

Martina Misutova

Chinese Foreign Direct Investment in CEE

The underlying patterns and motives

Master Thesis

MSc in Business, Language and Culture (Chinese) – Business and Development Studies

Copenhagen Business School – January 15, 2018

Author

Martina Misutova

Supervisor

Prof. Peter Gammeltoft, Department of International Economics and Management, CBS

STU count: 171 706

Number of standard pages: 75,5

Acknowledgements

I would like thank to my parents and friends who have supported and encouraged me throughout this lengthy process.

I would also like to thank my supervisor, Peter Gammeltoft, who has provided me with helpful advice.

Martina Misutova,

Copenhagen, January 2018

Abstract

Chinese investment in the countries of Central and Eastern Europe (CEE) has been increasing ever since the One Belt, One Road (OBOR) strategy was introduced. With the increasing interest of Chinese investors in the CEE region, it is important to understand the patterns and the underlying motives of Chinese investment in the CEE countries. Thus, the main purpose of this thesis was to find the location determinants of Chinese FDI in the countries of Central and Eastern Europe and to describe the investment patterns and characteristics of Chinese companies investing in this region.

Set of economic and institutional variables was employed on a firm-level dataset to find the determinants of Chinese FDI in 16 CEE countries during 2006-2017 using Negative binomial regression analysis. The results indicate that Chinese OFDI into CEE countries is associated with the volume of Chinese exports, market size, strategic-assets, good infrastructure and the cultural proximity to the host countries (in all countries and EU-members) and high political risk in the host countries (EU-members). The institutional variables control of corruption and economic freedom weren't found to be related to Chinese OFDI into CEE countries.

To characterize Chinese investments in the CEE, a cluster analysis was performed which has identified two distinct types and two subtypes of Chinese investments. First main type of Chinese investments is characterized by small companies, usually service POEs without any previous international experience that enter market through M&A and form JVs with the local partners in the EU-member countries. The second main type of Chinese investments is characterized by large SOEs that tend to invest in the primary and secondary sector in the non-EU countries. These firms are large, make large investments are more likely to have previous international experience and tend to choose high equity modes and GI to enter the market.

TABLE OF CONTENTS

Abstract	iii
Table of Contents	iv
List of figures	vii
List of Tables	vii
List of abbreviations	viii
1. Introduction	1
1.1 Research questions	1
1.2 Delimitation	2
1.3 Structure of the thesis	2
1.4 Definitions of terms	3
1.5 Summary	4
2 Methodology	4
2.1 Research philosophy	5
<i>The ontological level</i>	5
<i>The epistemological level</i>	6
<i>The methodological level</i>	6
2.2 Research design	6
<i>The type of research and the research method</i>	6
2.3 Quantitative or qualitative research	7
2.4 Data source and sample	7
<i>Data sample choice for descriptive and regression analyses</i>	7
<i>Data selection:</i>	9
<i>Subsidiary selection</i>	10
<i>Data on independent variables</i>	10
<i>Limitation of using secondary data</i>	11
<i>Choice of econometric methods for the regression analysis</i>	11
2.5 The credibility of research	11
2.6 Summary	13
3 Theoretical foundations	13
3.1 Theories about the internationalization of MNEs	13
<i>Market-seeking</i>	19
<i>Efficiency-seeking</i>	19
<i>Resource-seeking</i>	19
<i>Strategic-asset seeking</i>	19
3.2 Summary	19
4 Empirical literature on Chinese OFDI and hypotheses development	20

4.1	Literature on Chinese OFDI in Europe	20
4.2	Chinese investment in the CEE countries	20
4.3	Empirical literature on market-seeking motive	21
	<i>GDP per capita</i>	21
	<i>Intensity of trade relations</i>	22
4.4	Empirical literature on efficiency-seeking motive	23
	<i>Infrastructure</i>	23
4.5	Empirical literature on strategic asset-seeking motive	23
4.6	Empirical literature review on Institutions	24
4.7	Regulatory pillar	25
	<i>Corruption</i>	25
	<i>Political stability</i>	25
	<i>Economic freedom</i>	26
4.8	Normative pillar	26
	<i>Cultural distance</i>	26
4.9	Cognitive pillar	27
	<i>Tertiary enrolment</i>	27
4.10	Summary	28
5	Descriptive analysis	28
5.1	Historical development of Chinese outward foreign direct investment (OFDI)	28
	<i>One Belt One Road Initiative (OBOR) 2013</i>	29
5.2	Geographical distribution of Chinese OFDI in the CEE region	31
	<i>Summary</i>	39
5.3	The influence of firm and investment characteristics on the volume of Chinese FDI in CEE	40
	<i>Firm characteristics and the impact on the volume of investment</i>	40
	<i>Combination of firm and investment characteristics and the impact on the volume of investment</i>	42
	<i>Summary</i>	44
5.4	Classification investments	45
	<i>Type A investments</i>	47
	<i>Type B investments</i>	49
5.5	Summary	50
6	Regression analysis	51
6.1	Proxies for relevant variables	51
	<i>Dependent variable</i>	51
	<i>Independent variables</i>	51
6.2	Model and method description	56
6.3	All countries regression	57

6.4	FDI dynamics for all CEE countries	59
6.5	FDI differences among EU and Non-EU countries	59
6.6	FDI dynamics for the EU members CEE countries	60
6.7	Results and interpretation of the regression analysis	60
	<i>Host country political stability</i>	60
	<i>Cultural distance</i>	62
	<i>Host country's GDP per capita</i>	62
	<i>Chinese exports to host country</i>	63
	<i>The number of fixed broadband subscribers per 100 people</i>	63
	<i>Research and development expenditure (% of GDP)</i>	64
	<i>Control of corruption</i>	64
	<i>Economic freedom</i>	64
6.8	Summary	65
7	CONCLUSION	66
7.1	Main contributions	67
7.2	Limitations of the study	68
7.3	Suggestions for future research	69
	References	70
	Company web pages	79
	Appendices	82

List of figures

<i>Figure 5-1 The estimated volume of Chinese FDI into CEE countries in the period 2006-2017 (in thousand USD adjusted for inflation)</i>	31
<i>Figure 5-2 The estimated number of Chinese FDI projects into CEE countries in the period 2006-2017</i>	32
<i>Figure 5-3 Comparison of EU and non-EU Countries of Chinese FDI</i>	33
<i>Figure 5-4 Comparison of the number of Chinese FDI projects into EU countries and non-EU countries in the period 2006-2017 (in thousand USD adjusted for inflation)</i>	34
<i>Figure 5-5 Degree of ownership of Chinese subsidiaries in CEE</i>	35
<i>Figure 5-6 Degree of ownership of Chinese subsidiaries in CEE</i>	36
<i>Figure 5-7 Previous International experience of Chinese companies investing in CEE</i>	36
<i>Figure 5-8 Ownership type of Chinese companies investing in CEE</i>	37
<i>Figure 5-9 Size of Chinese companies that invested in CEE</i>	38
<i>Figure 5-10 Sector in which Chinese companies invested in CEE</i>	39
<i>Figure 5-11 Final Dendrogram of Hierarchical clustering method</i>	48

List of Tables

<i>Table 2-1 The main characteristics of the four paradigms</i>	5
<i>Table 2-2 The research approaches</i>	7
<i>Table 6-1 The determinants of Chinese FDI</i>	56
<i>Table 6-2 Final collinearity diagnostics results of model development</i>	58
<i>Table 6-3 Significant home country determinants</i>	61

List of abbreviations

JV – Joint venture

EU – European Union

BRIC – Brazil, Russia, India, China

WO – Wholly-owned subsidiary

MNE - Multinational enterprise

CEE – Central and Eastern European

GDP – Gross domestic product

M&A – Mergers and acquisitions

FDI – Foreign direct investment

POE- Privately-owned enterprise

SOE- State-owned enterprise

OBOR- One Belt, One Road

OECD – The Organization for Economic Co-operation and Development

1. INTRODUCTION

Traditionally, there have been studies conducted about multinational companies from developed countries investing in other developed economies and developed economies. However, the 21st century has seen a stark increase in the outward foreign direct investment coming from emerging economies, flowing either into other emerging economies or developed countries. One of the five emerging economies known as the BRICs that have been gaining attention is the People's Republic of China. After launching the "Go Global" policy, China's position has changed from being an attractive destination for foreign direct investment from the western multinationals to being also a source country of foreign direct investment to other economies.

Besides the South-South investment, the Chinese companies have been also investing in the developed economies of the Americas and Europe. Several studies have looked at the determinants of Chinese foreign direct investment in Europe, however, these studies are usually mainly focused on the western Europe as most of the investment from China has been concentrated in the western European economies. Nevertheless, with the "One Belt, One Road" initiative starting in 2013, the transition economy countries of Central and Eastern Europe have been getting more attention from Chinese investors. Although there has been an increased interest in the countries of Central and Eastern Europe by Chinese multinationals, there are not many quantitative studies concerned with researching Chinese investments focusing solely on the Central and Eastern Europe, probably because Chinese investments have been mostly directed towards the western European countries and the investments in the Central and Eastern European countries have not been very substantial, especially before launching the "One Belt, One Road" initiative. Only recent years there has been an increase in interest of Chinese investors in the CEE region. Therefore, it would be interesting to study the following problem:

1.1 Research questions

Why do Chinese companies choose to invest in the Central and Eastern European region?

In order to gain a thorough understanding of the problem, the research question will be supplied with the following sub-questions:

- What are the characteristics of Chinese investments in the Central and Eastern Europe and how has Chinese FDI developed in this region over time?

