned enterprises (SOEs), which
thus often have different motives for and characteristics of FDI. According to them, private firms tend
to be market seekers while SOEs are motivated by access to natural resources and risky environments.
This low degree of risk-averseness may also stem from the fact that SOEs have preferential access to
capital below market rates (Zhang & Filippov, 2009). Chinese banks (which are mostly state-owned
themselves) prefer granting loans for SOEs, as they are backed financially by the Chinese government
and because Chinese banks are as yet inexperienced in evaluating private company credit risk (Mork
et al., 2007). In contrast the views just stated, Nicolas & Thomsen (2008) and He & Lyles (2008)
claim that state intervention in Chinese companies is generally exaggerated and that even SOEs have
gone through massive restructuring and have become much more independent.

4.4. Summary

The existing literature covers a number of areas that will also be the focus of this thesis. However,
detailed analysis of Chinese FDI in Europe has only been exclusively descriptive qualitative in nature.
These research methods are very suitable for the examination of new phenomena, but have their limits
in respectively sophisticated interpretation and generalizability. No quantitative analysis of the host
country factors that attract Chinese FDI has yet been conducted for the case of Chinese investors in
Europe. Neither has the applicability of FDI theories yet been analyzed for the specific case of
European subsidiaries. By combining a quantitative analysis of company data with case studies, this
thesis has the potential to present a more comprehensive picture of Chinese internationalization
strategies in Europe.
5. Descriptive analysis of Chinese outward FDI

This chapter seeks to answer the first subsequent research question and by focusing on the characteristics and composition of Chinese FDI in Europe. Apart from giving a comprehensive overview over the Chinese subsidiaries located in Europe, the findings can also contribute to an evaluation of the motives behind Chinese FDI.

The chapter begins with an overview over the institutional background and economic policies that have over time both restricted and encouraged Chinese outward FDI. A short description over the locational distribution of China’s global outward FDI volumes follows in section two.

Afterwards, collected company data will be described according to characteristics such as location, entry mode, function, sectorial distribution, size in section three. The distribution of investor characteristics will be subject of section four. In section five, a cluster analysis will be conducted to identify groups of subsidiaries with common characteristics. The last section briefly summarizes the findings.

5.1. Historical development of Chinese outward FDI

Chinese outward FDI was prohibited until 1979, when it was officially permitted as part of China’s “Open Door“ policy (Buckley et al., 2007). At the time, only state- and local-government-owned enterprises were allowed to invest abroad. Investment was driven by political rather than economic considerations (Cheung & Suny, 2009) and often took place in sectors of national importance (Buckley et al., 2008). The first generation of Chinese MNEs thus consisted of large state-owned enterprises (SOEs) that benefited from a domestic monopoly in industries like financial services, shipping, international trading and natural resources (Nicolas & Thomsen, 2008). Later, private enterprises were permitted to apply for FDI projects, but complex processes and procedures as well as fund limitations restricted the amount and autonomy of their foreign investment (Buckley et al., 2007).

It was not until 1992 that Chinese outward FDI policy was significantly liberalized, which resulted in a wave of outward FDI from companies with a more diversified ownership structure. However, many FDI projects did not perform well due to the lack of investment know-how and strategic focus, corruption and ignorance about the rule of law in overseas markets (Cheung & Suny, 2009; Child & Rodrigues, 2005). Consequently, after an initial upsurge of FDI, the approval procedures were tightened again to ensure that capital was invested properly overseas (Nicolas & Thomsen, 2008).
In 1999, Chinese outward FDI regulations took another significant leap forward with the “go global” policy, which encouraged outward investment. It was fully implemented in 2002, right after China joined the WTO (World Trade Organization), and has been re-emphasized in China’s 10th and 11th five year plans (2001-2006 and 2006-2011). Frequently quoted reasons for China’s present support for outward FDI are the wish to improve the domestic technological know-how and the need for diversified investment opportunities for China’s massive foreign currency reserves (Cheung & Suny, 2009; EIUL, 2009).

Measures to support outward FDI included tax rebates, cheap capital and financial underwriting of large investment projects, access to state-supported scientific and technical research, privileged access to educational markets, simplified approval procedures and lifting of the foreign exchange purchase constraint for FDI (Nicolas & Thomsen, 2008; Child & Rodrigues, 2005; Filippov & Saebi, 2008). Another area in which the importance of the Chinese government cannot be ignored is the provision of information through the establishment of databases containing market research and information about investment opportunities and legislation (Rios-Morales & Brennan, 2010). The reforms have facilitated outward FDI activities significantly; however, Chinese authorities still state explicit goals for outward FDI and actively encourage FDI projects in selected sectors. In addition, a certain power over outward investors remains due to the fact that FDI projects still have to be officially approved (Cheung & Suny, 2009). The government steward logic, while significantly decreased in importance, thus continues to hold some merit for Chinese FDI. State-owned companies still hold a dominant position in global FDI volumes (MOFCOM, 2010).

### 5.2. Chinese outward FDI volumes

Chinese FDI increased tenfold between 2003 ($33 billion) and 2010 and reached a total stock volume of $317 billion in 2010 (the source of all data on FDI volumes, unless otherwise stated, is the 2010 Statistical Bulletin of China’s Outward Foreign Direct Investment, published by MOFCOM). Despite of this impressive increase, China’s FDI is still low compared to its GDP, as the country’s score in UNCTAD’s FDI performance index, which measures the relative importance of a country’s outward FDI against its economic size, is below that of all other BRIC countries (Brazil, Russia, India, China). State-owned companies continue to stand for the great majority of FDI from China and the largest FDI players overlap substantially with the country’s most profitable SOEs (Mork et al., 2007). Indeed, of the 50 largest outward investors measured by FDI stock (MoFcom, 2010), only three companies are not owned by the national or local government.
The by far most prominent destination for Chinese FDI is Hong Kong, which stood for 74% and 63% of total FDI stock in 2003 and 2010 respectively (see Figure 2). The international financial centers Cayman Islands and British Virgin Islands hold an unchanged second position with 13%. Much of this investment returns to the Chinese mainland. This so-called “round-tripping” is caused by tax incentives for foreign investors into China, which encourages the establishment of small subsidiaries in Hong Kong and international tax havens (e.g. Nguyen, Okrend & Tang, 2010). While the role of funds channeled through tax heavens has increased with respect to FDI in Europe (Godement et al.,
companies that wish to take active control over their subsidiaries are unlikely to cover their investment flows. Hence, while the use of tax heavens does make a precise evaluation of Chinese outward FDI difficult, the results of this thesis should not be overly biased by not including such FDI projects.

The most important destination for outward FDI except Hong Kong and tax havens were other countries in Asia.

Chinese investment into Europe has increased more than Chinese FDI stock in total, its share in total Chinese investment rising from 1% in 2003 to 4% in 2010 (see Figure 2). However, a large part of this increase was located in Luxembourg, where Chinese investment went from zero to $6.7 billion between 2006 and 2010. This dramatic increase is likely to be the result of investments in the financial sector or at least in subsidiaries with a financial function. As mentioned, such investment will be excluded from the analysis and its steep increase in Chinese investment will hence not be reflected in the results. The European countries that in 2010 by far hosted the largest volumes of Chinese FDI were Germany, Sweden, and the UK. Sweden reaches an impressive second rank, because of Zhejiang Geely Holding’s acquisition of Volvo that same year. FDI is concentrated in the old member states of the EU. Excluding Luxembourg, the share of FDI stock located in new member states lay fairly constant between 8% and 12% each year.

Without Luxembourg, FDI within the analyzed region only constitutes for 2% of China’s worldwide FDI stock. From the EU’s point of view, the phenomenon of Chinese FDI seems even less significant: According to Eurostat, FDI stock with Chinese origin constituted only 0.23% of total inward FDI stock and 1.66% of FDI inflows that originated outside of the EU in 2010. At present, the economic impact of Chinese FDI in Europe is therefore negligible. However, since it is unknown how many funds might be channeled through Hong Kong or international tax havens, no definite conclusion on the applicability of the gravity approach and the geographical prediction of the Uppsala model can therefore be made based solely on FDI statistics.

It should be noted that the growth rates of Chinese FDI in Europe are unusually high, peaking in 2007 (125% increase in FDI stock) and in 2010 (80%), with FDI stock increasing 16-fold between 2003 and 2010. If this trend continues, Chinese FDI is bound to gain in economic importance.
5.3. Composition of subsidiary characteristics

This section describes the composition of Chinese FDI in Europe with respect to individual subsidiary characteristics. Apart from being instructive in itself, such information will also be drawn on in further analysis in subsequent chapters.

5.3.1. Number of FDI projects per year

The number of Chinese direct investments made in Europe increased considerably between 2003 and 2004 (see Figure 3), perhaps an indication of a certain break between the time China’s outward FDI policy was liberalized and the visibility of effect. Since then, the yearly number of Chinese direct investments has increased slowly but steadily, except for a peak in 2007 (which was caused by the acquisition of large companies with several subsidiaries within Europe).

Figure 3: Number of Chinese direct investments by year

![Figure 3: Number of Chinese direct investments by year](image)

In the course of the following analysis, the years taken into consideration will in some cases be shown individually or divided into two time periods to identify any changes that have occurred over time. The corresponding subsample sizes are given in Table 3.

Table 3: Number of Chinese investments by time period

<table>
<thead>
<tr>
<th>Year</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>All years</td>
<td>548</td>
</tr>
<tr>
<td>2003-2006</td>
<td>205</td>
</tr>
<tr>
<td>2007-2010</td>
<td>343</td>
</tr>
</tbody>
</table>
5.3.2. Subsidiary location

The countries in which most Chinese subsidiaries are located are Germany with 37%, followed by the Netherlands, the UK, France and Spain (see Figure 4). While only 11% (59 companies) of all subsidiaries are located in the new member states, it is noteworthy that three countries in Eastern Europe, namely Romania, Poland and the Czech Republic, are hosts to relatively many Chinese companies. Indeed, they occupy ranks five, seven and eight among all countries included in the analysis. In the member states that joined the EU in 2004, only 2 subsidiaries were registered before the enlargement took place. Interestingly, though, Romania attracted Chinese companies already before its accession to the EU in 2007.

Figure 4: Number of Chinese subsidiaries by country

5.3.3. Subsidiary size

The size of the Chinese investor can be measured by a number of variables, e.g. assets, revenue, profit, or the number of employees. Related information was not publicly available for many investors. Therefore, Orbis’s own classification of company size was used to categorize the subsidiaries according to their size. Orbis’ classification of size can be found in Appendix 1.

As can be seen in Figure 5, almost all Chinese subsidiaries in Europe are categorized as small or very large in size. The composition of subsidiary size in the years included in the sample only changed marginally, with small and very large companies always clearly representing the largest and second-largest position respectively.

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4 Cyprus (not included in the analysis), Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta (not included in the analysis), Poland, Slovakia and Slovenia
5.3.4. Entry mode

According to Cui & Jiang (2008), the entry mode choice of Chinese MNEs depends primarily on the firm’s strategic fit in the host industry and its strategic intent of the investment. The entry mode can thus be informative with respect to FDI objective and motivation.

Each Chinese subsidiary was classified according to the chosen entry mode at the time of the initial investment. Entry mode was defined along two dimensions, namely wholly owned/joint venture (i.e. jointly owned) and greenfield/acquisition.

Since the objective of making the distinction between wholly owned subsidiaries and joint ventures is to examine which companies rely on local European partners, companies established by two Chinese owners were recorded as wholly owned investments (as they are wholly owned by Chinese entities) and only registered once in the data.
The data depicted in Figure 6 shows that 77% of all Chinese subsidiaries in Europe were established by greenfield investment, which hence is much more common than acquisition as entry mode. This is in accordance with findings by Shi, Hay & Milelli (2010). Additionally, an equal 77% of all subsidiaries are wholly owned, making the by far most popular mode of entry wholly owned greenfield investment, representing 60% of all subsidiaries.

Looking at how the composition if Chinese FDI has changed with respect to entry mode over the analyzed period, it becomes apparent that greenfield joint ventures only played an important role in 2003 and 2004. This is in accordance with Buckley et al.’s (2008) global study on Chinese outward FDI, which finds that wholly-owned projects have increasingly displaced joint ventures since the mid-1990s.

It thus seems that Chinese investors today rely less on the assistance of local partners than they used to. When all subsidiaries included in the sample are taken in consideration, the years 2005, 2007 and 2011 stand out due to an unusual large share of acquisitions. However, Chinese companies frequently acquire companies that in turn have several subsidiaries within Europe (e.g. Lenovo and SGSB Group in 2005, CIMC in 2007). Cancelling out this effect and counting every acquisition decision only once, the share of acquisitions remained relatively stable.
5.3.5. Subsidiary function

Every subsidiary was only assigned one function, even if several functions were discernible on Orbis or on the company’s website. Following Shi, Hay & Milelli (2010), the hierarchy R&D – Manufacturing – Services was adapted, since the prior usually also entails the following function.

Services are further divided into subcategories, the largest of which, “support activities”, includes all kinds of services that are, in essence, carried out on behalf of the parent company. These activities include import, trade, retail, wholesale, and business, administrative and holding services. There is a further differentiation between construction, logistics and holding companies, as different factors might be important in their investment decision. All other services are combined in the category “services, other”.

As Figure 7 shows, 74% of all Chinese subsidiaries in Europe provide services, mostly support activities for their own company. 16% of subsidiaries are engaged in manufacturing, while only 10% are active in R&D. No noteworthy change in this distribution occurred during the analyzed time period.

Figure 7: Composition of subsidiary functions
5.3.6. **Important sectors**

Traditionally, Chinese companies established European subsidiaries in industries in which it already competed heavily, such as electronics, machinery, appliances, textiles and apparel (Dexter et al., 2004). But in recent years, the number of sectors in which Chinese companies have invested in the EU has increased (Shi, Hay & Milelli, 2010). The collected data reflects that while electronic equipment is still important, investment in the production and wholesale of machinery, automobiles and parts and logistics has increased considerably over the time period studied. Additionally, the renewable energy sector (mostly photovoltaic and wind energy), and pharmaceuticals, chemicals and biotechnology represent new areas of investment.

5.3.7. **Differences between subsidiaries in Eastern and Western Europe**

It has been suggested that investment motives and strategies differ between Chinese FDI into Western and Eastern Europe. Figure 8 shows that there is indeed a difference between the functions undertaken by Chinese subsidiaries. In Eastern Europe, a larger share of subsidiaries is engaged in manufacturing, construction and, to a lesser extent, other services. Such other services consist almost exclusively the provision of telecommunication networks, an activity that is almost non-existent for subsidiaries located in Western Europe.

In turn, relatively fewer subsidiaries are engaged in R&D and supporting activities. This indicates that while the majority of Chinese investors are attracted to Western Europe’s large markets, Eastern Europe’s low wages make it appealing e.g. for the use as a manufacturing location for Chinese products. Chinese investors can thus avoid tariffs and get closer to their customers. In the construction and other sectors, Eastern Europe probably offers lower standards and easier entry than their Western European counterparts.

In addition, the share of subsidiaries that were set up as joint ventures with local partners is twice as high in Eastern than in Western Europe (41% and 22% respectively). The reason may be that Eastern Europe represents a less transparent environment for investment, especially since few Chinese companies have gathered experience in these countries. Therefore, joint ventures with local partners, who know the local market and can be helpful in overcoming cultural and institutional barriers, might appeal to Chinese investors.
5.4. Composition of investor characteristics

For every subsidiary in the sample, the investor was identified and certain characteristics registered to be included in the analysis. These characteristics are ownership (private or state-owned), the existence of foreign subsidiaries before investing in Europe and company size. No definite change over time is discernible for the share of investor characteristics.

5.4.1. State-ownership

As mentioned previously, Chinese SOEs are believed to be strongly influenced by government priorities and enjoy a high degree of financial security. This has led to wide media attention and apprehensions in European host countries, as to the implications for the local economy and politics. For a description of the criteria used in categorizing the investors as state-owned, refer to Appendix 2.

The data shows that contrary to the attention devoted to them in the media, only 33% of Chinese direct investments in Europe were made by state-owned companies. However, these might possible be larger in size and thus tend to have more impact on host country economies.

5.4.2. Prior existence of international subsidiaries

The Uppsala model alleges that internationalization occurs gradually and step by step, while new theories developed for EMNEs claim that no such path dependency exists. The only variable reflecting
international experience that could easily be quantified was whether investors had already had foreign subsidiaries elsewhere before investing in Europe. This is thus the only measure included in the quantitative analysis, but one should keep in mind that companies might have gathered international experience in ways not included in the model, e.g. through joint ventures with European companies in China. As mentioned before, Orbis does not include data on companies that have been dissolved. Consequently, the precise number of existing subsidiaries outside of Europe at the time of investment cannot be determined and there is a certain risk that the number of investors with prior foreign subsidiaries was underestimated.

The share of very large investors and companies that already possessed foreign subsidiaries outside of Europe is only 36%, which means that contrary to the geographical aspect of the Uppsala model, most Chinese investors in Europe do not have experience with managing foreign operations closer to home.

5.4.3. Investor size

The monopolistic advantage theory states that companies that are already dominant in the home market are more likely to consider outward FDI than their competitors. This dominance usually requires a large company size. However, in contrast to this assumption, only 36% of the Chinese subsidiaries in the sample is large or very large in size.

Large companies tend to have access over more resources, both financial and human, to back their internationalization activities and might therefore be more likely to engage in FDI. In addition to the predicted tendency to invest abroad, the advantages associated with company size can also influence how companies decide to invest abroad.

5.5. Identification of distinctive FDI categories

A number of connections might exist between the different characteristics of both the subsidiaries and investors. For instance, given preferential treatment by banks and the government, one might expect a higher propensity for SOEs to invest in large and wholly owned subsidiaries, which are associated with a higher risk. The same tendencies might be supposed of large investors, due to a larger supply of financial resources.
In the identification of distinctive groups, bivariate variable correlations have their limits. For example, 62% of all acquisitions were made by state-owned companies. This statement becomes much larger in importance when taking into consideration that only a third of all investors are state-owned. Also, connections between more than two variables at a time are difficult to evaluate on the basis of only correlations. In order to identify distinct groups of FDI that tend to have a number of variables in common, a cluster analysis will be conducted using SPSS. Such groups can subsequently be analyzed separately with respect to the applicability of FDI theories. An overview over the investment characteristics included in the cluster analysis, frequencies in the sample and abbreviations is provided in Table 4. The variables “R&D” and “Manufacturing” were combined, so that only two possible outcomes for the characteristic “Function” remains. While this entails some loss of information, this grouping is justifiable, because R&D and manufacturing tend to be carried out in close cooperation and one often to a certain extend encompasses the other.

In a preliminary analysis, the variable “JV” was identified as an outlier and excluded from subsequent investigation. The conduction of cluster analysis involves several decisions with respect to the exact methods employed. An overview over the choices made can be found in Appendix 3.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Variable</th>
<th>Number of observations</th>
<th>Share in %</th>
<th>Variable name in cluster analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry mode</td>
<td>Greenfield</td>
<td>421</td>
<td>76.8%</td>
<td>Greenfield</td>
</tr>
<tr>
<td></td>
<td>Acquisition</td>
<td>127</td>
<td>23.2%</td>
<td></td>
</tr>
<tr>
<td>Degree of ownership</td>
<td>Wholly owned</td>
<td>419</td>
<td>76.5%</td>
<td>WO</td>
</tr>
<tr>
<td></td>
<td>Joint Venture</td>
<td>151</td>
<td>23.5%</td>
<td>JV</td>
</tr>
<tr>
<td>Function</td>
<td>Services</td>
<td>406</td>
<td>74.1%</td>
<td>Services</td>
</tr>
<tr>
<td></td>
<td>R&amp;D and manufacturing</td>
<td>142</td>
<td>25.9%</td>
<td>RDManufacturing</td>
</tr>
<tr>
<td></td>
<td>R&amp;D</td>
<td>53</td>
<td>9.7%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manufacturing</td>
<td>89</td>
<td>16.2%</td>
<td></td>
</tr>
<tr>
<td>Subsidiary size</td>
<td>Small subsidiary</td>
<td>338</td>
<td>61.7%</td>
<td>SubSmall</td>
</tr>
<tr>
<td></td>
<td>Medium sized, large or very large subsidiary</td>
<td>210</td>
<td>38.3%</td>
<td>SubLarge</td>
</tr>
<tr>
<td>Investor characteristics</td>
<td>State-owned</td>
<td>181</td>
<td>33.0%</td>
<td>SOE</td>
</tr>
<tr>
<td></td>
<td>Privately owned</td>
<td>367</td>
<td>67.0%</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>Subsidiaries outside of Europe</td>
<td>197</td>
<td>35.9%</td>
<td>ForeignSub</td>
</tr>
<tr>
<td></td>
<td>No subsidiaries outside of Europe</td>
<td>351</td>
<td>64.1%</td>
<td>NoForeignSub</td>
</tr>
<tr>
<td></td>
<td>Large or very large investor</td>
<td>228</td>
<td>41.6%</td>
<td>InvLarge</td>
</tr>
<tr>
<td></td>
<td>Small or medium-sized investor</td>
<td>320</td>
<td>58.4%</td>
<td>InvSmall</td>
</tr>
</tbody>
</table>
A graphical representation of the results of the cluster analysis is depicted in Figure 9. This dendrogram is a graphical representation of the groupings that are formed during the clustering process. The dendrogram lists all individual variables on the left side of the graph. From here, the variables are combined according to their “similarity”, i.e. according to the relative likelihood that they both are present in a certain FDI project. The closer to the left hand side of the diagram two variables or clusters are combined, the more closely are they connected to each other. SPSS standardizes the clustering distances by setting the distance at which the last clustering occurs equal to 25.

Dividing the data into separate time periods of two or four years yields mainly the same results. While they in a few cases differ with respect to at which stage and at which distance the variables are connected, the same two distinct groups are formed for every time period. The characteristics of Chinese FDI in Europe have thus seen little change over the time period investigated.

The cluster analysis clearly identifies two distinctive clusters and, consequently, types of subsidiaries, which will be described separately. They will hereafter be referred to investment type I and investment type II.
5.5.1. Identification of investment type I

In the first cluster, the investor characteristics small size (including small and medium-sized companies), no subsidiaries outside Europe and private ownership, are very close to each other. The subsidiaries of investors with these characteristics typically fulfill a service function and are established as greenfield operations. They also tend to be wholly owned and small in size. Findings from the previous sections of this chapter show that such subsidiaries represent a large share of Chinese FDI in Europe.
During the data collection, it became apparent that a large part of such subsidiaries as just described engage in wholesale operations connected to small manufacturers’ or trade companies’ export activities to Europe. The first cluster is thus consistent with the establishment of sales- and marketing offices in what for many Chinese companies is the most important export market. Consequently, they are likely to have gathered experience through exporting before engaging in FDI, which matches the Uppsala model with respect to gradual entry of foreign markets. The decision to take control over parts of the value chain located in Europe must stem from the belief that such functions can be carried out more efficiently within the company than by an external partner, which is in congruence with internalization theory. The purpose could e.g. be to ensure a high quality customer service or to improve the absorption of local market knowledge into the company.

Investors of this type are unlikely to be dominant in the domestic market or to be in possession of company-specific advantages that could be exploited abroad. Instead, they probably benefit from country-specific cost advantages that allow them to export cheap products to Europe. What has changed compared to the environment in which conventional FDI theories were developed is that instead of developed country companies moving their manufacturing to low-cost China, Chinese companies themselves are now in control of such manufacturing processes. The products exported are almost exclusively characterized by a low level of technology or standardization (e.g. gift bags or textiles), which might mean that R&D and brand recognition have become less important than low manufacturing costs. In this context, it may be reasonable that control over such products should move the developing country in which the production takes place.

5.5.2. Identification of investment type II

The second cluster reveals that large investors often already possess foreign subsidiaries at the time of their first investment in Europe. This intuitively makes sense, since there is a causal relationship between assets of foreign subsidiaries and company size. The last investor characteristic in this cluster is state-ownership and these three variables are those that are most similar in the cluster.

The subsidiary characteristics join this cluster individually and at an increasingly high distance. This illustrates that these attributes are distributed more diversely across all observations and investment patterns concerning them are therefore not as clear-cut. Deductions concerning investment motivation are thus difficult to make based solely on the cluster analysis.

What is obvious though is that large and state-owned companies, which in many cases are the same, are indeed willing or able to commit more resources in Europe than smaller ones. No conclusion can be drawn on whether they are more risk averse with respect to the chosen degree of control over a
company, however, as the proximity matrix (see Appendix 4) shows that no noteworthy difference exists between the two clusters with respect to the share of subsidiaries that are wholly owned.

Regarding the bivariate relationship of the combined variable R&D and manufacturing to the variables contained in the cluster, it should be noted that manufacturing is more closely connected to all of them. Subsidiaries active in R&D are thus more distant from the rest of the group than manufacturing.

5.6. Summary

This chapter has given an overview over the historical development and the composition of Chinese FDI in Europe with respect to the distribution of both investor and subsidiary characteristics. It was found that the Chinese government used to have a large influence on Chinese outward FDI and that Chinese FDI in Europe increases rapidly but is still relatively small in volume.

The most common characteristics of Chinese subsidiaries are small size, wholly owned greenfield entry modes and the provision of services. The large majority of investments were made in Western European countries and subsidiaries located in Eastern Europe show different characteristics with respect to function and entry mode. Using a cluster analysis, two distinctive investment types were identified. The first group combines variables that are consistent with small Chinese exporters establishing a sales office in Europe. The second group is less homogenous, but provides a picture of large, state-owned companies that acquire large manufacturing companies.
6. Regression analysis of host country factors

The purpose of this chapter is to identify which host country factors seem to attract Chinese FDI in European countries and thus to answer the second subordinate research question.

As Chinese FDI has undergone a rapid development in terms of both volume and composition over the past decade, the motivations behind Chinese investment and consequently also the host country factors that attract it may have changed. Similarly, it has been suggested that the reasons for investing in the new member states of the European Union differ from those behind investment in the old member states. On that account, the regression will not only be conducted for the entire dataset, but also for the individual time periods and for Eastern and Western European host countries respectively. The results can thus detect changes over time and locational differences. However, when dividing the sample into two four-year time periods, the number of Chinese subsidiaries in the new member states of the EU in each period is very low (20 and 39 respectively). The small sample sizes make it improbable to make generalized statements based on the results. Only one regression, including all years, will hence be run for data on Eastern European host countries, the total number of regression run will thus be seven.

In the first section of this chapter, existing FDI theories and literature on global Chinese FDI are used to determine which host country factors should be included and to develop hypotheses about expected relationships. Afterwards, the model building process will be described shortly. The third section analyzes the results of the analysis, which are afterwards summarized in section four. An explanation of the specific regression models chosen can be found in Appendix 5.

6.1. Hypotheses development

The hypotheses developed in this section can be divided into several groups. The first two groups include hypotheses on variables that assume a certain motive for the investment, namely the search for markets and for strategic resources respectively. The other two groups consist of hypotheses on factors that influence the conditions under which the investment is made, namely the liabilities of foreignness and the institutional environment faced by the investors.
6.1.1. Market opportunities

The OLI paradigm suggests that one of the reasons why companies engage in FDI activities is to take advantage of market opportunities abroad. Numerous empirical studies have indeed shown that host country size in terms of GDP (which approximates the absolute size of the market) is highly significant for inward FDI flows in general (e.g. Billington, 1999; Dees, 1998; Shatz & Venables, 2000; Loree & Guisinger, 1995). Existing literature also provides evidence for the importance of host country market size for Chinese investment. Buckley et al. (2007) as well as Cheung & Suny (2009) find a positive correlation between global Chinese FDI on the one hand and absolute and relative host market size as well as GDP growth on the other hand.

The EU’s common market signifies that by entering one country, a company can reach the entire European market and accordingly, many Chinese MNEs have developed and implemented pan-European strategies (Zhang & Filippov, 2009). However, significant obstacles to regarding the countries of the EU as a homogenous market persist in the form of different standards, regulations, culture and language (Buckley et al., 2008). In addition to the desire to minimize difficulties arising out of different country characteristics, being close to customers can be advantageous for market research, marketing, and customer service or save transportation costs. It can thus be assumed that, everything else equal, Chinese companies would chose to invest directly in the country in which it wish to create or improve revenue. The market opportunities present in individual countries can therefore be a relevant factor for the location of FDI within Europe.

The following hypotheses are derived to capture different aspects of the market opportunities that exist in European host countries:

H1a: Host country GDP is positively related to the number of Chinese subsidiaries.

H1b: Host country GDP growth is positively related to the number of Chinese subsidiaries.

H1c: GDP per capita is positively related to the number of Chinese subsidiaries.

While H1a seeks to estimate the absolute market size, H1b is a proxy for whether market opportunities will continue to exist in the future. H1c predicts the relationship between the relative market size and Chinese investment, which in European countries, characterized by relatively high income equality, can approximate the standard of living.

The purpose of FDI can be to facilitate or improve already existing export activities. The European Union is China’s largest trading partner, which in itself indicates that good market opportunities exist and that many companies might be motivated to extend or improve their activities. In addition to benefits that might arise from close proximity to customers, Chinese exporters to Europe are
frequently faced with trade barriers, such as quantitative restrictions, and have been subjected to a number of anti-dumping cases (Deng, 2004). Such barriers can be overcome by locating parts of the value chain within Europe.

FDI intended to support trade or to overcome trade barriers is likely to be located predominantly in countries that already import a substantial amount of Chinese products. Correspondingly, Ramasamy, Yeung & Laforet (2010), find that China’s export volume has a positive influence on the location of China’s ODI on a global scale. This leads to the following hypothesis:

**H1d:** Exports to the host country are positively related to the number of Chinese subsidiaries.

### 6.1.2. Availability of strategic assets

Both Dunning’s OLI paradigm and newly developed theories of FDI stress the importance of assets such as technologies, know-how located in the host country as an important driver for FDI and it has been argued that the acquisition of such assets might be of special interest to resource-poor companies from emerging markets.

The idea to learn from developed country companies in order to improve competitiveness is not new to Chinese firms. Since the opening of the Chinese economy, JVs of local companies with foreign investors into China were partly motivated by the possibility of knowledge and technology transfer. However, inward investors prefer to keep essential expertise to themselves due to intellectual property reasons (Zhao et al., 2010). The success of this strategy thus has its limits from China’s standpoint, as both entrepreneurs and Chinese authorities show a strategic desire to quickly move beyond costs and into higher-value adding markets (Filippov & Saebi, 2008). The acquisition of strategic assets in the developed host countries, in which the control over their ownership lies, thus represents a way to speed up the transfer process of knowledge and technology.