- How do economic and institutional factors of the Central and Eastern European countries influence the investment decisions of Chinese multinational companies?

1.2 Delimitation

To proceed with this thesis, it is imperative to specify the scope of the research problem. This thesis will be primarily concerned with the determinants of Chinese investments in the CEE region using a firm-level database in the period 2006-2017. This thesis will not consider investments made into the financial sector and portfolio investments, as it is believed that banks and financial institutions behave differently from the MNEs. The home (push) country determinants will not be employed in this thesis because every region in China differs in the institutional, cultural and political factors, which are, however, not distinguished in the official sources that only present data for China as a whole. Another reason for not including determinants related Chinese home country factors is that the data from Chinese sources is not easily accessible. Only some determinants were chosen based on the extant theories and availability of data, therefore, this thesis should not be considered a complete presentation of Chinese investments and the determinants of Chinese investments in the CEE region.

1.3 Structure of the thesis

This thesis consists of six chapters and will be structured in the following way: The first chapter introduces the research problem as well as the scope of the research problem, presents the structure of the thesis and provides definitions of terms.

The second chapter describes the research methodology. The third chapter presents the theoretical background relevant to the research problem, while the fourth chapter provides empirical literature review, and the hypotheses. The fifth chapter is the largest chapter of this thesis and includes the descriptive and the regression analyses and the results that were obtained in these analyses. It consists of three subchapters- the descriptive analysis, the ANOVA analysis, the cluster analysis and the regression analysis. In the last chapter, the conclusions on this thesis and the suggestions for future research are made. The additional information is included in the appendices that can be found at the end of this paper.

1.4 Definitions of terms

Foreign direct investment

Foreign direct investment is defined by the International Monetary Fund IIMF (1993) as the “international investment made by one economy’s resident entity, in the business operations of an entity resident in a different economy, with the intention of establishing a lasting interest”. World Trade Organization (1996) defines the FDI as a purchase of assets in a foreign entity with the intention to control the assets, or an ownership of at least 10 percent of a share or voting stock in a foreign company. OECD has characterized FDI as “the net inflows of investment undertaken to acquire a lasting management interest (10% or more of the voting stock) in a firm conducting business in any other economy but the investor’s home country (Makoni, 2015).

MNE

Multinational enterprises are defined as the “firms that own and control income-generating assets in more than one country”. According to John H Dunning (2014), MNEs are “companies which undertake productive activities outside the country in which they are incorporated” (p. 400).

Emerging markets

According to Forbes (2010), there are many definitions for emerging markets. Emerging market economies usually refer to the countries that have neither yet fully developed nor they are still developing economies. However, these emerging markets experience “high industrial growth, growing global integration, diversification of the economic structure and an increasing per capita income” (Forbes, 2010).

Developing country

There are no WTO definitions of “developed” and “developing” countries. However, the (Cambridge dictionary, 2017) defines developing country as “a country with little industrial and economic activity and where people generally have low incomes“ (Cambridge dictionary, 2017).

Transition economies

The countries whose economies have been undergoing the transformation from a communist system to a capitalist system such as China or countries of the former Eastern Bloc in Europe, are referred to as the transition economies (Roth & Kostova, 2003).

CEE countries

There are several opinions on which countries comprise the CEE region, because they are based on different indicators - political, geographical and economical. This thesis will use the term CEE for the former Soviet countries comprising of Estonia, Latvia, Lithuania, the Czech Republic, Slovakia, Hungary, Poland, Romania, Bulgaria, Slovenia, Croatia, Albania, Bosnia-Herzegovina, Montenegro, Macedonia and Serbia. Kosovo is also a former Soviet country, however, it is not a part of China's 16+1 initiative, and therefore it will not be considered.

SOEs

The majority of China's state owned enterprises are "large industrial and service groups belonging to SASAC's (2017) central and local administrations", but also "sovereign wealth funds, state-owned insurance companies, venture capital firms, pension funds, research institutes and government departments and agencies"(H. Zhang, 2014). It can be argued that the SOEs possess specific ownership advantage, because they are financially and politically supported by the government, however, they also need to follow government's specific agenda. SOEs were the companies that started going first abroad after the Chinese government started promoting the "Go Global" policy. The major activity of such companies abroad consists of high-profile acquisitions of resources and knowledge-assets (H. Zhang, 2014).

POEs

Private companies in China have acquired the necessary set of advantages in the home market in industries where the SOE monopoly was abolished, such as consumer electronics, automobile industry, telecommunications and renewable energy. Most of POEs investing abroad either through M&As of established European companies or through greenfield investments driven by efficiency, market and knowledge seeking motives (H. Zhang, 2014).

1.5 Summary

This chapter has presented the research problem and provided the outline for the thesis.

2 METHODOLOGY

Before embarking on any research, it is important to understand the philosophical underpinnings of the proposed study, because each researcher has their own set of beliefs and world views that might affect the research in question. Therefore, this chapter will be concerned with "peeling the

research onion”, ergo, with determining the research philosophy approach, research strategies and methods. Therefore, this chapter will present the research methodology of this thesis.

2.1 Research philosophy

Research philosophy is linked to the development and nature of knowledge (Saunders; Lewis; Thornhill, 2009). Lincoln and Guba (1985) have identified three questions for determining the research philosophy (or paradigm as indicated by Lincoln and Guba, 1985) – the ontological, the epistemological and the methodological question.

Ontology is concerned with the nature of the reality, while epistemology explains how that reality can be known and methodology is concerned with how that reality comes to be known (Blaikie, 2000). Since research philosophy influences the way research is conducted the way the thesis is written, it is important to choose the right paradigm to inform the inquiry. There are four main research paradigms as presented by Guba and Lincoln (1994) to navigate the research process – positivism, post-positivism, critical theory and constructivism. The main characteristics of the four paradigms are presented in the Table 2-1 adapted from Guba and Lincoln (1994, p. 109).

Table 2-1 The main characteristics of the four paradigms

	Positivism	Post-positivism	Critical Theory	Constructivism
Ontology	Naïve realism	Critical realism	Historical realism	Relativism
Epistemology	Dualist/objective	Modified dualist/objective	Subjective	Subjective
Methodology	Experimental	Modified experimental	Dialogic/dialectical	investigative

This thesis will employ the post-positivist paradigm, because it suits the nature of research conducted, which will be explained in the following section. Post-positivism stems from the same assumptions as positivism with some modifications in the ontological aspect since it was developed due to criticisms of positivism. The subsequent passage will describe the ontological, epistemological and methodological assumptions of post-positivism and relate it to the research of this thesis.

The ontological level

Post-positivism has adapted a critical-realist view as opposed to the naïve realist understanding that is characteristic of positivism. This means that researcher knows that objective reality exists,

however, it can't be perfectly known and there is some level of uncertainty surrounding the perception of reality (Saunders, Lewis, & Thornhill, 2009). When considering the research problem of this thesis, it is assumed that there is only one truth concerning the determinants of Chinese OFDI in CEE countries. Nevertheless, this truth might never be discovered because of the influences that are unaccounted for in the thesis.

The epistemological level

The epistemological level of post-positivism is that of a modified objectivist, which means that the researcher is aware of the fact that research and the results from the research might not be completely objective, so it is important for the researcher to be as much neutral as possible during the research process.

The methodological level

The methodological level describes how can the researcher approach determining what he or she thinks can be known (Guba & Lincoln, 1994). The core of the post-positivist approach is still essentially the same as the positivist approach – conducting experiments and testing hypotheses.

Guba (1990) asserts that when conducting a research, scientists are compiled to use 'grand theories' that might not fit individual contexts or modify the theories to work for a particular research study. Since this research is concerned with studying Chinese OFDI in the transition economies of CEE, not only the traditional theories about foreign direct investment will be employed to inform the analysis that are based on developed countries, but the theories will be also modified with new theories related to the context of emerging markets. The last imbalance that post-positivism is trying to minimize is between discovering new theories and verification of the old ones. According to Guba (1990), it would be more useful if verification and discovery was thought of as a continuum rather than two anti-poles. This thesis will attempt to mainly verify or reject proposed hypotheses, but also to possibly bring new discoveries as Chinese OFDI in CEE Europe have not been thoroughly researched based on a firm-level data yet.

2.2 Research design

The type of research and the research method

Blaikie (2000) argues that the choice of the research strategy is an important element of the whole research design because it will stir the direction that the planning and executing the research will entail. There are four research approaches – the deductive, the inductive, retroductive and the

abductive approach, and the two main approaches – the deductive and the inductive approach are presented in the Table 2-2.

Table 2-2 The research approaches

Deductive approach focuses on	Inductive approach focuses on
Progressing from theory to data	Gaining an understanding of the meanings humans attach to events
Explains causal relationship between variables	Close understanding of the research context
Mostly quantitative	Mostly qualitative
Researcher independent from the research process	the researcher is part of the research process
Larger samples needed for generalizing	Less emphasis on generalization

Based on the characteristics of the deductive approach indicated in the Table 2-2, it can be concluded that the most relevant approach for the type of research of this thesis seems to be the deductive approach, because this thesis will look at the theories of FDI first, then form hypotheses base on the FDI theories and then test the theories that was used for forming hypotheses using statistical methods. The main goal of the deductive approach is to test whether previous theories are valid for the research in question and accordingly to verify or disprove them (Greener, 2008).