It has been argued that China’s increasing interest in the acquisition of new technologies from Europe can be regarded as the preparation for an eventual shift in the competitive strategy from cost leadership to product differentiation as described by Porter in 1980 (Shi, Hay & Milelli, 2010). To date, however, Chinese designers and engineers are still characterized by a lack of creativity and originality (Minin, Zhang & Gammeltoft, 2010), which would be necessary for the implementation of such a shift.

Accordingly, a number of global studies focusing on the significance of strategic assets in Chinese international FDI activities have been conducted. They differ in terms of the variables they use as proxies for the amount of strategic assets (e.g. expertise, capabilities, technology and brands) that is
available in a certain country. Not all of these variables (e.g. the percentage of the population receiving tertiary education) are sensible in a context involving only European host countries. Since strategic assets are a result of innovation and R&D, the chosen proxies for their presence and the connected hypotheses are as follows:

H2a: The number of patents granted in a country is positively related to the number of Chinese subsidiaries.

H2b: R&D expenditure as a percentage of GDP is positively related to the number of Chinese subsidiaries.

6.1.3. Reducing liabilities of foreignness

Several theories introduced in chapter three, in particular the gravity approach, and the latecomer theory, recognize the liability of foreignness as a central obstacle that has to be overcome by foreign investors. Given the large distance between China and Europe in terms of geography, culture, language and institutions, the liabilities of foreignness faced by Chinese investors can be assumed to be significant no matter which country is chosen for investment. However, a number of factors have the potential to facilitate Chinese the operations for Chinese companies, mainly by making it easier for companies to obtain information and communicate with local stakeholders. To determine how important such factors are in the location decision of Chinese investors, they will be included in the analysis.

The latecomer approach advocates the importance of relationships and networks for developing country companies investing in developed economies. A number of researchers have furthermore argued that ethnic and family networks constitute firm-specific advantages for Chinese companies, as they reduce business risk, transaction costs and thereby the liabilities of foreignness (e.g. Braeutigam, 2003; Erdener & Shapiro, 2005). Several studies with a global scope (Ramasamy, Yeung & Laforet, 2010; Buckley et al., 2007; Deng, 2004) have confirmed that the size of the Chinese population in the host country has a positive effect on Chinese FDI. The following hypothesis is thus derived:

H3a: The size of the Chinese population in the host country is positively related to the number of Chinese subsidiaries.

The presence of other Chinese companies that have already invested in a certain host country may also help Chinese companies to bridge the cultural (and institutional) gap with the host country. Already established companies may provide networks and especially information about the local market, from which new investors can benefit. Cheung & Suny (2009) support this assumption with
their finding that Chinese capital clusters among developed economies that already have a large share of Chinese FDI. Apart from diminishing liabilities of foreignness, other factors might also contribute to this clustering. For instance, investors might simply share the same FDI motives and hence chose the same location for their subsidiary.

**H3b:** Already existing Chinese FDI stock is positively related to the number of Chinese subsidiaries.

Another aspect that may decrease the liability of foreignness faced by Chinese investors is English proficiency in the host country. While the focus on foreign language skills in China has increased significantly in the past decade, language skills other than English are still rare. The language barrier can therefore prove to be an obstacle to Chinese business activities in Europe. Liu & Tian’s survey (2008) of Chinese companies stresses this point by finding that cultural and language proximity was the third most relevant reasons for investing in the UK. This leads to another hypothesis:

**H3c:** English proficiency in the host country is positively related to the number of Chinese subsidiaries.

### 6.1.4. Host country institutions

As mentioned in section 4.2., existing literature finds that political risk has a positive influence on FDI inflows from China and explains this relationship by the familiarity of Chinese investors with an unstable environment.

The influence of risk is interesting to analyze in a purely European context, as some of the new member states to the EU are, like China, still converging from a planned to a market economy and have higher political risk than older member states. If Chinese companies were attracted to locations with a similar political environment to the one they are used to at home, one would expect Chinese companies to prefer Eastern European countries for their investment, everything else equal. However, the positive influence of political risk on Chinese FDI stock in a certain country might purely be caused by the fact that large natural resources endowments are often found in high risk countries. Chinese investors might thus not invest in host countries because of weak institutions, but in spite of them. Since subsidiaries active in the natural resources sector or related activities are excluded from this thesis, the last hypothesis to be tested in the regression analysis is therefore:

**H4:** Political risk has no significant effect on the number of Chinese subsidiaries.
6.2. Model building

The hypotheses developed, the variables used as proxies and the expected relationships are summarized in table 5. The table also includes the code of each variable as it is used in the regression model, the theoretical justification for the inclusion in the model and the data source. Details on the data sources and operation can be found in Appendix 6.

Table 5: Overview over hypotheses, variables and sources used in the regression analysis

<table>
<thead>
<tr>
<th>H#</th>
<th>Independent variable</th>
<th>Proxy</th>
<th>Code</th>
<th>Theoretical justification</th>
<th>Exp. relationship</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Absolute host market size</td>
<td>GDP</td>
<td>GDP</td>
<td>Market-seeking (OLI)</td>
<td>+</td>
<td>World Bank Development Indicator: GDP (constant 2000 US$)</td>
</tr>
<tr>
<td>1b</td>
<td>Host market growth</td>
<td>GDP growth</td>
<td>GDPG</td>
<td>Market-seeking (OLI)</td>
<td>+</td>
<td>World Bank Development Indicator: GDP growth (annual, %)</td>
</tr>
<tr>
<td>1c</td>
<td>Relative market size</td>
<td>GDP per capita</td>
<td>GDPPC</td>
<td>Market-seeking (OLI)</td>
<td>+</td>
<td>World Bank Development Indicators: GDP per capita (constant 200 US)</td>
</tr>
<tr>
<td>2a</td>
<td>Innovation and high technology</td>
<td>Annual patent applications</td>
<td>PATENT</td>
<td>Strategic-asset seeking (OLI), Latecomer theory, Springboard view</td>
<td>+</td>
<td>World Bank Development Indicator: Patent applications, residents</td>
</tr>
<tr>
<td>2b</td>
<td>Innovation and high technology</td>
<td>R&amp;D expenditures</td>
<td>RDE</td>
<td>Strategic-asset seeking (OLI), Latecomer theory, Springboard view</td>
<td>+</td>
<td>World Bank Development Indicator: Research &amp; Development expenditure (% of GDP)</td>
</tr>
<tr>
<td>3b</td>
<td>Knowledge about host market</td>
<td>Chinese FDI stock</td>
<td>FDIS</td>
<td>Gravity Approach, Latecomer theory</td>
<td>+</td>
<td>Statistical Bulletin of China’s Outward Foreign Direct Investment</td>
</tr>
<tr>
<td>3c</td>
<td>English proficiency</td>
<td>Percentage of population able to have a conversation in English</td>
<td>ENG</td>
<td>Gravity Approach, Latecomer theory</td>
<td>+</td>
<td>Eurobarometer (2005), Crystal (2004)</td>
</tr>
<tr>
<td>4</td>
<td>Political stability</td>
<td>Average of six governance indicators</td>
<td>RISK</td>
<td>Institutional theory</td>
<td>0</td>
<td>World Bank Governance Indicators</td>
</tr>
</tbody>
</table>
When building the model, a combination of backward elimination and forward selection was intended in order to yield the best model, given the available variables (see Christensen, 1997). In other words, beginning with a model containing all variables, the variables with the least significant test statistic should be deleted, but added again later in different combinations until the model with the best fit is found. However, when employing this method, the results showed no material improvement. Moreover, variables that were not found to be significant in one region or time period were so in another.

Some multicollinearity between the independent variables was expected, so for each individual regression, these correlations were calculated. Hereby, it was discovered that the number of patent applications by residents was highly correlated (<-0.8) with at least one other variable in four of the seven datasets. This variable was therefore excluded from the regression analysis. For the six regressions including Western European host countries, no variables thereafter had a higher value than 0.8. In the dataset including only Eastern European countries, several high correlations (>0.8) still persist, but the exclusion of any of the variables in question does not change the variables that are found to be significant in the regression.

Therefore, all regressions conform to the following model:

\[
\log \left( \lambda (\text{SUBS}_{\text{Country}}) \right) = a + b_1 \text{GDP} + b_2 \text{GDPG} + b_3 \text{GDPPC} + b_4 \text{IMP} + b_5 \text{RDE} + b_7 \text{CCP} + b_9 \text{FDIS} + b_9 \text{ENG} + b_{10} \text{RISK}
\]

\text{(equation 1)}

### 6.3. Results of the regression analysis

For all seven regressions conducted, the likelihood ratio Chi Square has a significance level of 0.000 for all regressions, which means that at least one of the model’s regression coefficients is not equal to zero and the chosen model is appropriate.

An overview over the variables found to be significant at a significance level of at least 0.1 in the regression analyses is provided in Table 6 along with the specific level of significance and direction of their influence.
What can be seen from the regression analysis is that GDP has a highly significant positive influence on Chinese FDI in Europe in general and in four other regressions run. H1a is thus affirmed. However, in the time period of 2007-2010, GDP is not a significant factor. A reasonable explanation might be that when the financial crisis deteriorated the European economy, economic growth became a more important indicator of continued market opportunities, which is in fact significant only during this time period in Western European countries. H1b is consequently conditionally confirmed, as GDP growth seems to be taken into consideration in Chinese investment decisions in times of economic uncertainty.

GDP per capita is not, as postulated by H1c, positively related to the number of Chinese subsidiaries. Indeed, in Western European countries, the relationship is the opposite. One explanation could simply be that the four countries that had the highest GDP per capita in almost all years are Norway, Switzerland, Denmark and Sweden. Due to the small absolute market size of these countries the relationship between GDP and GDP per capita becomes negative. As mentioned, host country GDP is shown to be an important factor for the type of Chinese investment analyzed in this thesis and the found negative relationship may simply be a result of the fact that GDP is more important than GDP...
per capita. In addition, one should keep in mind that large part of GDP in Norway and Switzerland are generated the financial or natural resources sector, which were excluded from the analysis. Cheung & Suny (2009), who find the same negative relationship between GDP per capita and Chinese investment in their analysis of Chinese FDI into developed countries, offer another explanation. They argue that much Chinese FDI concerns trade and that the products sold tend to be in the lower-end of the market. These in turn are geared towards low income customers and might simply not appeal to consumers in countries with high standards of living. Both explanations probably contribute to some extend to the found negative relationship between GDP per capita and Chinese FDI.

Imports from China are significantly related to Chinese FDI in all regressions, making it the most obvious factor to attract FDI from China. This suggests that much Chinese FDI has the purpose of substituting trade and to get closer to customers. H1d is thus accepted. Companies investing in Europe are likely already to export to Europe before engaging in trade-substituting FDI.

No conclusion can be drawn on the importance of patent applications on Chinese FDI (H2a), as the related variable was excluded due to high multicollinearity. No significant relationship was found between R&D expenditures in the analyses of all countries and of Western European economies; H2b is thus rejected for these locations. The finding that asset-seeking is overall of little importance contradicts other studies on Chinese FDI in developed countries. This may be a consequence of the use of only a single measure to approximate the availability of strategic assets. Another notable difference, though, is that other researchers used investment volume as the dependent variable in their analyses. As the cluster analysis shows, investment in R&D and manufacturing as well as acquisitions (which are most likely to have the purpose of obtaining new technology) are often large in size. They thus carry less weight in this thesis than in other studies.

Unexpectedly, R&D expenditures are positively related to Chinese FDI in Eastern European host countries. This seems contradictory, since the countries of Western Europe are generally endowed with more highly developed technology and know-how than the new member states of the EU and accordingly, the descriptive analysis in chapter five finds that the share of subsidiaries located in Eastern Europe is lower than Europe as a whole. Since R&D expenditures in Eastern Europe are highly correlated with GDP, it is more likely an indicator not so much of the presence of advanced technology, but instead of a relatively well-developed economy and a qualified work force. Such factors might indeed be a prerequisite for Chinese investors for investing in the relatively less developed Eastern European economies.

The analysis shows that host country factors likely to reduce the liability of foreignness, namely Chinese population, English proficiency and Chinese FDI stock do not have a significant positive
influence on Chinese FDI in Europe. H3a, H3b and H3c are rejected accordingly. Indeed, existing Chinese FDI stock (H3b) is negatively related to the number of subsidiaries, when including all countries or only Western Europe in all years and the time period from 2003 to 2006. One reason could be that the reasons for investment and thus the preferred locations of FDI changed just before this period. This would indicate that private companies, which began internationalizing after the implementation of the go global policy, are indeed attracted to other host country factors than large SOEs. Since no data Chinese FDI is available for the years before 2003, no conclusions can be drawn on this possibility. Another, more material explanation is that the countries in which the largest investments take place are not necessarily those with most Chinese subsidiaries. For instance, measured by the number of subsidiaries, the Netherlands hold the second rank of all European countries. However, only 2% of these subsidiaries are very large in size, as opposed to an average 36% of all subsidiaries in Europe.

Hypothesis 4 predicted that political risk does not influence Chinese FDI in a purely European context. When taking all countries into account, this is indeed the case. But interestingly, there is an obvious locational difference. In Western European countries, there is a positive influence between political stability in all time periods at least at the 0.1 level. However, the effect is opposite in Eastern European host countries. H4 is thus accepted in general, but rejected for both Western and Eastern European countries, when considered separately.

This finding supports studies on Chinese FDI on a global scale and substantiates the argument raised in the literature that, at least in developing and emerging economies, Chinese companies seem to be attracted by a political environment familiar to their own. However, the negative relationship between political stability might in fact be an indicator of other host country factors not included in the model. For instance, competition in such markets might be lower, because companies from developed countries are less inclined to enter the market, or the governments of such countries grant beneficial conditions for market entry in order to attract foreign investment.

In the descriptive analysis in chapter five, it was found that the subsidiaries investing in Eastern Europe show a different composition regarding function than those located in Western Europe. In combination with the finding that different host country factors seem to attract Chinese investors in the new member states of the EU, this indicates the existence of a third group of Chinese investment characterized with its own motives for engaging in FDI.
6.4. Summary

The results of the regression analysis show that Chinese FDI is most closely related to host country factors that represent possibilities for market exploitation, which thus seems to be the most important motivation for Chinese FDI in Europe in general.

The availability of strategic assets, the significance of which is predicted by conventional and new theories of FDI alike, was only found to be significant for Eastern European host countries, where the proxy used might actually rather be an indication of the existence of a developed economy and a skilled workforce. The contradictory results found in this thesis as opposed to previous studies on Chinese FDI are likely the result of the fact that every subsidiary received the same weight in the analysis, while most researcher have used FDI volume as the dependent variable. Factors that can decrease the liability of foreignness for Chinese investors were not found to have significant positive influence on Chinese FDI, thus contradicting the assumptions behind conventional FDI theories.

A regional difference was identified with respect to the importance of political stability. While political stability, in accordance with the main argument of institutional theory, positively influences FDI in Western European countries, the opposite is true for Eastern European host countries. Combining the results of the descriptive and the regression analysis it seems that investors in Eastern Europe constitute their own distinctive group in terms of FDI motives.
7. Case study on FDI targeting strategic assets

The case study in this chapter aim to give better insights into Chinese FDI aimed at the acquisition of strategic assets and ultimately, to answer the third subordinate research question. The case study also offers a good opportunity to evaluate the applicability of conventional versus newly developed theories of FDI, as the latter focus mainly on the characteristics and behavior of asset-seeking investors.

The first section includes an overview and theoretical justification of the areas to be investigated in the course of the case studies. Section two presents the case companies and section three analyzes the cases with respect to the research question. Section four concludes on the chapter.

7.1. Areas of investigation

Conventional and newly developed theories of FDI offer different prerequisites, conditions and explanations for FDI conducted with the objective to gain access to strategic resources. This section shortly summarizes these disparities, which will subsequently be compared to the case companies in order to determine whether or which theoretical concept is best suited to explain the case of Chinese companies’ search for strategic assets in Europe.

7.1.1. Starting point of the investor

A central element of conventional theories of FDI is the prerequisite of the investor to possess firm-specific advantages over foreign companies before engaging in FDI. Similarly, the investor is depicted as already holding a dominant position in the domestic market or to follow competitors’ internationalization strategies. In contrast, the latecomer theory and springboard view regard FDI to be a strategy for weak EMNEs to overcome competitive disadvantages through the acquisition of strategic assets. They are hereby often believed to act according to direct or indirect instructions by their government. In accordance with the oligopolistic reaction theory, companies might also choose to invest abroad to follow competitors, as they do not wish to be left out of possible opportunities for profit generation.
7.1.2. International experience
The Uppsala approach declares that resource commitment and FDI location depend on international experience and perceived distance to the host country. Advocates of theories developed on the basis of companies from developing countries catching up to their international competitors, though, find that no such path dependency exists.

There are a number of ways in which Chinese companies can gain a better understanding of international markets and thus lower the liability of foreignness. For instance, Chinese companies can have been exposed to the Western way of doing business via exports to Europe or by cooperating with foreign firms investing in China prior to engaging in FDI (Luo & Tung, 2007; Guthrie, 2005). The case companies will be analyzed with respect to all of these possible types of experience.

7.1.3. Type and use of acquired resources
The eclectic paradigm describes strategic asset-seeking FDI as focusing on firm-specific assets that can be turned into sustainable ownership-specific advantages that are difficult to imitate. The latecomer theory, however, states that EMNEs primarily seek assets that are easily transferable. This tendency is explained by the necessity to quickly integrate technology and know-how into the company in order to improve the company’s long-term competitiveness not only internationally, but also at home. According to the springboard view, companies from developing countries can lay the basis for the development of their own innovative capabilities on the know-how acquired through their FDI projects.

7.1.4. The role of networks
Traditional theories of FDI do not include the notion of networks as inherent company asset and are based on the presumption of competition between companies. Yet the latecomer approach emphasizes networks and personal relationships with partners, competitors and government institutions alike. Such networks are not only believed to facilitate the establishment of operations abroad, but also to improve access to know-how and technology.
7.2. Description of case companies

The companies chosen will be presented very briefly in this section. A detailed description of their history, activities and investments, on which the analysis is based, can be found in Appendix 7.

7.2.1. Shenyang Machine Tool Company (SYMTC)

Shenyang Machine Tool Company is China’s largest company active in the manufacturing of small and medium-sized machine tools. While publicly listed, 42% of all shares are still owned by the state-owned mother company Shenyang Machine Tool Group. In 2004, SYMTC acquired a majority share in the German manufacturer of very large machine tools, Schiess GmbH. In 2009, SYMTC became the sole owner of the subsidiary.

7.2.2. Xinjiang Goldwind Science & Technology Company

Xinjiang Goldwind Science & Technology Company (Goldwind) is China’s leading producer of wind turbines and also offers services related to wind energy generation. The company has been listed at the Shenzhen Stock Exchange since 2007, but government entities still own more than 25% of all shares. Goldwind was licensed to manufacture products developed by the German wind turbine manufacturer Vensys in 2002 and four years later established a wholly owned greenfield subsidiary in Germany to facilitate the transfer of technology. In 2008, Goldwind acquired 70% equity ownership in Vensys.

7.2.3. Sany Heavy Industry

Sany Heavy Industry (Sany) produces a wide variety of construction machines. The company has always been privately held and has since its registration on the Shanghai Stock Exchange had a diverse ownership structure. In 2008, Sany set up a large wholly owned greenfield subsidiary in Germany and four years later acquired 90% of equity shares in the world’s leading concrete pump manufacturer Putzmeister Holding GmbH.

7.2.4. Shanghai Automotive Industry Corporation

Shanghai Automotive Industry Corporation (SAIC) is a state-owned company and China’s largest vehicle manufacturer. SAIC bought the copyright to a number of MG Rover’s vehicle models already in 2004 and entered into a strategic partnership with the company for the development of new
technologies. For this purpose, SAIC established a wholly owned greenfield technical center in the UK in 2005. When MG Rover entered administration, negotiations to take over the company failed. Instead, Nanjing Automobile Corporation (NAC) purchased MG Rover. As NAC was merged with SAIC in 2007, SAIC now has control over all MG motors’ assets and has integrated them with its already existing activities in the Europe.

### 7.3. Analysis of case companies

All case companies are very large in size and occupied a leading role within their industry in the Chinese market before investing in Europe. However, the companies’ products are still mainly sold domestically and internationalization was not started until recently. Nonetheless, the companies are very serious about their international expansion strategies, which from the very beginning included developed countries. All case companies are active in technology-intensive industries and hardly possess any assets that would give them a technological advantage in international markets. Compared to international competitors, none of them had superior technologies or reputable brands. What they share is an abundance in financial resources, flexible and cheap manufacturing processes, as well as a strong wish and capacity to learn. While the prior can be classified as country-specific advantages, the latter is an inherent capability of the individual companies, indispensable in these companies’ dealings in Europe.

The case companies are not the only ones in their industry to invest abroad, indeed, they do it simultaneously or follow / lead others that do the same. This is in accordance with the oligopolistic reaction theory, which states that no company wishes to be left out of profits that competitors might earn abroad. But this development also has to be seen in light of the general encouragement and argument for internationalization presented by the Chinese government. The cases provide evidence that government support for the internationalization of specific companies or entire industries (e.g. alternative energy and automobile) is important for both private and state-owned companies. Institutional factors thus appear to have an influence on Chinese companies’ strategies for FDI in Europe, as is predicted by institutional theory and the government steward logic.

In terms of international experience, only Sany, the only privately held company included in the analysis, possessed prior foreign subsidiaries and had substantial experience in exporting to Europe before engaging in FDI in Europe. This indicates that privately owned companies might indeed be more risk averse when it comes to the commitment of assets. All case companies, in one way or another, entered Europe stepwise. They had already spend much time in getting to know the market.
and its players, either through cooperation with European companies, a stepwise increase in share ownership, or through greenfield investment in clusters that possess an experienced workforce. Only afterwards did they decide to invest a large amount of resources in Europe. On first glance, this conduct is in accordance with the Uppsala model’s predictions about market entry. However, the decision to acquire a local company might also be made based on the realization that existing wholly owned greenfield subsidiaries face difficulties in succeeding on their own.

All investors already had experience with cooperating with companies from developed economies, thanks to which they had already improved their technology and management skills before investing in Europe. Long-term relationships and networks with partners as well as competitors and suppliers play an important role here and several co-operations may be in place at the same time. In two of the four cases (SAIC and Xinjiang Goldwind) the Chinese company decided to purchase a company with which it had previously cooperated closely. By integrating the European company, they take control over and can thus considerably speed up the transfer of strategic resources.

The case companies appear to engage in a committed search for strategic assets in Europe, which will help them in reaching their highly prioritized goal of internationalization. Apart from technology, several other resources imbedded in the acquired companies are clearly also targeted: First, experience in international markets, including sales networks and contacts to customers, are highly valued. The existence of such networks can accelerate the internationalization goals of Chinese investors considerably. Second, facing the perception of low quality products from China, investors select internationally established brands and a reputation for quality to facilitate their internationalization strategies. Both the responsibility for managing international markets and the acquired brand remain within Europe, as the Chinese investors cannot easily transfer international networks and the immediate incorporation of the brand would evidently damage its reputation.

One central difference between traditional FDI theories and those newly developed for EMNEs is the nature of the resources targeted. The latecomer theory states that the assets sought-after are likely to be easily transferred and duplicated. The case analysis, however, shows that this is not entirely so. Instead, Chinese investors seek out companies that are endowed with capabilities that are very specific to the company and its employees, such as specialized technologies know-how and R&D capabilities. As such assets cannot be transferred easily to China, the development and manufacturing of sophisticated technologies continue to be carried out by local teams in the European host country. Associated products are also still sold primarily on international markets. Local R&D departments are highly integrated and cooperate closely with R&D personnel in China, where the required specialized knowledge does not exist.
At the same time, assets that can be easily transferred, such as the production technology of standardized parts, are indeed moved to China, where manufacturing costs are significantly lower. As a result, Chinese companies on the one hand make sure that a high quality standard pertinent to brand image is all times assured in international markets, while simultaneously increasing competitiveness of such products by lowering costs. By maintaining the acquired brand, Chinese investors seek to benefit from its reputation and at the same time have the opportunity to slowly increase both awareness and standing of their own name in the industry. Domestically, investors begin to differentiate between products of lower quality, for which they continue to use their own brand, and products of higher quality for which the acquired brand name may be used.

Concluding on the above arguments, Chinese investors in the short to medium term remain dependent on the support of innovative capabilities, international networks and the location of the acquired brand in Europe. In the long-term, though, know-how and technologies are slowly absorbed into the Chinese mother company. Through such a learning process investors cannot only catch up to their international competitors in terms of product quality; the mere association with European company can improve the companies’ perception in the domestic market. It follows that Chinese companies that invest in Europe in order to acquire strategic resources have a long-term interest in their subsidiaries. From the point of view of acquired European companies, investment from China may thus prove to be advantageous as well, as the case examples indicate that targets often face financial difficulties prior to the acquisition. A substantial inflow of financial resources from China and a subsequent cost advantage have the potential to revive companies that had been on the verge of closing down.

7.4. Summary

While dominant in the domestic market, none of the case companies possessed any technological company-specific advantages that made them competitive against international players prior to their investment in Europe. Their strengths lie in the ability to learn from co-operation partners, their financial solvency and in their manufacturing systems. Investors searching for strategic resources tend to enter Europe stepwise in terms of resource commitment and target resources that are very specific to their own industry as well as international sales networks. All case companies at one point acquired an already existing European company and thus internalized the latter’s knowledge and technology base. Following the acquisition, investors tend to move easily transferable technology, know-how and processes to China. As a result, the Chinese investor can improve the domestic knowledge base and
revenues can be increased following the reduction in manufacturing costs. However, Chinese investors also target assets which are specific to the employees and processes of a certain company or region. Such inherent assets can only be absorbed slowly. A close integration of corresponding departments in Europe and China has the objective to enable a long-term knowledge transfer to China.
8. Analysis on the applicability of theoretical frameworks

This section seeks to combine the findings of the descriptive, regression and case analyses included in chapters five, six and seven in order to evaluate which theoretical concepts can be applied to explain Chinese FDI in Europe.

The cluster analysis in chapter five clearly identifies two separate types of Chinese FDI and the existence of another group of investors became apparent through a combination of the descriptive and regression analysis. These three groups differ with respect to how and why they invest in Europe and will thus be analyzed separately. Indeed, the existence of such groups can help explaining why previous studies analyzing Chinese FDI in Europe have partly reached contradictory conclusions.

It should be noted that the three identified groups of investment do not represent the entire population of Chinese subsidiaries in Europe. For instance, small investors might set up small subsidiaries that function as R&D listening posts. As they are not predominant, characteristics and conclusions on such FDI could not be identified through the quantitative methods employed in this thesis. Nonetheless, one should keep in mind that the three investment types explained below are not exclusive and merely incorporate the most prominent kinds of investment.

In accordance with the research questions, the analyses of the three FDI groups will follow the framework depicted in Figure 10. This framework begins with the characteristics of the Chinese investors and their position in the international market at the time the direct investment in Europe occurs. The investor characteristics and position in the international market are the bases on which the motivations for FDI are formed. In their decisions, the investors are also influenced by factors within China that are external to their own operations, e.g. government policies or the behavior of their competitors. The reason for FDI in turn determines which host country factors are attractive to investors. All the elements above finally lead to a decision on how the investment should be made, i.e. which characteristics the subsidiary should have and which functions it should perform for the investor. Thus having defined each investment type in detail, the theoretical models that can explain them will subsequently be identified.
8.1. Investment type I: Expanding export activities

The first type of FDI identified, classified as type I, encompasses the largest group of Chinese investment in Europe. It includes the investments made by investors that are typically characterized by small size and private ownership. Such investors are active in the production or trade of products that involve little technology or are highly standardized. In contrast to traditional theories of FDI, they neither hold a dominant position within their home market at the time of investment, nor do they, with the possible exception of superior production processes, possess notable company-specific advantages that can be exploited in developed economy markets. Instead, they compete on the basis of country-specific cost advantages in manufacturing.

Type I investors tend not to have any foreign subsidiaries at the time of their investment in Europe, but have gathered export experience to Europe before making the decision to invest directly.
The main motivation for type I investors to engage in FDI is clearly the wish to expand or improve their export activities to Europe. The reason why Chinese companies decide to engage in direct investment instead of finding local partners who can market their products in Europe must be related to advantages arising from taking control over downstream parts of the value chain. For instance, directly owned subsidiaries might have a higher motivation to coordinate marketing efforts or to improve after sales services. In addition, local subsidiaries can be helpful in accessing information about market demand. When making their investment decision, type I investors are bound to be influenced by the encouragement and especially incentives provided by the Chinese government to outward investors. While unlikely to direct FDI in a certain direction, this support has the potential to induce small companies to invest abroad that would otherwise not have had either the courage or means to do it.

The relationship found between variables approximating market opportunities (market size and Chinese imports) and Chinese FDI is applicable to type I investment. In accordance with the motivation behind Type I subsidiaries, they tend to be active in functions such as import, wholesale and marketing. The established subsidiaries are mostly small in size and established in the form of wholly owned greenfield operations. While the small size and greenfield as entry mode appear intuitively sensible taking the intended function and limited availability of funds into account, complete ownership seems surprising in view of the large cultural and institutional distance between China and Europe. Indeed, only 22% of all subsidiaries active in providing support services are jointly owned. Neither do factors diminishing the liability of foreignness seem to play an important role. This may be a result of the experience that Chinese exporters had already gained substantial experience with the European market before engaging in FDI. The finding that greenfield joint ventures decreased in importance after 2004 supports this argument, as Chinese companies have since increased their knowledge about the European market.

Type I investment has little similarities with the kind of FDI described by newly developed theories. Indeed, none of the theories reviewed in chapter three explicitly explain outward FDI on the bases of low costs. However, Vernon’s life cycle theory explains the re-location of manufacturing of standardized products to low-cost countries, from which they are subsequently exported back to the developed countries where they were originally designed. It seems that, as the importance of R&D declines even further with respect to manufacturing efficiency, companies from developed countries lose their advantage. If developing countries at the same time improve their own entrepreneurial and production expertise, the ownership of the entire value chain can move to the developing countries, in this case China, where (country-specific) advantages now are located. This also offers an explanation to why type I investment is not path dependent in a geographical sense (thus defying the gravity
approach and part of the Uppsala model), as the primary markets of such products might be located in distant, developed regions such as Europe.