2.3 Quantitative or qualitative research

Quantitative methods will be used for the research described in this thesis, because the main goal of the research in this thesis is to gather numerical data and build statistical models to attempt to explain the observed phenomena (2017), ergo the number and volume of Chinese OFDI in CEE, in contrast to the qualitative research that is more subjective and aims to provide a meticulous description of the observed phenomena. One major limitation of the quantitative research is that even though the data might be more efficient and objective, the quantitative study might lack contextual details, ergo richness.

2.4 Data source and sample

Data sample choice for descriptive and regression analyses

There is a possibility of two different types of independent variable data to be employed in the analysis of investment determinants – aggregate data, which has been used widely in the research, or the firm-level data. However, there are several issues with using official aggregate data on investment - the statistics obtained from Chinese sources (MOFCOM) differ from aggregate

statistics published by UNCTAD or Eurostat and have problems with quality and accuracy. Furthermore, the data published by the Chinese government are often distorted due to the existence of offshore locations such as Cayman Islands where Chinese MNEs seemingly invest, however, the investment actually flows back to China. Almost all the studies that have used data from the Chinese sources mention that there is general lack of high quality data. Mainly Chinese used source includes statistical data from China's Ministry of Commerce (MOFCOM).

The FDI generally needs to be pre-approved by MOFCOM, however, this does not necessarily include small investments (Korniyenko & Sakatsume, 2009). Furthermore, the volume of investment registered doesn't entirely reflect the actual amount of investment. The investments made by offshore Chinese companies (located in Hong Kong, Macao, or Cayman islands) are not registered as investment. As Wang et al. (2012), point out, most of the studies on the outward FDI of Chinese firms employ aggregate data, and however, with the use of aggregate data, it is impossible to get a more detailed information about the firms and how they diverge. Other studies that use surveys or case studies, might not reveal true strategies of the firms, therefore they aren't very reliable, and the case studies cannot be generalized (Wang, Hong, Kafouros, & Boateng, 2012). This thesis will employ data taken mainly from two Bureau van Dijk databases – Orbis and Zephyr and China Global Investment Tracker As Dreger, Schüler-Zhou, and Schüller (2017), emphasized, there official database only contains data on approved and registered projects, which might possibly exclude some projects that were not registered, by smaller private firms, for example.

Orbis is an extensive database containing detailed information on 220 million public and private companies across the world, including financial, accounting, ownership and industry data, M&A information, agreements and projects, among others (Dijk, 2017). BvD indicates that the Orbis database is compiled from 160 individual providers as well as from their own sources. The ownership data is taken from sources such as the official national databases, company annual reports and websites, news reports, telephone research and M&A intelligence (Dijk, 2017).

Orbis contains a product called Zephyr, which provides information on almost 1.6 mil both announced and completed M&A deals in the world and is updated daily (Dijk, 2017). This product was also utilized as it contains data on the financials, such as the deal values as well as the data on the target, acquirer and the vendor which are mainly taken from Orbis. The sources utilized for

extracting information are company websites, news publications or stock exchange announcements (Dijk, 2017).

China Global Investment Tracker (CGIT) published by the American Enterprise Institute and the Heritage Foundation provides information on the outward investment of the large Chinese companies from the years 2005 to 2017 including percentage of ownership information, the deal value, the country of investment, and the sector of the company. The CGIT contains information on more than 2500 transactions larger than 100 mil USD\$ across various sectors such as the energy sector and technology. The data is compiled from reliable news outlets or publicly accessible press releases.

The information that was sometimes missing in Orbis database (such as the number of employees, the entry mode) was searched in the Bloomberg website or on the companies' websites or newswires.

Data selection:

At first, the Chinese companies that invested abroad were searched in the Orbis database, limited to following variables: active companies, an ultimate owner or shareholder from China with a minimum of 10% ownership in the foreign entity or a subsidiary, where the ultimate owner signifies at least 50% of ownership in 11 EU member and 5 non-member countries -Albania (AL), Bosnia and Herzegovina (BA), Bulgaria (BG), Croatia (HR), Czech Republic (CZ), Estonia (EE), Hungary (HU), Latvia (LV), Lithuania (LT), Macedonia (FYROM) (MK), Montenegro (ME), Poland (PL), Romania (RO), Serbia (RS), Slovakia (SK), Slovenia (SI). A 12 year time period from 2006-2017 was selected for the analysis, since there weren't many Chinese investments into the CEE region before year 2006. As the Orbis database is constantly updated, it is important to note that the data was extracted in the period of April-June 2017.

The information on the dependent variable (the volume of FDI and the number of FDI projects) was also determined primarily from the Orbis database (in case of number of FDI projects) and supplemented with data from Zephyr and CGIT. The value of FDI volume was either found in Zephyr (the amount of deal value), from CGIT dataset or by estimation from the percentage of ownership and total assets of the company. The values of FDI volume were adjusted for inflation by employing World Bank's GDP deflator, expressed in 2010 US\$.

The information on company characteristics were collected from the abovementioned databases. The Orbis database provides information on firm ownership on three levels, so if the owner at the first level wasn't a Chinese company, it was found which company owned the company at the first level, and if there wasn't a Chinese owner at a second level, the procedure was repeated until the Chinese owner was identified (either at the second or third level of ownership). Apart from the information about the owner, the ownership type was determined (whether it was a publicly quoted company or a private company), the percentage of ownership (wholly owned or joint venture), type of investment (greenfield vs M&A, determined from Zephyr and news reports), previous international experience of the company (was estimated based on searching whether the company had any other subsidiaries in the world before the investment in question has taken place), and information about the company's number of employees, operating revenue/turnover, and the sector of the company (BvD major sector). The data on companies obtained from the CGIT dataset were missing information on the operating revenue/turnover and the number of employees which was found from the websites of the respective companies and their annual reports or Bloomberg.

Number and characteristics of M&A Chinese deals in the CEE region were searched in Zephyr and then if the investment was not already registered in Orbis then the information about the companies was searched in Orbis the same way as with the other companies found initially in Orbis.

Subsidiary selection

Some of the companies that were found in Orbis were located in Hong Kong or Taiwan. If the parent company was located in mainland China, the subsidiary was included in the sample, otherwise it was excluded. After the selection and exclusion of the unfit companies there was 103 companies in the final sample. In case of one a company investing several times in the same subsidiary but at different time periods, each investment was recorded individually since the location characteristics were changing every year. The companies were classified into four groups according to the Orbis database classification (determined from total assets, turnover and number of employees). More detailed description of the classification can be found in the Appendix 1

Data on independent variables

The data on independent variables were either directly collected from the official sources, such as the World Bank or they were transformed into desired form (as the Political stability index) or the

data on independent variables was calculated from the base data, e.g. data on the cultural distance were calculated using Kogut and Singh (1988) index.

Limitation of using secondary data

According to Saunders, Lewis and Thornhill (2009), there is only one major limitation to using secondary data – the fact that the researcher does not have any control over the quality of the data because the research has been conducted by a different researcher and the data has been already collected. However, this limitation can be reduced by checking the methods of data collection and assessing the reliability of the secondary data source which will be addressed in the reliability and validity section.

Choice of econometric methods for the regression analysis

Since the dependent variable, ergo the number of Chinese FDI projects in the CEE countries, is a count variable, the regression model suitable for this type of discrete dependent variable in panel series is a count regression model (Berenson, Levine, Szabat, & Krehbiel, 2012; Dreger et al., 2017; Greene, 2003). Ramasamy, Yeung, and Laforet (2012) have presented several reasons why count data are more suitable to use in the regression models. Firstly, the regression models that employ the volume of FDI as the dependent variable might suffer from potential bias, as large volume of investments might distort the results. For example, the investments in the primary sector tend to be capital-intensive and this might result in distorting the perceived attractiveness of a location. Moreover, the extremely large values could distort the estimation of the model. The second argument for using the count data models by Ramasamy et al. (2012) is that these models tend to work well with zero values which mitigates the selection bias risked with the conventional models if there is lot of excluded countries based on not receiving any FDI in a given year. Count data regressions are suitable to for modelling dependent variables that take zeros or excess zeros, but also when a highly skewed distribution is expected unlike in the OLS estimation models.

Data sample for the descriptive analysis contained 103 companies, but where the volume of FDI was needed (in ANOVA and cluster analysis), the final sample contained 76 companies.

2.5 The credibility of research

Validity and reliability

For research to be credible, its validity and reliability should be ensured, therefore the following section will address the issues of reliability and validity of this thesis. According to Janesick

(1994), quantitative research is built on validity, reliability and generalizability. Reliability is concerned with whether the research conducted in this thesis will be able to be replicated (on other occasions or by different researchers). All the procedures from how the data was collected, cleaned up, sorted out assessed and tested is described in the thesis in such a way that replication of the same experiment should be possible.

When using secondary data as a primary source of data it is important to look at how the data was collected and assess the reputation of the source. The secondary data that are used in this thesis were obtained mainly from private databases Orbis and Zephyr owned by the company Bureau van Dijk (2017). On the BvD website, it is indicated that the data for these databases were collected either directly from the annual company yearbooks or from the official databases of the respective countries or from the media. The private organization sources are likely to be accurate since the livelihood of the organizations often depends on the reputation of the source. Moreover, the official sources are likely to be accurate and thorough. Another source of secondary data that was used in the thesis was the China Global Investment Tracker (CGIT) database that tracks only large-scale investments over 100 million USD. The CGIT database is also a private organization that collects data from about Chinese multinationals. All the data that was collected was double-checked against inconsistencies with the websites of the respective companies and other online sources to ensure high validity.

The other criterion for a credible research is validity. Validity refers to either internal validity or external validity. (Greener, 2008) Internal validity is used to assess whether there is a causal conclusion, ergo whether bias is minimized. The bias, such as the presence of multicollinearity which is highly probable since some of the independent variables are similar in nature, will be minimized by performing statistical tests to ensure the validity of the research. The presence of endogeneity is also minimal since the amount of Chinese investments in CEE is not very large yet. On the other hand, the external validity refers to whether the results can be generalized. (Greener, 2008) External validity can be also proven by performing statistical tests, such as the Omnibus test that was employed in the thesis. The relevant statistical tests will be more clearly explained in the analyses sections or in the appendices.

2.6 Summary

The post-positivist philosophy, the deductive approach and the quantitative research design will be used in the study. The chapter has also provided descriptions of the data sample and the data sources.

3 THEORETICAL FOUNDATIONS

This section will present IB theories relevant to the research undertaken in this thesis. However, first, it is important to state which theories can be employed for analyzing the Chinese investments. Some researchers (Boisot & Meyer, 2008) contend that it is not entirely known whether traditional FDI theories can be employed to explain the FDI from emerging markets. (Berning & Holtbrügge, 2012) have conducted a literature review of 62 articles in 15 peer-reviewed journals on Chinese OFDI and have found that most of these studies find that the traditional IB theories are not applicable for studying Chinese investments. However, some other researchers have verified that EMNES in fact do behave in line with the traditional theories, for example, (Gugler & Boie, 2009) found in their study that the traditional theories can be used to explain Chinese MNE behavior while conducting FDI, while some other suggest that the traditional theories can be used for studying the investment patterns of EMNEs with some adjustments (Wang et al., 2012). Chen (2015) has studied the investment determinants of Chinese provincial firms and has found that the patterns of the provincial firms are consistent with the traditional IB theories. Therefore, a mixture of traditional IB theories with the new IB theories will be utilized in this paper.

3.1 Theories about the internationalization of MNEs

Cantwell and Hodson (1991) has identified three main levels of analysis - the macroeconomic, the mesoeconomic and the microeconomic level. The macroeconomic level is has drawn mainly from the traditional trade theories and is concerned with location-specific factors, focusing on the national patterns of FDI, while the mesoeconomic level relies mainly on the industrial organizational economic theory, and the microeconomic level is concerned with the theory of the firm, ergo the organizational aspects and the factors that are inherent to the firm (Faeth, 2009).

The current, third wave of the study on the FDI theories has started with researchers such as P. J. Buckley and Casson (1976) and it has been concerned with the theory of the MNE rather than FDI theories, there's been a "switch in attention from the act of foreign direct investment [...] to the institution making the investment." (Dunning 1979, p. 274) and the focus in the literature has

shifted to developing a global theory of a multinational enterprise. Buckley and Casson's Long Run Theory of MNE (1976) was built on Williamson's (1975) transaction cost theory (it can be more advantageous for the firm to concentrate its activities within the value chain rather than to outsource by licensing or subcontracting) to explain why firms might choose to internalize the activities, thus opting for a foreign production rather than just exporting.

Dunning (1977) has extended the internalization theory, arguing that the firms must not only possess but also be willing to internalize the advantages from having superior resources which is the extension of Hymer's argument about holding advantages. The willingness of firms to internalize activities is to avert disadvantages or exploit the advantages resulting from the market imperfections (Dunning, 1977, p.402). Dunning (1982) #972} has combined the theories of monopolistic advantage (Hymer, 1976), the internalization theory and has added the concept of location advantages to propose an eclectic paradigm (the OLI framework). ***The OLI framework - ownership advantage, location advantage, internalization advantage***, explains the determinants of investment decisions made by multinational companies and that the firms' FDI decisions are affected by each of the three factors. Dunning (1977) has identified host country and home country determinants, where the home country factors are related to the O and I of the eclectic paradigm and the host country determinants are linked to the L advantages (Chen, 2015). The ownership advantage refers to firm specific assets that must employ the firm with an extraordinary advantage that allow the firm to invest abroad. An ownership advantage could be for example a possession of a well-known brand or trademark. In order for Chinese firms to be competitive on the local market, they must possess a specific advantage, which also eliminates the risks associated with doing business abroad. If a firm has a specific advantage, it can decide between production in the home country and subsequent export to the host country market or selling license. However, there are several disadvantages to or production in the host country in order to gain access to the market, for example the contracts might be incomplete, and there could be dissemination of the intangible assets to a competition (Blomström & Kokko, 1998).

The location advantages refer to the home (such as government policies that encourage outward FDI) and host country factors, for example the market character or abundance of natural resources. The internalization element of the OLI framework is concerned with choosing to

From all of the theories on FDI and MNE, the OLI paradigm seems to describe the essence of FDI best for the industrialized nations, because it offers a holistic approach, therefore, there has been

many studies conducting on the determinants of FDI that took the OLI paradigm as a basis for analysis. Even with the arrival of EMNEs and appearance of new theories that could explain the behavior of the EMNES, there is evidence that the OLI frameworks is still at least partially applicable to those cases. Since it was found that institutions matter in firms' decisions about the location of FDI, Dunning and Lundan (2008) have expanded on Dunning's OLI paradigm to include institutional factors of the home and host countries.

Another internationalization theory, also known as the *Uppsala model or the Scandinavian School* (Jan Johanson & Wiedersheim-Paul, 1975) (Jan Johanson & Vahlne, 1977) (J. Johanson & Mattsson, 1988) (Vahlne & Nordstrom, 1988) was developed based on the behavioral patterns of mainly Swedish firms. The theory assumes that the firms will first need to establish themselves in their home country because of they lack international experience (in line with Hymer's assumption), and the authors see internalization as a gradual process to getting familiar with the foreign market that starts first with occasionally exporting goods or services and then increasingly becoming more involved with the foreign market until it sets up its own subsidiary in the foreign country. The Uppsala model also accounts for the cultural and psychic distance (D Ionascu, KLAUS E Meyer, & SAUL Estrin, 2004). Psychic distance is cited by Jan Johanson and Vahlne (1977) as "the sum of factors preventing the flow of information from and to the market" which includes "differences in language, education, business practices, culture and industrial development (p. 24).(Delia Ionascu, Klaus E Meyer, & Saul Estrin, 2004)

In contrast with the Uppsala theory, new theories of international business argue that some firms can start investing abroad without first having to go through stages. These are the international venture theory and Mathews (2006)' Latecomer theory on emerging market multinationals and Luo (2007)and Tung's Springboard View. *LLL – "linking, leverage, learning"* framework is an extension to Dunning's OLI framework, because Mathews has observed that many companies from the Asian Pacific region did not follow the patterns of investment described by the traditional theories. The newcomer firms' strategy is to "link", ergo form joint ventures or partnerships with foreign firms to access resources that are difficult to obtain that can be "leveraged", e.g. easily reproduced, transferred or imitated. This way the newcomers are able to learn how to manage foreign transactions (Mathews, 2006).

The Springboard view (2007) differs from the LLL framework in some aspects as identified by Luo and Tung (2017), even though both of the frameworks focus on the international expansion

of EMNEs, and agree on the fact that the Chinese firms might not necessarily possess a monopolistic advantage in order to internationalize, and both “recognize the use of networks and partnerships”. For example, the Springboard view takes into account the home and host institutions more, also, the attainment of strategic assets is more emphasized in the Springboard view. Luo and Tung (2017) have identified the main points of the Springboard view theory as following: (1) the EMNEs internationalize in order to attain strategic assets, to avoid unfavorable institutional environment at home and reduce their disadvantages via rapid M&A (Yadong Luo & Rosalie L. Tung, 2017). Unlike the Uppsala model which presents that firms will go through gradual step by step internationalization, the Springboard view presents that the firms will internationalize even without having an extensive experience and knowledge. Firms can overcome their latecomer disadvantages by acquiring strategic assets and organizational learning. Luo and Tung (2017) compared the Springboard view to the internalization theory and even though these two theories are similar in the view that it is important for the firms to ‘recombine resources’ and internalize the control of the global value chain, however, the Springboard theory accents the significance of acquiring assets to compensate for the firm’s disadvantages, while the internalization theory emphasizes firm’s strengths in the process of internalization.

Institutional theory

Studying institutions is important because no organisation that exists in a country’s environment can escape the influence of its institutions. Institutions are central in managing the societal undertakings in the spheres of politics, law and the society. Institutional theory is important for accounting for the factors that can’t be observed using purely the economic approach (Peng, Wang, & Jiang, 2008). Powell (1996) called for the researchers to “tackle the harder and more interesting issues of how they matter, under what circumstances, to what extent, and in what ways” (p. 297)(Powell, 1996). There are two waves of institutionalism, sociological (Scott (W. R. Scott, 2013) (DiMaggio & Powell, 1983) that is concerned more with legitimacy and the economic (North, 1991), (Williamson, 1975) which is rather focused on efficiency. This thesis draw from both approaches. Several researchers (Meyer, Estrin, Bhaumik, & Peng, 2009) (Mudambi & Navarra, 2002, {Xu, 2002 #1046) have argued for the importance of looking at the social context, ergo, institutions when studying FDI, because institutions constitute an essential part of the localization advantage of a country.

Davis and North (1971) define institutional framework as “the set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange, and distribution.”(p.6). Institutions are informally known as the “rules of the game”. According to Markusen (2003) the word “institutions” is a fuzzy term and can encompass multiple elements, therefore it is imperative to define them in order to understand what institution definitions will this thesis utilize. On the other hand, North (1990) has defined them as "the humanly devised constraints that structure human interaction"(p. 3) which include economic contracts, political rules and judicial decisions. At the same time, Scott (1995) has defined institutions as "regulative, normative, and cognitive structures and activities that provide stability and meaning to social behavior"(p.33) which include norms of behavior. While North divided institutions into formal and informal categories, Scott believed that institutions consisted of three main pillars- the cognitive, the normative and the regulatory.