Turning to the OLI paradigm, the targeting of profitable markets and benefits connected to the internalization of downstream functions are consistent with the concepts of location- and internalization-specific advantages. The last element of the OLI paradigm, ownership-specific advantages, however, does not in its original sense apply to small Chinese manufacturers and traders of standardized products. Seen from the point of view of possible European competitors, though, significant cost advantages in combination with support from the Chinese government constitute indeed an advantage of Chinese firms, which are difficult to imitate. Allowing country-specific advantages to replace advantages that are specific to only a single firm (as suggested by authors like Rugman & Li, 2007 and Nguyen, Okrend & Tang, 2010) and integrating institutional aspects into the framework (Dunning & Lundan, 2008), the OLI paradigm thus offers the best theoretical basis for explaining type I investors.

8.2. **Investment type II: Gaining access to strategic resources**

The second group of subsidiaries (hereafter referred to as Type II) invests in Europe with the purpose of acquiring strategic assets such as know-how, technology, international sales networks, or brands. This group was primarily analyzed through case studies in chapter seven, but the characteristics match the second cluster of FDI variables identified in chapter five very well and the results will therefore be combined in the following analysis. It should be noted that the characteristics of the second cluster are not very closely connected to each other and that companies that deviate from one or two of its characteristics can thus still belong to the same group of investors.

Type II investors tend to be very large in size and are possibly state-owned. They hold a leading position within their perspective industries in the Chinese domestic market and are active in manufacturing technology-intensive products. While investors may possess subsidiaries outside of Europe, these are not likely to be numerous and mostly located in other developed countries. Neither do the investors tend to have significant export experience to Europe.

Although internationalization might only have started recently, type II investors share a determination to expand their international activities rapidly. However, they hereby face numerous difficulties related to a perceived or actual low quality compared to their international competitors. A mere cost advantage often proves insufficient for such companies to succeed in Europe by themselves.
As they lack the necessary know-how, technologies and management capabilities, they use internationalization in order to acquire resources that will help them to catch up to their competitors and overcome their competitive disadvantages. The Chinese government tends to actively support type II investors either through direct ownership ties and related preferential treatment, industry-specific support, or general encouragement of FDI that aims at improving China’s knowledge base. In combination with the tendency of domestic competitors to likewise invest abroad, the companies come from an environment that is highly encouraging of outward FDI.

The regression analysis did not support the finding of various previous studies that Chinese FDI is positively related to proxies of the endowment of strategic resources in European host countries, as one would have expected of type II investors. This may be due to several reasons: First, as suggested by the descriptive analysis, the relative number of type two investments may be too low to be reflected in the regression results. Secondly, the proxy used for the availability for strategic assets might have been inadequate for capturing the actual presence of such assets. Lastly, investors might be only concerned with strategic assets available in their own industry. Case study evidence indeed shows that Chinese investors seek out locations and acquisition targets based on the existence of clusters and very specialized knowledge.

Type II investors proceed stepwise in the FDI engagement in Europe. For instance, greenfield investment close to industry clusters might precede the acquisition of a large manufacturing company. The reason for such an iterative strategy may be that investors wish to become better acquainted with market and be in a better position to identify prospective acquisition targets before committing large resources. However, companies might also experience that their initial subsidiary faces too many obstacles both in succeeding in the European market and in gaining access to relevant strategic assets by themselves. Including such early investments, the subsidiaries of type II investors become very diverse in nature. This may be part of the reason why the ties between the variables included in the cluster associated with type II investment are not close.

After having acquired a European company, Chinese investors divide the acquired resources into those that are easily transferable and those that are imbedded in the host country. The first kind of assets is transferred to China, where they on the one hand are used to improve the knowledge base and improve the quality of domestically sold products. On the other hand, standardized products exported back to Europe, where they represent a cost advantage for the subsidiary’s products. At the same time, functions and manufacturing processes associated with a high level of specialized know-how remain in Europe. Through high levels of integration and co-operation between the investors and his subsidiary, the Chinese company seeks to establish a way of transferring even highly embedded know-how to China in the long term and to finally move from cost- to differentiation-based competition.
Type II investment is not path dependent in terms of geography, which defies conventional theories like the gravity approach and the geographical predictions of the Uppsala model. The reason is probably that the aspired assets and markets are unlikely to be found in other emerging or developing countries, which may be even farther behind in terms of technology than China.

The OLI paradigm, as the most comprehensive and flexible conventional framework for FDI, can to a large extent explain type II investments as a combination of asset-seeking and market-seeking FDI. Strategic assets are sought in order to improve quality and be able to succeed in new markets as quickly as possible. Industry-specific and management expertise can be regarded to be location-specific advantages, while internalization through FDI is necessary in order to secure and facilitate the transfer of assets that are often impossible to acquire on the open market. Ownership-specific advantages again have to be extended to include country-specific advantages in low-cost manufacturing, government support and related financial liquidity as well as the ability to learn from and co-operate with foreign partners.

At the same time, the newly developed theory on latecomer firms and institutional theory depict a very accurate picture of the outset of type II investors, investment motives and subsidiary characteristics. While the kind of resources that are targeted are not, as described by the latecomer approach, exclusively those that are easily transferable, the springboard view offers a valuable addition by including the recursive nature of FDI and long-term aspect of slowly absorbing innovative know-how and processes into the company. Institutional theory and the government steward logic in particular likewise describe the environment in which type II investors operate very accurately, as they are actively supported by the Chinese government both directly and indirectly.

Summarizing, both the OLI paradigm and newly developed theories can explain Chinese FDI in Europe that has the objective of acquiring strategic resources. The new theories are better equipped to explain the specificities of the FDI outset, process and especially the differentiation between short-term and long-term goals, whereas an enlarged version of the OLI paradigm offers a more easily structured tool for comprehending Chinese FDI in Europe.

8.3. Investment type III: Locating in convenient markets
A third type of investment became apparent in the course of the quantitative analysis, because of differences detected in the characteristics of Chinese subsidiaries located in Eastern as opposed to Western European countries.
The characteristics of type III investors are difficult to generalize, partly because the number of Chinese subsidiaries in Eastern Europe is still very low and partly because they have very varied attributes. Type III investments mainly consists of investments in manufacturing and construction and the provision of telecommunication networks. What these investments share and what combines them in a single group is a similar reasoning behind their location decision.

It has been suggested in the literature that Chinese investors are attracted to low levels of political stability in developing and emerging host countries, as they are used to operating in an uncertain environment. The regression analysis in chapter six found a consistent negative relationship between political stability and Chinese FDI. However, the majority of type III investors chose to enter Eastern Europe through joint ventures. As investors clearly seek to protect themselves from uncertainty by relying on a local partner, it is unlikely that they are attracted by political risk. Instead, they might find factors that are primarily found in countries with low levels political stability attractive, such as low costs, low employment standards and easy market entrance. These factors might even gain more weight in case Eastern European governments, especially those characterized with high political instability, offer special terms to foreign investors in their wish to generate employment (Godement et al., 2011).

Concerning Chinese companies active in the construction or the provision of telecommunication networks, their investment in Eastern Europe is based on the wish to take advantage of local market opportunities within or close to the specific country of investment. Apart from a possibly less competitive market, Eastern Europe in these service sectors also offers a regulatory environment that is more similar to China than it is the case in than Western European countries. This in turn requires the companies to undertake fewer modifications of company policies and procedures and thus facilitates market entry.

Turning to manufacturing facilities in Eastern Europe, it is apparent that the production undertaken by Chinese subsidiaries mainly entails products that involves little advanced technology or rapid development (e.g. batteries, bicycles, tobacco). It thus seems improbable that such investment occurs in search of strategic assets. Nonetheless, a precondition for successful manufacturing activities is the presence of a skilled workforce, which is likely why a positive relationship was found between R&D expenditures and the number of Chinese subsidiaries in Eastern Europe. The country in which Chinese manufacturers locate might in themselves represent interesting markets to them, as is suggested by the positive relationship between GDP and the number of Chinese subsidiaries identified in chapter six. Looking closely at the investors in question, though, it becomes apparent that almost all of them already export to Western European countries. Hence, easy access to the large common market of the EU is probably a not insignificant factor in the investment decision. Assuming that investments are
made at least partly with the objective of entering the entire EU market, it is likely that in accordance with Zhang & Filippov (2009), the specific choice of host country was based on the wish to avoid European import restrictions while keeping costs associated with wages and employment standards as low as possible.

For both manufacturing and construction companies, the main attraction in Eastern Europe as a host country is thus easy entry and cost savings, which does not in any way match the assumptions of newly developed theories of FDI. Instead, the OLI can explain the investments through market-seeking as a primary, and efficiency-seeking as a secondary motive.

8.4. Summary

In this section, the three different types of Chinese FDI in Europe identified in this thesis were analyzed with respect to the applicability of existing theoretical models. It was found that only conventional theories of FDI, adapted to include, among others, the role of institutions and networks, are capable of explaining investment made by small Chinese companies exclusively looking for market opportunities. The same applies to FDI in Eastern Europe that is active in manufacturing, construction or the provision of telecommunication networks. Both an extended version of the OLI paradigm and recently developed theories are well suited to explain investment projects of investors with the objective to acquire strategic resources. While the new theories are more explicit and detailed, the OLI model represents a more clearly structured analysis tool.
9. Conclusion

The aim of this thesis has been to determine how and why Chinese companies engage in FDI into European countries and to evaluate the applicability of existing theoretical concepts to this new phenomenon. As the research question is relatively broad, four subordinate questions were formulated. These were answered through a combination of a descriptive, regression and case analysis of mainly company-level data. This conclusion summarizes the answers to each subordinate research question in a separate section. Afterwards, the perceived threats of Chinese FDI to Europe, as outlined in the introduction, will be evaluated on the basis of the results of this thesis. Finally, a few suggestions will be made for further research.

9.1. Development and composition of Chinese FDI

The first sub-question focused on the development of Chinese FDI in Europe over time and sought to examine its characteristics. By analyzing existing literature, it became apparent that the Chinese government has historically had a very large influence on Chinese outward FDI and directed it according to political priorities. It was not until the “go global” policy of 1999 that outward FDI was liberated significantly and the government began to generally encourage outward FDI. However, government authorities continue to affect outward FDI through administrative controls and deliberate support of selected sectors or companies.

Using data on the volume of global outward FDI from China, it could be seen that FDI stock situated in Europe constitutes only a negligible share of both China’s total outward and Europe’s inward FDI. However, Chinese FDI into Europe has grown dramatically in recent years, so that an increase in economic importance can be expected if this trend continues.

The number of Chinese direct investments made per year shows a slowly but steadily increasing trend between 2003 and 2010. The most important host countries were Germany, the Netherlands and the UK. The large majority of investments (89%) went to Western European countries. The most common subsidiary characteristics of Chinese subsidiaries in Europe are a small or very large size and a greenfield entry mode characterized by complete ownership. The importance of joint ventures has decreased since 2004, reflecting an increased confidence of Chinese investors.

The majority of Chinese subsidiaries in Europe provide services, while manufacturing and R&D respectively hold the second and third positions. The most common service functions are those which
support Chinese exports, e.g. wholesale and marketing. Industries in which Chinese companies are strong, such as textiles, electronic equipment and appliances continue to play an important role in the sectorial composition of Chinese FDI in Europe. In recent years, though, investments in new areas, e.g. automobile and new energy, have increased. Contrary to the attention they have received in the literature, very large, state-owned investors stand only for about one third of all Chinese direct investments made.

Using a cluster analysis, two quite distinct groups of Chinese investment were identified, which were treated separately in the analyses of investment motivation and the applicability of theories. The first group (type I) includes small, privately owned Chinese manufacturers and trading companies that engage in FDI of small volume in order to improve their export performance in the European market. Their subsidiaries are typically small in size, greenfield and wholly owned. The second investment group (type II) is less homogenous than the first and consists of investors that tend to be large, state-owned and often already have experience in managing foreign subsidiaries. Their subsidiaries likewise tend to be large, have often been acquired and are active in R&D and manufacturing. These characteristics largely match the description of the companies analyzed under the third subordinate research question, which are therefore regarded as the same group of investments.

A comparison between Chinese subsidiaries in Eastern and Western Europe shows that Eastern European subsidiaries have different characteristics. Manufacturing, construction and telecommunication services are more common, while fewer subsidiaries are active in export supporting functions. Also, more investors chose joint ventures as entry modes. These differences indicate that such investment differs from those described by type I and II. Hence, a third group of Chinese investors (type III) was defined, the members of which share investment motives that lead them to choose Eastern Europe as the location for their investment.

9.2. Host country factors attracting Chinese FDI

The second sub-question deals with the issue of which host country factors attract Chinese FDI in Europe. Existing theories and literature was used to determine which country characteristics should be included in a regression model of count data. The analysis was further divided into two time periods (2003-2006 and 2007-2010) and into two different subsidiary locations (Eastern and Western Europe). The results were used to gain insights into the motivations behind Chinese investments and changes over time.
The strongest relationship found in the regression analysis is between imports from China and Chinese FDI. Absolute market size is also of importance, although it seems that market growth becomes more important in times of economic uncertainty. These relationships suggest that much Chinese FDI serves to expand and improve export activities. This is in accordance with the previous findings on type I investors, which represent the largest group of Chinese FDI and consequently have a large impact on the results of the regression analysis.

In contrast to previous research, no positive relationship was found between R&D expenditures and Chinese FDI in Western European countries, as one should have expected for type II investors. This may be a result of methodological attributes. For instance, type II investors tend to be large in size, which means that they would carry larger weight in analyses of investment volumes, which are the basis of most previous research. Case evidence of this thesis shows that these investors are attracted by the existence of technology, international sales networks and a highly skilled workforce within a particular industry.

Interestingly, no positive relationship was found between host country factors that have the potential to decrease the liabilities of foreignness faced by Chinese investors. Apparently, such aspects are of little importance as long as Chinese investors otherwise perceive a large potential in locating within a specific country.

Companies that choose to invest in Eastern European countries are indeed attracted by different host country characteristics than those locating in Western Europe. Congruent with literature on global Chinese outward FDI, political stability has a negative influence on FDI, whereas R&D expenditures have a positive influence. As the subsidiaries in Eastern Europe are not characterized by a high level of technology, the latter relationship can be interpreted as an indicator for the existence of a comparatively skilled work force. Similarly, easy entry conditions for foreign investors and low labor standards and costs, which tend to be connected to political risk, are likely to stand behind the identified relationship.

9.3. Investment in strategic assets

The third subsidiary research question focuses only on why and how Chinese companies invest in strategic assets in Europe, which are largely congruent with the described type II investment.
At the time of investment, investors in strategic assets tend to be dominant in the domestic market, but lack e.g. technological and innovative capabilities that are necessary to compete internationally. They do, however, possess certain advantages in the form of abundant financial resources, cheap and efficient manufacturing processes and a high capability and willingness to learn from co-operation partners.