Normative institutional pillar consists of the values and norms of the country, they encompass what is an accepted behavior. The regulative pillar refers to the “existing laws and rules in a particular national environment” (Kostova, 1999, p. 314), whereas the cognitive pillar encompasses “the cognitive categories widely shared by the people in the particular country such as schemas, frames, inferential sets and representations affect the way people notice, categorize and interpret stimuli from the environment” (Kostova , 1999, p.314).

The institutional theory tries to explain how the institutional environment of a given country influences MNE and, in turn, how MNE impacts the institutional environment (Blumentritt & Nigh, 2002). According to Engwall (2006), MNEs constitute important political players in the institutional contexts. Even though institutionalism has been studied since the 1970s, it had become a topic within the IB literature much later. Meyer and Peng (2005) argue that the rise in institutionalism coincides with the rise of emerging country multinationals, which offers a possibility for new perspectives in extending the institutional theory.

MNEs investing abroad face constraints resulting from the institutional pressures - the pressure from the institutional environment of the host country as well as the pressure from the parent company {Kostova, 2002 #1011}. Due to facing institutional pressures in the environment, the MNEs embedded in that institutional environments become isomorphic (Dacin, 1997). The institutional environments differ from country to country and consist of different kinds of institutions, for example regulation, policy and value systems (Kostova & Zaheer, 1999).

Therefore, it might be more difficult for the MNEs in the host countries to gain legitimacy and this will obstruct transfer.

Investment motives

From the FDI data it is evident that FDI flows differ from country to country. What, then, is all about the volume of FDI influx into a country? Which factors determine that some countries can enjoy a great amount of inward foreign capital flow and others not? Determinants of investment decision-making can be divided into two basic groups – internal, relating to the company’s resources and external number of economic, cultural and legal factors. The external determinants can be divided into host and home country determinants, where the home country determinants refer to the factors that might influence firm’s decision on its parent country- such as, governmental support for FDI, high production costs, lack of raw materials – these are referred to as the “push” factors. The other group of determinants are the host country determinants, such as the economic and political environment, growing market, growing demand, attractive investment environment, cheap workforce and the level of infrastructure, also referred to as the “pull” factors (Carstensen & Toubal, 2004).

The firm makes its investment decision based on its strategy. FDI studies have tried to explain FDI and identify MNE’s motives for foreign investment from various points of view, such as differing industries, host countries or firms. According to (Blonigen, 2005), theoretical economics points out that decisions on where FDI will be directed depend on the location characteristics of each country. These determinants can be divided into several categories – economic, political, institutional and other determinants (Reiljan, 2001). Some of the determinants include the size of the market and its potential, country openness, exchange rate, political stability, inflation, human capital, tax system, natural resource endowment, infrastructure quality and business tariffs. Reasons for foreign direct investment may vary. Most often, it is about reducing production costs in the process of increasing competitiveness (e.g. by applying new technologies, gaining cheap labor, etc.), finding new territories for the sale of goods and services, expanding existing markets, trying to maximize revenues. (Pauhofová & Svocáková, 2014) There have been three main investment motives identified by (J. Dunning, 1993) – market seeking, resource-seeking, knowledge-seeking, asset-seeking, and asset-augmenting, however, Eiteman (1992) suggest that the motives are usually combined. Chinese FDI is mainly resource-seeking and market-seeking,

but lately has been also strategic-asset seeking (Buckley (P. J. Buckley et al., 2007) (Di Minin, Zhang, & Gammeltoft, 2012).

Market-seeking

The market-seeking FDI is related to the host country's market size and growth (Voss, 2011), and it can be classified into a defensive (to assert firms' position in the current market) or offensive (to expand to new markets). Defensive market-seeking FDI happens when firms want to avoid trade barriers or strengthen their customer base, whereas the expansive market-seeking FDI occurs when the firms want to enter new markets, and by establishing production sites close to the new markets can save production and transportation costs. (Voss, 2011)

Efficiency-seeking

Böckem and Tuschke (2010) have described three conditions under which firms will conduct the efficiency- seeking FDI. Firstly, there must be an incomplete resource market (most often it is the labour market), secondly the firm's technology and know-how must be transferable, and thirdly, the firm must possess assets that can be exploitable.

Resource-seeking

The resource-seeking FDI can be either the natural resource seeking, technology-seeking or a strategic-asset seeking FDI. The natural resource seeking FDI refers to the natural endowments such as minerals, oil or raw materials. Even though several studies on Chinese MNEs have identified natural resources as one of the major FDI determinants (and it is also part of China's strategic goals for internalization of firms (Alon, 2010), because the amount of natural resources per capita in China is quite low, however, this natural resource seeking motive mainly applies mainly for Africa that is abundant in natural resources, and Central and Eastern European countries are not expect to possess many natural resources that would be the main objective of Chinese firms in those countries.

Strategic-asset seeking

Strategic-asset seeking FDI occurs when the MNE intends to acquire intangible resources and factors such as know-how and innovative capacity.

3.2 Summary

This chapter has identified and described several IB theories that are relevant to use for studying Chinese investments in the CEE region. Primarily, the analyses will be based on the OLI paradigm,

the institutional theory and the Uppsala model, however, the new IB theories – LLL and the Springboard view will be also relevant for the analysis.

4 EMPIRICAL LITERATURE ON CHINESE OFDI AND HYPOTHESES DEVELOPMENT

The purpose of this chapter will be to present an empirical literature review based on which hypotheses could be formulated.

4.1 Literature on Chinese OFDI in Europe

Even though the Chinese investment in the countries of the European region is generally lower than in other parts of the world (Blomkvist & Drogendijk, 2016; Á. Szunomár, 2016), the number and the volume of Chinese investments is continually increasing (Dudas & Dudasova, 2016; Á. Szunomár, 2016) to such an extent that in 2011, European Union has become a top destination for Chinese OFDI in the world (Meunier, 2014). Consequently, the amount of published studies focusing on the Chinese investments in the European context has increased compared to the previous years, however, there is still a lot of under-researched territories. The results of these studies show that Chinese investments in Europe are mainly market- and strategic asset – seekers, but the ability to attract Chinese investments by different European countries varies greatly (Blomkvist & Drogendijk, 2016). Several studies have shown that there are differences in the Chinese investment motives between eastern and western European countries (Blomkvist & Drogendijk, 2016; Gammeltoft & Fasshauer, 2017). Even though the previous studies were mainly concerned with studying Chinese OFDI into separate European countries, predominantly in western Europe, the importance of individual regions in Europe is increasing and thus some researchers have also studied certain European regions (NUTS1 and NUTS2) (Karreman, Burger, & van Oort, 2017; Villaverde & Maza, 2015). The results show that the market size or labor regulation do not seem to be important for Chinese investors in the regions.

4.2 Chinese investment in the CEE countries

The amount of Chinese investment in the CEE region is still miniscule compared to the other parts of the world, it doesn't reach over 1% of GDP in any country except Hungary, where the amount of Chinese FDI stock amounts to little over 1% of GDP. However, in the recent years, there has been a considerable acceleration of the amount of Chinese investors choosing the CEE region for their investment (McCaleb & Szunomár, 2017). This could be partly due to the Chinese

government OBOR strategy. This means that not only the traditional economic factors could explain the Chinese investment motives in the CEE countries, but also that the political and institutional environment of these countries as well as China is important. For example, Hungary has the highest Chinese FDI stock, however, it is not the most attractive location in terms of low labor costs, highly skilled workers or the largest market.

There have been few studies concerned with the political and economic relations between China and the CEE countries in general (Éltető & Szunomár, 2016; Jacoby & Korkut, 2016; Song, 2013; Á. Szunomár & Biedermann, 2014; Turcsányi, 2014). Most of these studies are descriptive in nature and refer to Chinese investment trends in the CEE region, especially in the EU-member countries (e.g Dudas & Dudasova, 2016; Éltető & Szunomár, 2016; McCaleb & Szunomár, 2017; Szunomár, 2016). In similar fashion, the amount of quantitative studies that analyze the investment motives of Chinese FDI in CEE are very scarce, and they usually don't focus on the whole region, but few individual countries, mainly the Visegrad Four countries, Bulgaria and Romania. This means that there aren't any studies focusing on the whole CEE (16 countries) region nor there are any comprehensive analytical studies concerned with the determinants in these CEE countries apart from Zabožnik's (2016) which is not available online.

4.3 Empirical literature on market-seeking motive

GDP per capita

Market size is one of the most widely employed traditional host country determinants (Buchanan, Le, & Rishi, 2012) and has proven to be a major FDI determinant for MNEs (Davidson, 1980), (Chakrabarti, 2001; Tintin, 2013). Several researchers (Böckem & Tuschke, 2010) (Krifa-Schneider & Matei, 2010) (Aw & Tang, 2010), (Rodriguez & Bustillo, 2011) have used market size and market growth as a determinant of market-seeking FDI. The proxy used for market size is usually GDP per capita or GNP per capita and a proxy for market growth is the percentage increase of GDP in a year. (Chakrabarti (2001)) and (Böckem and Tuschke (2010)) justify using GDP rather than GNP measures due to the fact that GNP might “overestimate market attractiveness by inflating it with the earnings by nationals in foreign locations” (Böckem and Tuschke, 2010 ; p.276).