Type II investors have had international exposure of various natures, but have typically only begun their internationalization process in recent years. Nonetheless, they regard internationalization as an important strategic priority. They are hereby actively supported by the Chinese government and spurred on by domestic competitors who also invest abroad. Their main motivation for investment is to gain access to assets that will help them overcome their competitive disadvantages. Type II investors often proceed stepwise with respect to resource commitment and at some point acquire a local company to accelerate the transfer of strategic resources. In the acquisition of European companies, the investors follow both a short-term and a long-term strategy simultaneously. In the short term, all functions based on advantages that are firm-specific and difficult to transfer, the responsibility for international markets and the management of the acquired brand remain in Europe. At the same time, standardized parts of the production are moved to China, thus lowering costs internationally and improving the products sold only on the Chinese market. In the long term, however, the aim of the Chinese investor is to absorb even capabilities that cannot be copied easily, by deeply integrating e.g. R&D departments in Europe and China. The ultimate goal is thus the development of independent innovative capacities and the transformation from cost leadership to differentiation advantages.

9.4. Applicability of existing theoretical concepts

The fourth and final subordinate research question concerns which existing FDI theories are appropriate for explaining Chinese FDI in Europe.

One aspect which all three identified FDI types share, is that their internationalization activities are not path dependent with respect to either geographical or cultural distance. In other words, they do not tend to have much experience in operating foreign subsidiaries, but are nonetheless not detained by large liabilities of foreignness. Instead, they specifically select Europe for their internationalization purposes. The gravity approach and the geographical component of the Uppsala approach are thus not applicable to Chinese FDI in Europe. At the same time, however, all investors tend to proceed
stepwise in terms of resource commitment when entering Europe, either through prior exports or increasingly large FDI projects. The conclusion on the applicability of the Uppsala model is thus ambivalent.

Type I investment, made by small Chinese companies to improve their export activities, can best be explained by an enlarged version of Dunning’s OLI paradigm, which integrates several conventional FDI theories. Adapting the framework to new economic realities, institutional factors are integrated as determinants of ownership-, location- and internalization advantages alike. In addition, country-specific cost advantages are included as ownership-specific factors, as local European companies cannot easily copy them without relocating their own manufacturing to developing countries. Applying the adapted OLI framework, one can classify type I investment as market-seeking, because the internalization of downstream activities has the objective and potential to improve and expand existing export markets. In this context it should be noted that type I investment tends to involve highly standardized products.

Type II investment can be explained by newly developed theories of FDI, which after all were mostly developed on the basis of such FDI. The government steward logic and latecomer theory very accurately describe the background, characteristics and behavior of a type II investor. The springboard view offers a valuable addition by clarifying the distinction between short- and long-term objectives of the acquired assets and by pointing out the recursive nature of FDI. However, again allowing for the OLI paradigm to be adapted with respect to institutions, country-specific advantages and the ability to learn from partners as ownership-specific advantages, this framework continues to hold merit as well. Accordingly, investors can be described as engaging in asset-seeking FDI with the ultimate objective of being able to enter new markets. The internalization of European knowledge centers facilitates the transfer of know-how and technology. While the new theories offer a more detailed description of Chinese FDI with the purpose of acquiring strategic assets, the OLI paradigm offers a more simply structured tool for analysis. The choice of theoretical model under these circumstances is arbitrary and which is more appropriate should be decided based on the specific context in which they are to be used.

Type III investment can also be explained most appropriately by the extended version of Dunning’s OLI paradigm. While diverse in their characteristics, they all engage in market-seeking FDI, where the specific choice of location is based on efficiency-seeking motivations.

Summarizing, this thesis finds that extended versions of conventional theories of FDI are still most powerful in explaining Chinese FDI into Europe as a whole. Newly developed theories can also be
very useful due to their detailed description of Chinese investment made in the pursuit of strategic assets, but cannot be applied to investments made for other reasons.

9.5. An evaluation of the presumed threats posed by Chinese FDI in Europe

With respect to apprehensions that Chinese companies face when investing in Europe, small investments by Chinese manufacturers of low technology products are unlikely to change the European market conditions considerably. This is because the products very likely would have been exported to Europe in any case. In addition, in many such segments, cost advantages are likely to be so important that many European companies might already have moved their own production to low-cost countries. The argument of unfair competition in connection with this type of FDI thus seems unreasonable. In general, host countries benefit from the generation of employment and tax income, which, although small for individual subsidiaries, may still amount to a sizable amount in total.

The Chinese government indeed influences Chinese FDI in Europe by actively encouraging and supporting FDI projects that aim at acquiring and transferring strategic assets and capabilities to China. An underlying political motivation to improve China’s knowledge base and competitive position thus cannot be denied. Concerns have also been raised that related FDI strips Europe of its know-how and technology and that an increasing dependence on Chinese investors will decrease Europe’s political bargaining power. However, as was shown in the analysis, investors in strategic resources generally continue to depend on and support the development of cutting-edge know-how and technology within the European host country. Even if, in the long term, Chinese investors do succeed in copying even the most advanced technologies, it is unlikely that their innovative capabilities would actually have become superior to those present in Europe.

One should also keep in mind that concerning acquired companies, the alternative to Chinese ownership and the participation of Chinese companies in R&D processes in many cases is the complete closure of such companies. In such an event, know-how and technology can easily be sold off to the highest bidder in bits or lost entirely. Contrary to widespread apprehensions, Chinese investment can thus actually assist in retaining not only employment and tax revenues, but also technology and know-how in Europe.

As many strategic assets can only slowly be transferred to China, several functions of investor and subsidiary tend to be highly integrated to facilitate the flow of information and knowledge, which
makes it difficult to break off the engagement in the subsidiary. Chinese investors’ own long-term interest in learning from their European partners thus defies the argument that the Chinese government can increase its own bargaining power by threatening to shut down their European operations. Certainly, Chinese companies can and have abandoned their European subsidiaries when they are unsuccessful. But such decisions are much more likely to be based on economic instead of political considerations. Consequently, the threat of the Chinese government or individual Chinese investors exerting political pressure on European host countries is much larger in the context of easily revocable portfolio investment. Nonetheless, the Chinese government might indeed be able to influence European countries with respect to FDI projects that have not yet taken place. Especially but not exclusively, the possibility of high value direct investment of state-owned companies might be used to play out several economically weak European countries against each other or to secure the support in political matters.

When more standardized parts of the production are moved to China, companies acquired by Chinese investors can gain a cost advantage over other European manufacturers. It should be noted that the cost advantage is little different the costs companies can save by relocating certain manufacturing processes abroad themselves. However, large amounts of financial inflows used to modernize and enlarge acquired companies might be based on the financial support that state-owned companies receive from the Chinese government. In this context, the acquired European company benefits, whereas others might lose and be rightly aggrieved by unfair competitive conditions. In such cases, an evaluation of the benefits relative to the costs of Chinese FDI might indeed be useful before such FDI projects are implemented. But whether the existence of related control mechanisms would indeed be helpful or simply result in high administrative burdens benefitting only individual industry players is ambiguous.

Summarizing, the apprehensions towards Chinese FDI in Europe seem exaggerated, as not only employment and taxes are generated, but know-how, technology and innovation are actually sustained in the host country. While political motives do influence Chinese FDI, the long-term interest in European subsidiaries signifies that the effect on China’s political bargaining power is negligible with respect to already made investments. Pressure can mainly be exerted in cases where an investment has not taken place yet. While companies acquired by Chinese investors are likely to benefit from the alliance, their European competitors may indeed find their competitive position unfair, as the financial funds used to support the subsidiary might have originated in active financial support offered by the Chinese government.
9.6. Suggestions for future research

While this thesis has provided detailed insights into Chinese FDI activities in Europe, it has also left a number of questions unanswered. For instance, both the descriptive and regression analysis include indications that the characteristics of Chinese FDI might have changed around the time the go global policy was implemented. A company-level analysis would be helpful in determining whether this is indeed the case and which changes have occurred.

In addition, the conclusions drawn on investment categorized as type I and III in this thesis are exclusively based on quantitative analyses. To support and elaborate on related findings, qualitative measures such as interviews would be useful.

Last but not least, investment into Eastern European countries is still small in size and began fairly recently. The development of such investment should thus be re-examined in the future in order to reach more generalizable conclusions with respect to their characteristics.
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Articles and Papers


Books


Sources of secondary data


**Case company websites**

http://en.smtcl.com/


http://www.sanygroup.com/group/de-de/

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www.mg.co.uk

www.putzmeister.com

www.sanygroup.com

www.schiessgmbh.de

www.vensys.de
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Appendix 1: Company size

Due to the lack of other reliable data for a large number of companies in the sample, this thesis uses Orbis’ categorization of company size.

In its definition of company size, Orbis uses the following criteria. Only one of conditions has to be met in order to be included in the higher category.

**Very large companies**
- Operating Revenue $\geq$ 100 million EUR (140 million USD)
- Total assets $\geq$ 200 million EUR (280 million USD)
- Employees $\geq$ 1,000
- Listed

Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (140 USD) are excluded from this category.

**Large companies**
- Operating Revenue $\geq$ 10 million EUR (14 million USD)
- Total assets $\geq$ 20 million EUR (28 million USD)
- Employees $\geq$ 150
- Not Very Large

Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (140 USD) are excluded from this category.

**Medium-sized company**
- Operating Revenue $\geq$ 1 million EUR (1.4 million USD)
- Total assets $\geq$ 2 million EUR (2.8 million USD)
- Employees $\geq$ 15
- Not Very Large or Large
Companies with ratios Operating Revenue per Employee or Total Assets per Employee below 100 EUR (140 USD) are excluded from this category.

**Small companies**
Companies on Orbis are considered to be small when they are not included in another category.
Appendix 2: State ownership

State-owned companies in China can roughly be divided into three different categories:

1. Companies owned by central government institutions, either directly or through directly owned subsidiaries. The main institutions in this context are the ‘State-Owned Assets Supervision and Administration Commission’ (SASAC) and the state asset management bureau (SAMB) (Ramasamy et al., 2010). The former was established in 2003 to take over state-owned enterprises whose ownership was previously distributed among different ministries (Filippov & Saebi, 2008), while the latter appoints the board of directors and managers and transfers dividends earned to the state or provincial treasury.

2. Companies owned by regional or local government authorities, either directly or through wholly owned subsidiaries.

3. Former state-owned companies that have been listed on the stock market, but in which a government institution remains the largest shareholder.

Many companies that used to be entirely state-owned have only recently gone public and many informal ties between the enterprise and politics, e.g. relationships and inherent processes, still remain. Therefore, a majority ownership by governmental entities was not regarded to be necessary in order to be influenced classified as an SOE. In this thesis, an investor is regarded to be state-owned (or rather, state-controlled), when government entities are the largest shareholders with at least 25% of the shares or an ownership path of at least 25% exists.
Appendix 3: Methodological choices concerning the cluster analysis

In order to identify distinctive groups of Chinese direct investment, a hierarchical, agglomerative cluster analysis was conducted. The purpose of a cluster analysis is to identify homogenous subsets in a heterogeneous totality of observations. While a cluster analysis is usually conducted for cases, it can also be used to group variables. A hierarchical, agglomerative cluster analysis begins by regarding all variables as separate in the beginning and subsequently combines them in groups according to their similarity.

A cluster analysis involves choices about the measure of distance/similarity and the linkage criterion. While each choice influences the results, no general rules exist for the preference of one choice over the other (e.g. Backhaus, Erichson, Plinke & Weiber, 2006; Finch, 2005). In the following, the particularities of the data and the objective of the cluster analysis will be discussed in more detail in order to clarify the reasons behind the selection of distance measure and linkage method.

All investment characteristics included in the analysis have to be measured by binary data, which indicate whether a certain characteristic is present (1) or not present (0) for a certain observation. In most cluster analyses, including each characteristic only once would be sufficient to gain relevant results. However, in a cluster analysis on variables with binary data, the way the variables are coded can influence the results. For instance, if both joint ventures and large subsidiaries were coded as 1, then a hypothetical relationship between JVs and small subsidiaries would not be identified, as the coded constellation 1-0 would represent a large distance between the two variable outcomes. That being the case, all possible variable outcomes received their own dummy variable for the cluster analysis. This in turn has consequences for the choice of distance measure. Some distance measures, such as the commonly used simple matching for binary data (Sokal and Michener, 1958), take all matching components into account, no matter whether the cases are marked as existing or non-existing for both variables. Under the described inclusion of two dummy variables for each investment characteristic, this would lead to two problems: First, a group of identical clusters reflecting the same relationships would be formed, which would not reveal in which cluster the existence as opposed to the non-existence of a variable is responsible for the connection. For example, if one assumes that large investors have a tendency to co-exist with large subsidiaries, this would likewise be reflected in a clustering between small investors and small subsidiaries, where the non-existence of both traits leads to a low measured distance. Second, the common non-existence of rare variables could lead to a cluster that can easily be misinterpreted.
To prevent the formation of ambiguous clusters, the chosen measure of distance/similarity should only regard variables as equal when they are both present, i.e. coded as 1. At the same time, the common absence of a certain observation should not have a negative influence on the closeness of two variables. This is because some variables occur much less frequently than others and this circumstance in itself would lead to large distances between them. A measure of distance that satisfies the illustrated criteria is the Jaccard coefficient (Jaccard, 1901; Sneath (1957). This similarity measure calculates the difference between two variables through the following formula:

\[
\frac{a}{a+b+c} \quad \text{(equation A.1)}
\]

Where \( a \) is the number of observations that possess both variables, and \( b+c \) represent all observations for which only one variable is present.

The average-linkage-between-groups method was chosen for linkage, because it takes information about all pairs of distance between clusters into account. Used simultaneously with the proximity matrix, it is possible to identify which variables were most important in the cluster formation process. This linkage method, however, does not identify outliers that should be excluded. Hence, before beginning with the actual analysis, the single linkage method was applied to the data. This method tends to form chains of variables, in which it does not include variables that are not closely related to any of the other variables. These variables are subsequently eliminated from the analysis.
Appendix 4: Intermediate steps of the cluster analysis

Proximity matrix

Table A.1

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<thead>
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<th>Case</th>
<th>State-owned</th>
<th>Private company</th>
<th>Subsidiaries outside Europe</th>
<th>No subsidiaries outside Europe</th>
<th>Other sector</th>
<th>Large &amp; very large investor</th>
<th>Small or medium-sized investor</th>
<th>Wholly owned</th>
<th>Greenfield</th>
<th>Services</th>
<th>Small subsidiary</th>
<th>Medium-sized - very large subsidiary</th>
<th>Acquisition</th>
<th>R&amp;D or manufacturing</th>
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<td>.647</td>
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Agglomeration schedule

Table A.2

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<td>2</td>
<td>.184</td>
<td>12</td>
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</table>

Complete linkage method

The inclusion of both possible outcomes of one characteristic as an individual variable with the simultaneous use of average linkage bears the risk of certain variables not having been included in a certain cluster due to their far distance to their opposite variable. But a closer look at the proximity matrix shows that the closest similarity between any two variables inside and outside of the groups is .385 ("WO" and "InvLarge"), which is lower than any similarity between the variables inside the groups. Accordingly, the same analysis using the complete linkage method shows an identical division of the data in two subsets (see Figure A.1).
Appendix 5: Choice of regression distribution

The dependent variable in the regression analysis is the number of Chinese investments made per country and year. It is hence a directly observed count data, which is zero for the majority of observations. There is no reason to expect a linear relationship between independent and dependent variables. Under these circumstances, conventional linear or log-linear regression models are not feasible. A more suitable model, which is often used as a benchmark model for count data, is the Poisson regression (Cameron & Trivedi, 1998). It models the natural log of the expected count using a Poisson distribution, which was first developed by Simeon D. Poisson in 1837. It is a binominal distribution in which the probability of an event diminishes with its distance from the mean count, while there is no natural upper limit to the count data (Dallal, 2012).