According to the OLI framework, the firms that are market-motivated seek to invest in foreign markets because of expecting to earn a larger profit than in the home market. It logically follows, that the MNEs will choose countries with good market potential, e.g. large, growing markets or

with high GDP per capita, holding the assumption that firms only produce in the home market and can't export the goods due to their perishability or other reasons that would cause the cost of selling the goods in another country too costly. Therefore, in order to keep control of its assets, or to retain know-how, the firms will decide to move their production to a new country (Böckem & Tuschke, 2010). A firm is more likely to invest in a country that has an attractive product market (P. J. Buckley et al., 2007). It is anticipated that a larger number of Chinese FDI projects will go to countries with higher GDP per capita, because richer countries will bring more opportunities for generating profits. The size of the market will be more important for the POEs (A. Amighini, Rabellotti, & Sanfilippo, 2013; Ramasamy et al., 2012). It is also important to account for the fact that 11 CEE countries are already part of the EU, therefore the effect of the market size on Chinese investments in these countries might not be as stark as in the non-EU CEE countries (Villaverde & Maza, 2015). Based on the reasoning above, the following hypothesis can be formulated:

H1a: The number of Chinese FDI projects will be positively related to the GDP per capita.

Intensity of trade relations

The bilateral trade relations between two countries is considered an important factor related to FDI. Exports are oftentimes the predecessor of FDI, since investment oftentimes substitutes exports. The motive for substituting exports with FDI could be because of lowering costs associated with trade, such as the cost of tariffs, barrier-free access to a market or lower production costs in the host country. According to (P. J. Buckley et al. (2007)), the majority of FDI was in the tertiary sector, which means that the FDI into these countries exist to support the economic relationship between the two countries. Several research papers that focused on the effect of trade intensity between China and host countries and the level of FDI, concluded that the Chinese export to the host country does, in fact, influence the amount of Chinese FDI flowing into these host countries (X. Zhang & Daly, 2011) (Xie, Reddy, & Liang, 2017) Diego Quer et al., 2012; Cheung & Qian, 2009; Blomkvist and Drogendijk (2016). Lansbury, Pain, and Smidkova (1996) have also found that business and trade relations have had a positive significant effect on the level of investment in 11 CEE countries. Because of the pre-existing relationship with host countries, it can give Chinese investors an incentive to invest in the host country (Dreger et al., 2017). Based on the presented arguments, the following hypothesis is formulated:

H1b: The number of Chinese FDI projects will be positively related to Chinese exports to the host country.

4.4 Empirical literature on efficiency-seeking motive

Infrastructure

As described in the theory section, the location factor L in the OLI framework refers to the attractiveness of the host country location. When the country has a good infrastructure, such as efficient large transport network, the production costs decrease (Bouchoucha & Ammou, 2015) and the investors will be more attracted to such location. The importance of infrastructure on the investment decisions of MNEs has been studied and confirmed by several researchers (e.g. (Wheeler & Mody, 1992). Countries with better infrastructure are able to attract more investment because of the lower costs associated with good infrastructure. Therefore, the following hypothesis can be formulated:

H2: The number of Chinese FDI projects will be positively related to the level of infrastructure in the host country.

4.5 Empirical literature on strategic asset-seeking motive

Dreger et al. (2017) have identified that the Chinese MNEs are mainly attracted to big markets and pursuing strategic-assets in Europe. Even though strategic assets might be more pertinent in the western part of Europe, the research and development sector has become also attractive in the CEE region, especially in the Visegrad countries (Dreger et al., 2017). According to the Springboard view theory (Y. Luo & Tung, 2007), Chinese companies want to acquire strategic assets to gain ownership advantages comparable to the developed country MNEs. This is confirmed by several studies that found the access to the strategic resources as one of the main motives of Chinese FDI in Europe (Y. Zhang & Filippov, 2009). Other studies have also confirmed that strategic assets are one of the primary drivers of Chinese investment, especially for POEs (Xie et al., 2017); Amighini et al., 2013; (Blomkvist & Drogendijk, 2016). Amighini et al. (2013) found that the relationship between FDI and strategic assets is significant when the investments are located in the manufacturing sector of the high-income countries or countries with large markets. Similarly, Huang & Renyong (2014) have concluded that POEs are becoming strategic-asset seekers and through cross-border M&As are hoping to acquire either their competitors, to vertically integrate their value chain or to gain an access to a particular strategic asset. Based on the location advantages of the host country (OLI framework) and the new IB theories, the following hypothesis can be derived:

H3: The number of Chinese FDI projects is positively related to the availability of strategic assets in the host country.

4.6 Empirical literature review on Institutions

Delia Ionascu et al. (2004) and Peng et al. (2008) have argued that the strategies of MNEs are influenced by the institutional environment in the host economies, ergo their normative, cognitive and regulative measures. Zaheer (1995) also contends that compared to the local firms, MNEs face the ‘liability of foreignness’ which can lower their profitability (Delia Ionascu et al., 2004), therefore, the MNEs will have to dispense their organizational processes which are its competitive advantages to the subsidiaries abroad (Kogut, 1991). Institutional factors both at home and in the host economy influence the decision of firms to invest abroad, for example, sound institutions and some regulations create incentives for firms to pursue FDI, because they present better prospects for productivity and thus profit. Several researchers have conducted studies on good institutions and economic performance (e.g. (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999) (Hall & Jones, 1999) (J. Du, Lu, & Tao, 2009; Mengistu & Adhikary, 2011); (Buchanan et al., 2012) (Globerman & Shapiro, 2002) and confirmed that good public institutions indeed render good economic performance.

On the other hand, bad institutions, such as the existence of corruption, lack of IP rights protection can also push the firms to invest abroad in a country with better investment conditions (Wang et al., 2012). Moreover, MNEs that invest abroad are facing more uncertainties due to sunk costs. Simon (1984) believed that political risk affects countries’ environment. According to Bouchoucha and Ammou (2015), weak institutions discourage investment. Therefore, if a country has inadequate institutions, such as weak enforcement of laws, poor protection of intellectual rights or high levels of corruption, the investors would be more likely to be discouraged to invest in this country, because lack of good institutions increases the cost of investment. The empirical studies on OFDI and institutions present mixed results – some have identified institutions as significant variables that affect the investment decisions of Chinese firms either positively or negatively (e.g. Buckley et al., 2007; Kolstad and Wiig, 2009), whereas other studies did not find Chinese OFDI to be significantly affected by institutions (Cheung and Qian, 2008). (Rihab and Lofti (2011)) have determined that the cultural and institutional factors do matter in attracting FDI, especially the hierarchical distance and individualism. They identified that the three main areas of the

institutional framework - corruption, quality of government institutions and political stability (Rihab & Lofti, 2011), which will be utilized in this thesis as the regulative institutional pillar.

4.7 Regulatory pillar

Corruption

In accordance with the institutional theory, Wei (2000) argues that corruption and lack of laws protecting intellectual property rights or weak enforcement of laws rise investment costs because they increase the uncertainty in conducting business operations, therefore, the multinational firms that are focused on minimizing costs will be less likely to invest in such countries (Bouchoucha & Ammou, 2015). On the other hand, there is also a theory of “helping hand” of corruption which argues that corruption can aid in speeding up administrative processes, therefore it will make investing into the country easier and thus stimulate investments (Huntington, 1968). There aren't any studies that would study the interplay of Chinese investments and corruption in the CEE region as far as the author of this thesis is concerned, however other studies on corruption and FDI have shown mixed results, because some authors confirm the negative relationship between corruption and FDI (e.g. Wei (Bénassy-Quéré, Coupet, & Mayer, 2007), whereas other researchers do not find such relationship (such as Wheeler and Mody (1992)). Therefore, based on the institutional theory and empirical literature, following hypothesis can be derived:

H4a: The number of Chinese FDI projects in CEE countries will not be affected by the level of corruption in the host country.

Political stability

According to Buckley et al. (2007) FDI is influenced by the presence (or lack) of political risk. Political risk includes external influences, when there is a possibility of expropriation or nationalization in the country, or when the government regulations on changes in political and social situations can have a negative effect on economic activity. For this reason, this thesis also assumes that the degree of political risk is an important decision-making determinant for Chinese investment. A high degree of uncertainty in relation to foreign ownership may reduce the willingness of Chinese firms to place their investments in that country. On the other hand, however, in some cases the higher political risk offers higher returns, so FDI will still flow to such countries (Pauhofová & Svocáková, 2014). Spigarelli and Lv (2017) have found that the sale and services subsidiaries are mostly attracted to countries that are politically stable, whereas the

manufacturing MNEs tend to invest mainly in the countries with low trade barriers and control of corruption. Therefore:

H4b: The number of Chinese FDI projects will be positively related to the political stability of the host country.

Economic freedom

(Tintin, 2013) has employed the Economic freedom index as a proxy to measure the effect of the institutional environment in six CEE countries and inflows of FDI from four investor countries (EU-15, the US, China, and Japan). The Economic Freedom Index was found to be positively related to the FDI inflows and significant. Therefore, following the institutional theory and the extant empirical literature in this section, it can be assumed that the Chinese investors will be attracted with host countries that will have more friendly business environment and laws and regulations. From this, the following hypothesis can be formulated:

H4c: The number of Chinese FDI projects will be positively related to the level of economic freedom in the host countries.

4.8 Normative pillar

Cultural distance

(Delia Ionascu et al. (2004)), have argued that Hofstede's (1980) cultural indices can be used as a proxy for normative pillar. According to the Uppsala model, the decision where MNEs will locate their subsidiaries depends on the psychic distance, e.g. the cultural, geographical and institutional distance between the two countries – higher psychic distance is associated with higher costs of transactions, therefore, it is more preferable for MNEs to invest in the countries that are culturally closer (Peter J. Buckley & Casson, 1998). Expanding business to culturally more distant countries conceives problems, because the firms do not have sufficient knowledge about the host country and their perceived “foreignness” is a barrier for cooperation (Beugelsdijk et al., 2018). The greater the difference in cultures between individual countries, the greater the distance between the companies' organizational and managerial practices (Kogut & Singh, 1988) will be, which makes transfer of managerial practices more difficult into firms from countries that are more culturally distant.

Distance was found to be affecting MNE's location choice apart from other factors, such as entry mode, or knowledge transfer (Beugelsdijk et al., 2018). Zheng, Yan, and Ren (2016) suggest that

the results on how EMNEs react to the institutional risk and cultural distance are mixed, because some studies have confirmed that these two factors are positively related, while other studies have found the opposite to be true, for example (P. J. Buckley et al., 2007; Loree & Guisinger, 1995; Ramasamy et al., 2012). Zheng et al. (2016) found that the cultural distance matters more for Chinese firms that are manufacturing-oriented rather than for the R&D-oriented. Therefore, it can be assumed that Chinese investors will be more likely to choose destinations that they either have ties with (such as large Chinese diaspora in the host country) or that are culturally more similar in order to minimize the risk of intra-cultural problems stemming from miscommunication and different traditions or habits, which is often a problem that arises after a parent company sets up new subsidiary abroad or acquires a foreign company. Even though China is geographically distant from all of the countries studied in this thesis roughly by the same amount, the countries of Central and Eastern Europe are culturally different from each other. Therefore, a cultural distance variable will be included in the analysis. Other option could be studying relational ties of China to the respective CEE countries proxied by the percentage of Chinese diaspora in those countries, however, there is only a negligible amount of the Chinese diaspora in the CEE region, and thus this proxy can't be used. Based on the above arguments and the Uppsala theory, the following hypothesis was formulated:

H4d: The number of Chinese FDI projects will be negatively related to the cultural distance between China and the host country.

4.9 Cognitive pillar

Tertiary enrolment

One of the location advantages in the OLI framework is also the availability of skilled workforce which can increase the attractiveness of the host country for the MNEs (Sattinger, 1993), because the presence of science experts can help mitigate the negative impacts of inefficient legal system, inadequate infrastructure and cultural differences (Casi & Resmini, 2010). As Ionascu, Meyer and Erstin (2004) have pointed out, if there is large difference between host and home country's normative and cognitive institutions, there is a higher possibility of the cross-cultural communication between the headquarter and its subsidiary failing, because of different values and procedures (Y. Du, 2009). Chinese managers have troubles adapting to new cultural environments, therefore, cooperating with employees that are skilled in cross-cultural communication might increase the chances of successful relationship. People with higher education tend to be more open

and cosmopolitan, thus it can be assumed that Chinese managers will be more prone to invest in the countries where they find it easier to navigate the social, political and cultural environment. The higher level of cosmopolitan and highly-educated employees, the higher probability of the employees being able to speak English or other languages and understand other cultures, which will make communication between the Chinese managers easier and the local employees easier. Thus, based on the OLI framework and the literature review, the following hypothesis can be derived:

H4e: The number of Chinese FDI projects will be positively related to the level of tertiary enrollment in the host country.

4.10 Summary

This chapter was concerned with the empirical literature review while eight hypotheses were formulated based on the results of these studies.

5 DESCRIPTIVE ANALYSIS

This chapter will provide a short description of the historical development of Chinese OFDI, moreover, China's OFDI trends, geographical distribution and sectoral distribution of China's ODI into CEE as well as the firm and investment characteristics will be presented. The second section of this chapter will look at the impact of firm and investment characteristics on the volume of Chinese FDI, whereas the last section will be concerned with the classification of two investment types.

5.1 Historical development of Chinese outward foreign direct investment (OFDI)

Some background on the development of Chinese OFDI is needed for better understanding of the problem, therefore, this section will present a brief summary of the historical development of Chinese FDI. China is a country with "special characteristics" as deemed by the government, since it is a socialist state with a market economy. China became one of the biggest economies in the world as well as one of the biggest destinations and sources of FDI. This development would not have been possible if some reforms wouldn't have taken place - before 1978, when the "Open Door" policy (*Gaige kaifang*) came into effect, China was quite economically isolated with a minimal level of trade and exports usually limited to goods that could not be produced in China since it had planned economy with import-substitution model strictly controlled by the government

where only a few state companies were allowed to establish foreign affiliates (Voss, 2007). Only after the implementation of Open Door Policy in 1978, China went through a development that can be described in six stages (Voss, 2007). The first stage (1978-1985) was the aftermath of the Open Door Policy when the Chinese exports, mainly in textiles and manufacturing, have increased. In the second period (1985-1992), there was an increase in the Chinese OFDI to the world, which was encouraged by the government in the third stage (1992 – 1998). The fourth stage (1999-2001) is characterized with the ‘Go Global’ slogan, since Chinese OFDI was encouraged with aggressive government policies. A great breakthrough in the Chinese OFDI has happened in the fifth stage of China’s development, when China has gained the accession to the WTO in 2002 and the “Go Global’ policy was truly actualized. From 2002 onwards, the global trends of Chinese OFDI has been rising steadily. The Chinese government policy regarding Chinese OFDI that has an importance for this thesis is the launch of the OBOR initiative.

One Belt One Road Initiative (OBOR) 2013

This section will only briefly explain the OBOR initiative since it is only partially relevant to the thesis. The OBOR initiative was proposed by China’s president Xi Jinping in 2013 as a project to develop set of roads, railways and pipelines that would link China with parts of Asia and Europe. One Belt refers to the Silk Road Economic Belt, whereas One Road references the 21st Century Maritime Silk Road (Wilding, 2017), both of the routes are tied to Europe as it is their final destination (Suetyi, 2017). As stated in McKinsey’s report, OBOR “aims to create the world’s largest platform for economic cooperation, including policy coordination, trade and financing collaboration, and social and cultural cooperation” (Jinchen, 2016). There are over 60 countries that have expressed interest in participating in China’s OBOR initiative with collective GDP of around 21 trillion USD. China has already signed bilateral cooperation tied to the initiative with several countries, including Hungary (Jinchen, 2016).

The OBOR initiative might be one of the reasons why China is promoting the investment of construction companies abroad, and the higher interest of China in CEE countries, because two regions that are especially relevant to OBOR in Europe are the group of Central and Eastern European countries and Mediterranean countries (Southern Europe), because many of China’s OBOR projects are in these two regions, such as the China-Europe railway ports in Poland or the Land-Sea Express Route between Central Europe and Greece (Frans-Paul van der Putten, John Seaman, Mikko Huotari, Alice Ekman, & Otero-Iglesias, 2016). In 2015, Chinese investments that were part of OBOR have reached 14.53 billion

USD (out of total 170.11 billion USD Chinese investments globally) (Frans-Paul van der Putten et al., 2016)

Chinese OFDI in CEE

By the end of 2014, China has amassed over 100 million USD in stocks in six of the Central and Eastern European countries- Hungary, Poland, the Czech Republic, Romania, Bulgaria and Slovakia (Xu Cen, Gao Sen, & Jiayan, 2016). The investments by Chinese companies have been rising by 32% annually in the last ten years (Xu Cen et al., 2016). According to MOFCOM, bilateral investment flows between CEE countries and China are increasing steadily with predicted rise, in 2016 China has invested more than 8 billion USD in diverse industries- such as machinery, infrastructure, energy and telecommunications, while CEE countries have invested about 1.8 billion USD in China (Net, 2016). As stated by Naichunan Miao, the managing director of Lonchman Partners: “This year, we expect more Chinese institutional investors to go abroad for high quality assets due to policy changes. Premium cities such as London are getting increasingly expensive and continue to attract buyers. However, Chinese investors are now becoming more experienced in the international market. Those who are looking for better investment returns are already turning their attention to markets such as CEE.” (“SKANSKA,” 2016). Main destinations for Chinese MNEs in CEE is Hungary, Romania, the Czech Republic, Poland and Bulgaria investing primarily in transportation, electronics, telecommunication, chemical and energy industry (Kühnlentz).

According to Ikemoto (2007, p.92), there are several advantages for investing in CEE: “(1) the country’s tradition of manufacturing; (2) many qualified and skilled workers; (3) qualified production managers; (5) advantageous geographical location for the EU market; (6) relatively well established infrastructure (roads, railways, electric power, etc.); (7) lower labor costs than EU-15 countries; and (8) FDI incentive programs (several years’ tax holidays, duty free import of equipment, job creation grants, site development support, etc.)” (A. Szunomár & McCaleb, 2015). CEE is argued to be a “gateway” to Europe and a manufacturing hub for Chinese companies wanting gain access to Western Europe. (Éltető & Szunomár, 2016) Chinese investments in CEE are quite diverse- they engage in the manufacturing sector – especially the automotive industry (BYD automobiles in Hungary), information and communication technology (Huawei in Hungary) and infrastructure projects (port in Rijeka in Croatia, railways in Hungary, Slovenia)(McCaleb & Szunomár, 2017). Chinese investors are interested in gaining competitive advantages through

acquiring technology in CEE (such as laser production in Lithuania, automobile industry in the Czech Republic, aviation and biotechnology sector in Poland) (Jakóbowski, 2015).