The Poisson distribution assumes that the variance is equal to the mean (Cameron & Trivedi, 1998). If this is not the case, the data is over-dispersed, which means that it is more variable than the Poisson distribution predicts. The use of the Poisson model would thus lead to biased and too small standard errors. These, in turn, may result in the declaration of statistically significant predictors, although they are not. An alternative to the Poisson distribution is the so-called negative binomial distribution, based on the distribution developed by Greenwood & Yule (1920) and Eggenberger & Polya (1923). It is an extension of the Poisson distribution, which allows for more variability in the data. Both the Poisson and negative binomial regression are special cases of generalized linear models (first described by Nelder & Wedderburn, 1972). They generalize the linear models that are used for regression and analysis of variance, allowing for more general mean structures and general distributions (Christensen, 1997).

With several independent variables (covariates) X1, X2…Xp, both the Poisson and negative binomial regression model take the general form

\[ \log(\lambda(Y_i)) = a + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_p X_p \]  

(equation A.2)

where \( \lambda \) is an exponential function of independent variables Xi, a is a constant, and \( \beta \) stands for the coefficients. Both regression models use the maximum likelihood method to estimate the parameters. This means that the model selects parameters that give the observed data the largest probability of occurring.

Each of the regressions to be run was tested with respect to whether the requirement that the variance is equal to the mean is met. Using the likelihood ratio test, one computes -2(log likelihood (Poisson) – log likelihood (negative binomial)). If the calculated value is above 3.84, the critical value of the \( \chi^2 \)
statistic with 1 degree of freedom, then the negative binomial distribution must be used instead of the Poisson (Cameron & Trivedi, 1998). This was the case for four out of the seven regressions to be run, namely those including Western European host countries and either all years or the time period 2007-2010. The reason why the mean and variance in these cases are significantly different from each other is that these regressions contain more observations in which the number of direct investments made was uncommonly high. The Poisson distribution was used in all the three remaining regressions, thus conducting the best fitting regression model for all datasets.

SPSS uses Wald Chi Square values to test whether the calculated individual regression coefficients are significantly different from zero, given all other regression predictors in the model. The Chi Square test statistic is equal to the squared ratio of the estimate to the standard error of a specific estimated coefficient.
Appendix 6: Description of variables used in the regression analysis

This appendix gives a short description of the variable sources and measurements used in the regression analysis.

**Proxies for market opportunities**
As mentioned before, GDP is used to estimate total market size, while GDP per capita approximates relative market size and GDP growth is an indicator of future market opportunities. These values were retrieved from the World Bank Development Indicators. Investors are likely to take not only the current year into account, but to monitor the market for a certain time before the investment actually occurs. Accordingly, the variables used in the regression are the average of the year of the investment and the two years previously. Values for imports from China were retrieved from China’s yearly Statistical Yearbook and corresponding averages computed. This was likewise done to reflect the probability that a single successful year for Chinese exports is not likely to be enough to induce a company into direct investment.

**Proxies of the availability of strategic assets**
R&D expenditures as a percentage of GDP and patent applications of residents were retrieved from the World Bank Development Indicators to approximate the availability of strategic assets in the host countries. Three-year averages were used in order to correct for possible abnormalities in single years.

**Proxies for the liability of foreignness**
Since no up-to-date information about the size of the ethnic Chinese population could be found, the number of Chinese citizens living in a certain host country will be used as a proxy. This number is likely to be smaller than the ethnic Chinese population; however, it should nonetheless be able to estimate the relative distribution of Chinese in Europe reasonably well. Citizens from Hong Kong are also included in the sample, as 95% are of Chinese ethnicity (CIA, 2006). It should be noted that the number of Chinese citizens in the host country is likely to be influenced by the number of existing Chinese companies.

Data on the Chinese FDI stock was retrieved from the Statistical Bulletin of China’s Outward Foreign Direct Investment, which provides data from 2003 to 2010.

Hardly any comparable data for the English proficiency of the population of European countries is available. The most reliable source is a special Eurobarometer report from 2005. This report does not measure changes over time, but since pronounced changes in the ability to understand English are likely to occur slowly, the values were used for the entire time period. The UK, Ireland and
Switzerland were not included in the Eurobarometer, so for these countries, information on the population share that is fluent in English was retrieved from Crystal (2004) to complement the data.

**Proxies for political stability**

The political environment is measured by the average governance score of the World Bank’s Governance Indicators, namely: Voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Higher values correspond to better governance.
Appendix 7: Description of case companies

The companies analyzed in the case study in chapter seven are in the following described in detail. If not otherwise stated, the source of the information in this section was the website of either the investor or the subsidiary (see list of sources at the end of the appendices)

Shenyang Machine Tool Company

Investor background

The Shenyang Machine Tool Group Company was formed in 1993, when Shenyang’s three largest machine tool manufacturers and a fourth state-owned company were merged under the ownership of Shenyang State-owned Asset Supervision and Management Committee (EIU, 2004). At the time, the equipment in the three factories was outdated, facilities were redundant, market demand low and decades of bureaucratic planning had left managers incompetent when it came to winning new customers and operating in an international competitive environment. As a result, the many company units suffered great losses. In 1996, foreign management consultants of the US-based company EDS Business Planning were called in to assist in developing corporate strategy, management structure, manufacturing planning, technology requirements, software capabilities and marketing, accounting and financial systems. This initiative was part of a pilot World Bank/Shenyang municipal government project aimed at reviving the Shenyang machine tool sector.

The operational parts of the company are today centered in the publicly traded Shenyang Machine Tool Co., Ltd. (SYMTC), which also officially stands for FDI in Europe. As 42% of all shares remain in the hands of the mother company, SYMTC is thus regarded as state-controlled for the purpose of this paper.

SYMTC builds over 300 varieties of small and medium-sized machine tools, controls, equipment and parts (Metalworking Production, 2003; Schreier, 2008). The company has experienced very large growth rates and with revenues of $2.9 billion in 2011, SYMTC is today the third largest machine tool manufacturer in the world and the largest in China (Schnitzler, 2012; Schreier, 2008).

SYMTC was one of the last Chinese machine tool manufacturers to engage in FDI abroad. However, the company now states that one of its goals is to become an “international first-class transnational tycoon” (Press release dated 09/28/2010), a quest in which it is actively supported by Chinese government authorities, e.g. through financial backing. Schiess has acquired several domestic and
international machine tool making companies (Xinhua, 2012) and has foreign subsidiaries in Germany, the US, in Canada and in Turkey.

Characteristics of the acquisition target
Schiess GmbH is located in Aschersleben in Sachsen-Anhalt, Germany. The company has 150 years of experience in producing large and very large machine tools with applications in many different industries. It develops integral solutions in machine construction and mechanical and electrical engineering. The machines can be used for, among others, turning, milling, drilling and sanding. Examples for areas in which Schiess’ products are employed are marine turbines, automobile production and turbines in wind power stations. Apart from the production of new machine tools and parts thereof, the company also focuses on service and modernization of machinery, not only of its own produce. The company prides itself in innovative products that are characterized by high quality, reliability, flexibility, precision, energy efficiency and longevity. Schiess developed new concepts for all of its products in 1997, which thereby became one of the most modern manufacturers in the industry.

When Schiess was privatized after the German reunification, the company was left without the financial means to remain competitive (Rössler, 2010). The company had three consecutive owners, each of which further rationalized costs, reduced the number of employees and stripped the company for know-how. In 2003, Schiess was highly indebted (Schreier, 2008) and entered insolvency.

The acquisition
SYMTC was interested in Schiess’ know-how regarding the production of larger machinery, a process that SYMTC has little experience in and which requires complex technology and experience (Rössler, 2010). In the beginning, the German CEO maintained a minority share, as a new German CEO took office in 2009, SYMTC acquired the remaining shares and Schiess became wholly owned by the Chinese investor (Impulse, 2010).

The acquisition of Schiess was believed to offer new opportunities for development, marketing and production of machinery for both parties. SYMTC sees Schiess as a foreign base for research and training, a springboard for developing high-end products and for entering the European market (EIU, 2004). Moreover, Schiess’ products are known for their reliable quality made by German engineers, an image which SYMTC exploits both internationally and in the Chinese market. Well-established and extensive connections to customers in Europe, North and South America, Asia and South Africa made Schiess an integral part of SYMTC’s international growth strategy (digimagazine, 2011).
Development since the acquisition

Between 2004 and 2010, SYMTC invested approximately € 50 million in Schiess GmbH (Rössler, 2010). The acquisition thus provided funds for renovation and modernization of the production facilities, and new factory buildings were built. Similarly, the number of employees rose from only 64 at the time of acquisition to 340 in 2010 (data extracted from Orbis), 20 of which are Chinese (Rössler, 2010). The operating revenue has tripled since the acquisition (Schnitzler, 2011) and all profits generated are re-invested in Aschersleben (Rössler, 2010). While the Chinese investors expect high growth rates from Schiess, the local management under the leadership of a German CEO is in charge of day-to-day decisions (Rössler, 2010).

German engineers in Aschersleben still develop products that are only sold in Europe under Schiess’ own brand. At the same time, however, research and development is also undertaken on behalf of their new parent company (Schreier, 2008). The Chinese CEO of Schiess, responsible for the communication with the parent company in China, states that the technology and know-how inherent in Schiess and its employees cannot simply be copied (quoted in Rössler, 2010). Congruently, the German CEO Brumme has been quoted to say that as long as Schiess stays ahead of the Chinese in their research and development, there is no danger of the relocation of manufacturing to China (quoted in Impulse, 2010). In order to keep up to date with technical challenges, Schiess has entered into cooperation agreements with the Otto-von-Guericke University in Magdeburg and the Fraunhofer Institute (Kroh, 2012b). Similarly, as the label “made in Germany” for technological products is of very high value internationally and in China, it is important for SYMTC to maintain the brand Schiess and to continue to manufacture most machines in Germany.

So far, SYMTC does not export any completely Chinese machines to Europe (Schnitzler, 2011). However, the companies plan to develop and produce four medium-sized machining product lines in cooperation under the product line “Ascherleben” (Kroh, 2012a). The central idea is to introduce affordable machines with a quality that is below that of Schiess’ other products. They hereby combine the strengths of the two locations: German engineers are responsible for research, development, prototypes building and testing as well as for providing services to international customers. SYMTC stands for the low-cost production with short lead-times in China. For this purpose, new production facilities have been built in Shenyang. Local planners are hereby assisted by experts from Schiess in order to achieve a certain quality. The machines included in the new series are based on heavily standardized modules, the bases of which are made in China (Kroh, 2012b) and subsequently adapted to customer needs in Aschersleben (digimagazine, 2011).

Supported by the know-how acquired through Schiess, SYMTC at the end of 2012 changed its production strategy to a focus on high-end numerical control machine tools (Xinhua, 2012). Wishing
to further increase the quality of its products for international markets, SYMTC has also entered into partnerships with other renowned global companies, such as Siemens, Bosch and Schaeffler Technologies GmbH & Co. In the beginning of 2012, SYMTC set up European headquarters in Berlin with the objective of getting easy access to engineering graduates from Berlin’s many universities.

**Xinjiang Goldwind Science & Technology Company**

**Industry background**

As a result of the Chinese government’s efforts, which include committing funds to improve the international competitiveness of domestic companies, China has become a major global player in renewable energy. In recent years, Chinese companies active in the renewable energy sector, especially wind and solar energy, have begun to invest in Europe.

**Investor background**

The Xinjiang Wind Energy Company was established in Xinjiang in 1986 as the first domestic wind energy company. In the early years, the objective of the state-owned company was limited to analyzing already existing technologies with the goal of understanding and eventually replicating them. For instance, 13 wind turbines from the (at the time) Danish company Bonus Energy, which were installed in China in 1989, constituted the basis of the company’s technological development and experience (Springborg & Rostgaard, 2010). It was not until 2000 that a shift occurred from a pure R&D focus to a market-oriented enterprise that needed to break even. One year later, Goldwind Science & Technology Co., Ltd (Goldwind) was established as a joint-stock firm under Xinjiang Wind Energy Company.

In 2002, Goldwind established China’s first large-scale wind turbine assembly plant. The following year, Goldwind became China’s largest domestic wind turbine generator developer and manufacturer. With spectacular sales growth rates, which in many years reached over 100%, Goldwind has not only become one of the leading wind energy companies in China, but also one of the largest wind turbine manufacturers in the world. For example, Goldwind stood for a total domestic market share of 20.4%, measured by installed wind power capacity (Windpower Monthly, 2012) and reached an operating revenue of over $2 billion in 2011. The company’s nine production bases have a total annual capacity of over 3000 units.

Functions included in the company today are R&D, product development and manufacturing of large wind turbines, especially generator sets. Goldwind also provides a large range of services connected to wind farm projects, e.g. industry analysis, policy research, design, financing, site selection,
construction, training, operation and maintenance. The company highly prioritizes training of their personnel in an effort to improve quality and innovative capacity.

Goldwind was listed at the Shenzhen Stock Exchange in December 2007. However, the two largest shareholders as well as a number of smaller ones are still owned by Chinese government institutions, thus exceeding the threshold of 25% ownership as the categorization used in this thesis for state-control. Conformingly, the government has repeatedly supported Goldwind in its activities and has several times been left in charge of developments in wind energy technology desired by the Chinese government in course of China’s Five Year Plans. Since 2005, Goldwind (along with other major Chinese wind energy companies) has benefitted from the Chinese government’s focus and investment in renewable energy (Wang & Li, 2009) and has signed strategic cooperation agreements with state-owned China Development Bank and the Industrial and Commercial Bank of China to support its international expansion and domestic development.

While the first international sale took place only in 2008 (to Cuba), Goldwind has the goal of becoming the world’s leading wind power solutions provider and hence regards internationalization as a strategic priority. The company’s products are still mainly sold in the domestic market, but in 2010 offices were established in Australia and the USA; where the first three wind turbines were also installed. In its internationalization process, Goldwind tends to rely on cooperations with local partners and suppliers, who possess either or both market knowledge or technology.

Characteristics of the acquisition target
The roots of VENSYS go back to 1990, when a wind energy research group including experts from several German universities and research institutes was established at the Hochschule für Technik und Wirtschaft in Saarbrücken. Seven years of R&D resulted in the installation of the first cutting-edge Permanent Magnet Direct Drive (PMDD) wind turbine prototype. In 2000, the members of the research group founded the VENSYS Energiesysteme GmbH & Co. KG (renamed VENSYS Energy AG in 2007) in order to make commercial use of the accumulated know-how. Apart from production of essential parts, the company also offers surveillance and maintenance services for its wind turbines. VENSYS’ products are characterized by the use of a small number of high quality parts. The use of PMDD technology and a toothed belt instead of a gearbox reduces complexity, weight and the need for maintenance (Berlingske Business, 2010). PMDD is seen as one of the key wind energy technologies in the future (Berlingske Business, 2010).

The acquisition
In 2002, Vensys entered into a long-term strategic alliance with Goldwind, licensing the latter to produce and distribute Vensys wind turbines in China. It was part of Vensys’ internationalization
strategy and since then, several other companies have been licensed to do the same in India, Brazil, Spain and the Czech Republic (Windpower Monthly, 2008). Goldwind thus gained the opportunity to study Vensys’ technology and to gain experience in manufacturing it. To enhance the cooperation and facilitate technology transfer, Goldwind established the wholly owned subsidiary Goldwind Wind Energy GmbH in Germany in 2006.

In 2008, Goldwind acquired 70% equity ownership in VENSYS from Saarwind, a founding group of company employees, and the former main shareholder Hugo Denker. Several rationales lay behind this acquisition. First of all, Goldwind became the first Chinese wind power company to possess its own proprietary technology and independent R&D activities. In particular, Goldwind wished to benefit from Vensys’ extensive R&D experience in PMDD and to improve the quality of its products. Moreover, Vensys manufactures essential parts like generators, power converters and electric control units itself. The latter two product groups were very attractive to Goldwind, since the domestic market for these spare parts at the time still suffered from significant shortcomings (Wang & Li, 2009). In addition, Vensys already possessed direct contacts to local customers in the most important markets and had built up a network of international production through a licensing system. In continuing to use the Vensys brand and the label “Made in Germany”, Goldwind wished to gradually improve the perceived quality of its own products.

**Developments since the acquisition**

Today, Vensys functions as Goldwind’s European platform for not only R&D, but also manufacturing, marketing, sales, human resources and capital. Production in Germany is primarily aimed at the European market (Windpower Monthly, 2008), but production techniques and know-how are constantly transferred to factories in China. Vensys thus plays an integral role in Goldwind’s internationalization strategy and has contributed significantly to Goldwind’s success in catching up to its international competitors in terms of quality (Berlingske Business, 2010).

Vensys benefited greatly from the investment by Goldwind, as increased capital enabled the company to expand in size, establish its own production facilities and mass producing its wind turbines. As a result, Vensys was able to construct new production facilities in Neunkirchen and to establish a subsidiary that produces energy converters systems for Vensys and all its licensees. While Vensys had less than 30 employees at the time of acquisition (Rössler, 2010), VENSYS and its subsidiary today have almost 200 employees and over 6800 Vensys wind turbines have been installed in more than a dozen countries on five continents.
Sany Heavy Industry

Investor background
The Sany Group Co., Ltd. was founded in Lianyuan, Hunan Province in 1989 and has been privately owned since the very beginning. In 1994, the subsidiary Sany Heavy Industry Co., Ltd. (Sany) was founded, which since its establishment has grown at a rate of 50% annually and is now one of the 500 largest companies in China. Since 2003, the company segment Sany Heavy Industries has been traded on the Shanghai Stock Exchange and has a diversified ownership structure. Sany’s portfolio includes a wide variety of construction machines, for instance concrete pumps, road-building machinery, cranes and mining machinery. In several of these segments, SANY is the best-known brand in China and the company has always been a technology and quality leader in the domestic industry.

Sany holds over 500 patents, invests continuously in R&D and cooperates with several universities and research institutes. The objective is the constant improvement of products and quality and becoming competitive internationally. Over 20 research centers within eight different areas seek to be frontrunners in the development of industry standards and have often been the first to introduce new technologies in the domestic market.

Rapidly increasing domestic demand has been by far the main driver of growth for Sany (Anderson, 2012). However, in recent years, the SANY Group has expanded rapidly internationally and today counts about 70,000 employees in more than 150 countries. Manufacturing facilities have been established in India, Brazil, Indonesia, the United States and Germany. Sany’s enjoys a significant price advantage in international markets, as its products cost approximately 30% less and can be shipped in half the time of established brands (Engineering News-Record, 2007). Nonetheless, Sany’s internationalization process has been slow. Exports generate less than 5% of Sany’s total sales (China Daily, 2012) and Sany tends to carry out overseas investment plans in stages. In this context, Sany’s main founder and shareholder Laing Wengen has been quoted to say that he regards big overseas mergers as too risky and prefers to set up his own factories abroad and identify skilled staff step by step (Flannery, 2009).

Sany’s main domestic competitors, Zoomlion Heavy Industry Science and Technology Development Co. and Liugong Machinery Co. have also invested in manufacturing facilities in the US and Poland respectively (Bryant, 2012) and have formed strategic alliances for the marketing of their products in foreign markets (Anderson, 2012).

Investment in Europe
Before investing in Germany, Sany had already exported to the country through its sole German dealer, BODO (Press release dated July 3, 2007). Sany subsequently chose to invest in Germany to
acquire resources that would be helpful in its internationalization efforts. Germany was seen to be abundant in such resources, as it is one of the top countries in the machinery manufacturing field and products made in Germany enjoy a reputation for excellent quality, high precision and good performance (Press release dated April 20, 2010). Sany registered a wholly owned greenfield subsidiary in Cologne, Germany, in 2008. North Rhine Westphalia in particular is abundant in market opportunities and professional workers within this sector (Press Release dated May 19, 2009), allowing Sany to reach the best global manufacturing and engineering talent (Bryant, 2012).

In 2009, Sany signed a contract for the construction of an R&D center, equipment manufacturing facilities and a training center in Bedburg, 40 kilometers outside of Cologne, with a volume € 100 million. The investment was the largest ever made by a Chinese company in Europe at the time (Bryant, 2012). In June 2011, Sany opened the industrial park, which is responsible for the entire European market (Press release dated July 27, 2011). It is based on local demands and emphasizes communication with local customers concerning design, manufacturing processes and after-sales services in order to adapt to the given business environment. Before the official release of the first product made in Germany in November 2011, Sany Germany had spent one year on market research and subsequent modifications of technical specifications to meet European standards. All parts used in the new machine were purchased and manufactured in Germany and went through a TÜV-approved production process. After further improvements, mass production started in 2012 at the in Bedburg. The finished facilities have a capacity of 3,000 machine units per year (Press release dated July 27, 2011).

In July 2011, Sany was granted full membership in the influential German Engineering Federation VDMA (Verband Deutscher Maschinen- und Anlagenbau) (Press release dated July 27, 2011). At the time, 80% of the staff was from Germany and other European countries.

Seen from the perspective of Sany’s overall international strategy, the subsidiary serves to improve the reputation of Sany’s brand in Germany and Chinese brands in general (Press release dated April 20, 2010). The investment and the company’s presence themselves have given attention to Sany’s products and created initial interest in the European market (Press release dated April 20, 2010).

Sany’s German subsidiary faced difficulties in developing the European market, because it lacked a large sales and service network as well as an established brand name (Bryant, 2012). The company was far below its own export goals (Press release dated July 2, 2012). Sany therefore decided to become more proactive and in April 2012 acquired 90% of equity shares in the German company Putzmeister Holding GmbH, while the last 10% were received by CITIC Private Equity Advisors
The acquisition occurred when the Putzmeister’s founder sought a successor at the time of his retirement.

**Characteristics of the acquisition target**

With a market share of 40%, Putzmeister is the world’s leading concrete pump manufacturer (Sany press release dated February 14, 2012). More than 90% of all sales are generated outside of Germany and the company has an extensive global service and sales system. Founded in 1958 in Aichtal, Putzmeister has always been active in the concrete and mortal machinery industry and focused strictly on providing the best technology and products within this niche. This secured a steady but moderate growth. Some years ago, however, revenue fell and led to hundreds of job cuts (Bryant, 2012). The company has since returned to growth and profitability (Bryant, 2012).

**Expected developments after the acquisition**

According to plans, Aichtal will become Sany’s new headquarters for concrete machinery outside China and its overseas operational center (Press release dated February 1, 2012). Putzmeister will maintain operational independence and an independent brand within Sany. Putzmeister’s CEO, Norbert Scheuch, remains in his position and will additionally be nominated to the Board of Directors of Sany Heavy Industry. He will also be responsible for integrating Sany’s domestic and international concrete machinery business. Sany expects Putzmeister to more than double its sales figures under the new ownership by 2016.

Part of the production process will be moved to China in order to reduce costs and increase profits (Press Release dated March 3 2012). In return, apart from continuing in its current product lines, Putzmeister will also introduce Sany’s products to the global market. To this end, Sany intends to increase local employment opportunities (according to Sany Heavy Industry Chairman Liang Wengen, quoted in a press release dated April 20, 2012).

Sany regards the merger with Putzmeister as a milestone in its goal to become the leading global construction machinery enterprise (Press release dated April 20, 2012). Sany will take over all Putzmeister’s patents (Bryant, 2012) and the acquired technologies are hoped to further increase Sany’s quality. The strategic acquisition is desired to combine Putzmeister’s technological advantages with Sany’s cost advantage, thereby establishing Sany as leading company in the industry.
Industry background
Several investments by Chinese companies in European car manufacturers have been the issue of much discussion in recent years. In 2012, the Chinese Minister of Industry and Information Technology Li Yizhong, said that the Chinese government would implement measures to encourage overseas investment in R&D, brands and sales networks by domestic car manufacturers (Yu, 2010).

Nanjing Automobile Corporation (NAC) was the first Chinese car company to engage in FDI in Europe, when it purchased UK based MG Motors in 2005. NAC was in turn merged with Shanghai Automotive Industry Corporation (SAIC) in 2007, with SAIC effectively taking over the company and its UK subsidiary. The following analysis will thus give a brief overview over both SAIC and NAC.

Investor background
NAC was a state-owned automobile manufacturer, which was founded in 1947 and active in the production of cars, trucks and buses. The company had joint ventures with the Italian Fiat and benefited from technology transfer from both Fiat and Seat.

SAIC’s origins lie in the formation of the Shanghai City Diesel Parts Manufacturing Company in 1955, which began manufacturing vehicles in 1958. After the opening of the Chinese economy to foreign companies, both VW (1984) and GM (1998) entered into joint ventures with the then relatively small SAIC in order to be allowed access to the Chinese market. In exchange, SAIC gained the financial capital and technical know-how necessary to create a modern car company (Economist, 2008). The company itself always remained state-owned. SAIC Group’s growth has been consistently strong, in congruence with the very high growth rates in the domestic car market over the past decade (Frost & Sullivan, 2009).

NAC and SAIC competed intensively with each other, which resulted in overlapping brands based on the same foreign technology (China Daily, 2007), some of which both companies had acquired from MG Rover. To rectify this problem, the two companies were merged in 2007 through a share-swap. SAIC brought an abundant access to capital into the merger and essentially gained control over NAC. The resulting company (in the following referred to as SAIC) had a capacity of 1.6 million cars per year at the time of the merger (Adams, 2007). Since then, SAIC has become the largest vehicle manufacturer in China, selling more than 4 million vehicles in 2011 and employing more than 70,000 people.
History of the acquisition target

The roots of the British company MG motors go back to 1924 and the company was once the largest car producers in the world (Oliver, Holweg & Carver, 2008). Over the decades, it went through a number of mergers and changes in both name and ownership (Oliver, Holweg & Carver, 2008). The integration of weak or non-complementary companies in mergers caused problems that were difficult to resolve (Oliver, Holweg & Carver, 2008). While the company had a history of strong concept engineering, this was mostly based on exceptional single engineers, who resisted later adaptations to their original designs (Oliver, Holweg & Carver, 2008). The lack of continued progress and flexibility in R&D and design led to a steady decline in market share.

Throughout the 1980s and 1990s, Honda partnered Rover and provided it with new successful models (Oliver, Holweg & Carver, 2008). By the time the BMW Group took over the company in 1994, it had managed to return small profits and a reasonable range of models existed (Oliver, Holweg & Carver, 2008). Nonetheless, BMW was not successful in increasing the company’s market share (MarketWatch, 2004) and already began to sell individual parts of the Rover Group in 2000. At the time, the company only offered aging models and average quality assembly facilities at a time where the industry suffered under over-capacity (Oliver, Holweg & Carver, 2008).

Eventually, BMW sold the company to Phoenix, a group of venture capitalists and was renamed MG Rover Group. Certain other brands were retained by BMW or sold to Ford (Oliver, Holweg & Carver, 2008). Ford also received key R&D facilities, thus depriving MG Rover of skilled R&D personnel (Oliver, Holweg & Carver, 2008). The MG Rover Group lacked funds for the development of new models and continued to report losses (MarketWatch, 2004).

The acquisition

In its search for investors, MG sold the copyrights to several models to SAIC in 2004 and a strategic partnership began for the development of new technologies (Oliver, Holweg & Carver, 2008; BBC News, 2005). While outdated in the European market, MG Rover’s technology and brands were still attractive in China (Oliver, Holweg & Carver, 2008). In addition, the simple fact that the car originated in Great Britain could be a marketing advantage in China (BBC News, 2006). To facilitate technology transfer SAIC established the SAIC Motor UK technical Centre Limited (SMTC UK) in Leamington Spa and Coventry in 2005. Another function of the subsidiary was to tap into the highly skilled local automotive engineering and design talent located in the West Midlands and to get better acquainted with the European market.

In April 2005, MG Rover entered administration, ceased all production and fired its 6,000 employees (Plisner, 2007). NAC finally purchased the company. In April 2006, the NAC MG UK Limited was
formerly established. This acquisition gave NAC access to MG’s designs, expertise and machinery, which enabled the company to develop its own models (Plisner, 2007). To this purpose, NAC removed much of the production assets at Birmingham, including complete production lines, and moved them to China (Plisner, 2007). Apart from access to technology, NAC also obtained knowledge concerning the European market and better insights into European safety requirements, which represent a major obstacle for Chinese cars in Europe (Economist, 2008).

**Developments since the acquisition**
Assembly of cars re-started at MG Motors’ historic Longbridge site in August 2007, the same month in which NAC was merged with SAIC. Given the reputation of MG as opposed to Chinese cars, SAIC chose MG as its global and export market brand and as a platform for entering the European market (Subler & Yan, 2007). Within China, the MG and Roewe brands are used alongside each other, depending on the product range and differentiated versions. The Roewe (“Rong Wei” in Chinese) brand was introduced by NAC, because Ford had purchased the right to the Rover brand from BMW in 2006 (Oliver, Holweg & Carver, 2008). SAIC partly uses the same modules for the Roewe and MG brands, e.g. the platform and engines; however, all cars for the UK and European market are still designed, engineered and assembled in Birmingham.

After the merger, the R&D facilities of SMTC UK moved to MG’s factory in Birmingham. The Center is today closely linked with R&D facilities in China and is responsible for key aspects of the R&D involved in all MG cars. A constant interchange of engineers takes place between R&D centers in China and the UK. SMTC UK today encompasses about 300 employees with high experience within the UK motor industry and cooperates with Coventry University in the development of new technologies and management systems (Press release dated June 24, 2011). SMTC UK’s first output was the first all-new MG model since 2001, which was launched in June 2011. While designed and assembled in the UK, most parts are manufactured in China (Moulds, 2011). Specialist parts for the vehicles are still supplied by local companies in the UK, though (Plisner, 2007).
List of sources used in the appendix


**Case company websites**

http://en.smtcl.com/


http://www.sanygroup.com/group/de-de/

http://www.smtcchina.com/

www.goldwindglobal.com

www.mg.co.uk

www.putzmeister.com

www.sanygroup.com

www.schiessgmbh.de

www.vensys.de