5.2 Geographical distribution of Chinese OFDI in the CEE region

Trends of Chinese FDI into CEE in the period from 2006 to 2017

CEE countries vs Europe vs the world (graph, volume)

From Figures 5-1 and 5-2 it can be seen that the volume and the number of Chinese investments was miniscule in the first monitored years (from 2006 to 2009 only three projects amounting to 427.369 mil USD), however, it had really taken off from 2010 where it amounted to 1.7 billion

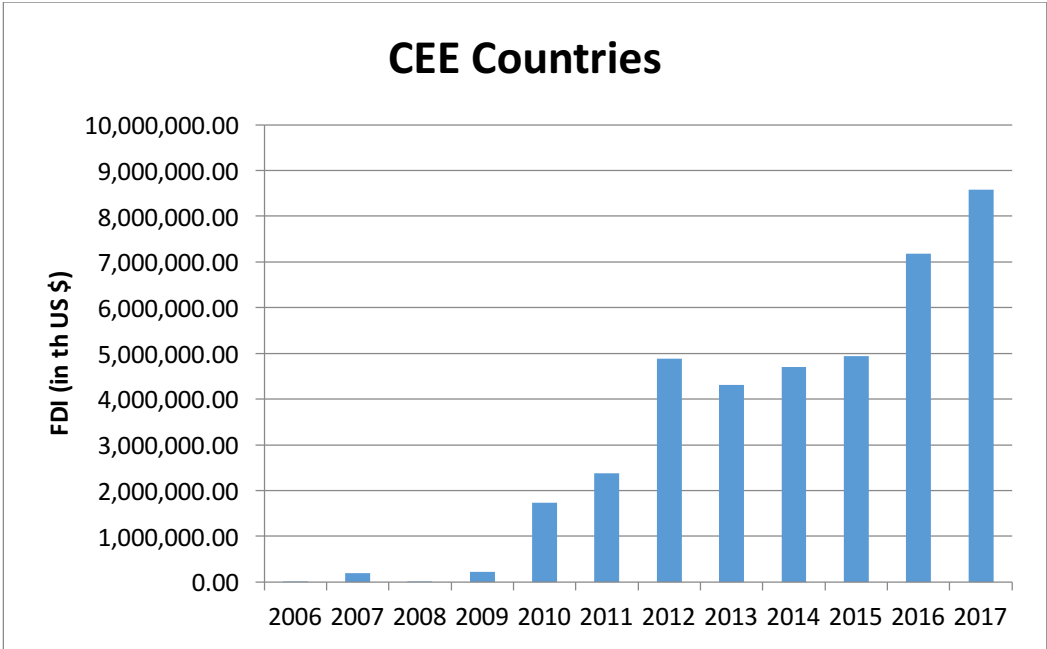


Figure 5-1 The estimated volume of Chinese FDI into CEE countries in the period 2006-2017 (in thousand USD adjusted for inflation

USD, which means that the volume of investments increased significantly. However, looking at the number of investments in the 2010, it is obvious that there was a big investment by a few companies, since the number of FDI projects hasn't increased markedly (from 2006 to 2009 there was 6 investments into CEE, whereas in 2010 there was five).

The number of investments and the volume of Chinese OFDI has had an increasing trend in the whole period 2006-2017 except for 2013-2014, when the number of investments into CEE slightly fell from 13 to 12 investments, and the volume of investments was increasing up until the 2013 when the investments were 4.3 billion USD compared to 4.9 billion USD the previous year. In

the years 2010 - 2013, the number of investments was 31, worth 13.304 billion USD, and the largest investment of up to 67 we recorded in the period of 2014 - 2017 that was worth 25.401 billion USD. The number of Chinese FDI projects has more than doubled in one year in from 12 investments in 2014 to 27 investments in 2015, with the highest number and volume of investments in 2017 reaching 40 Chinese OFDI projects.

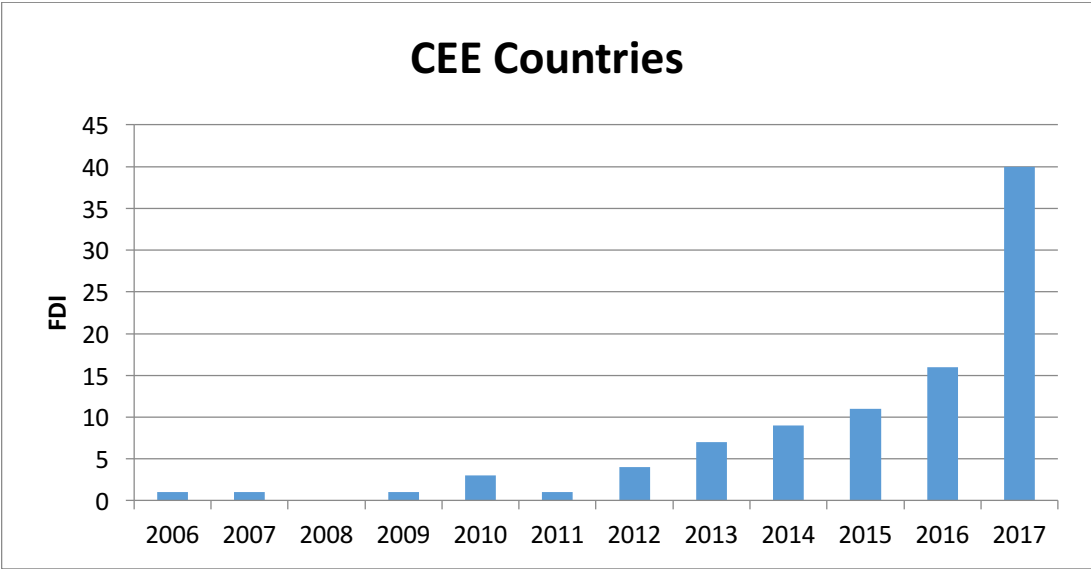


Figure 5-2 The estimated number of Chinese FDI projects into CEE countries in the period 2006-2017

It can be deduced that there was at least one larger investment into CEE in 2014, because even though the number of Chinese investments fell by one, the volume of investment has disproportionately increased from 4.3 billion USD to 4.7 billion USD.

In 2015, there were several smaller Chinese FDI investments into CEE because the number of investments has more than doubled (from 12 projects in 2014 to 27 projects in 2015), whereas the volume of Chinese FDI has only slightly increased compared to the previous year from 4.7 billion USD in 2014 to 4.9 billion USD in 2015. In the 2016-2017 period, the amount of investments was again proportionally larger than the volume of investments, which means that there were relatively smaller investments compared to the previous year, where large investments prevailed. This trend of a significantly increasing number of investment projects agrees with the assumption that the Chinese companies are becoming more interested in the CEE region, especially due to the implementation of the OBOR policies in 2013 as mentioned in the previous section.

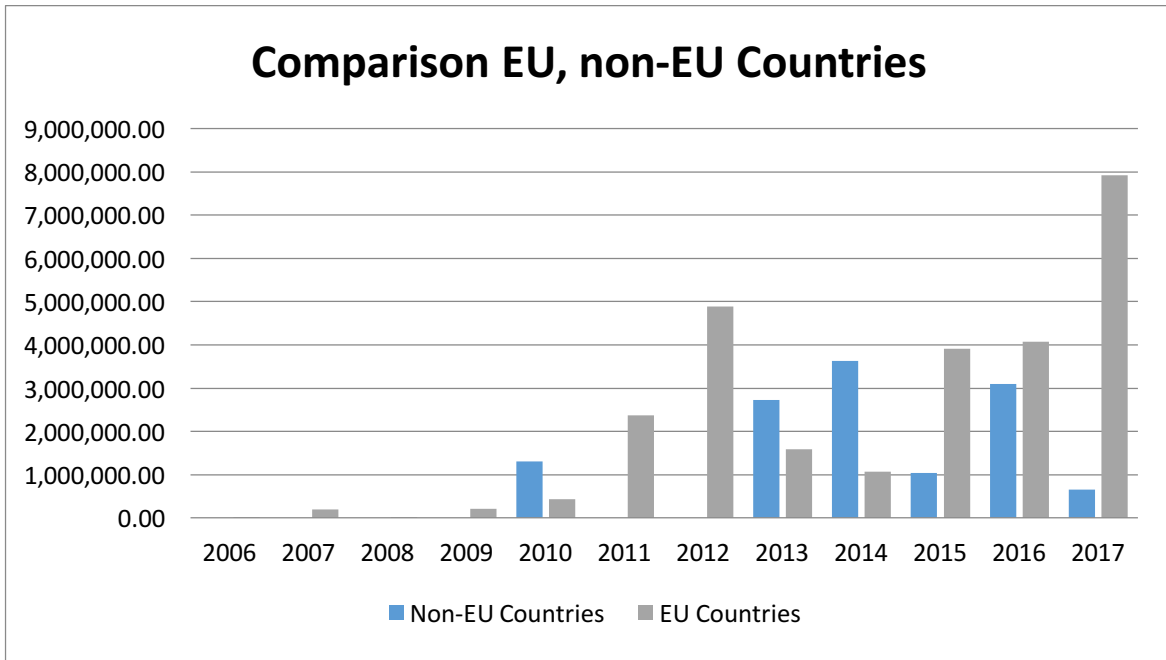


Figure 5-3 Comparison of FDI volume in EU and non-EU Countries of Chinese FDI

The volume of Chinese investments into EU member countries versus non-member has been fluctuating in the period 2006-2015 before the volume of Chinese FDI in the CEE countries has definitely overtaken the volume of Chinese FDI in the non-member countries being almost twofold of the FDI volume in the non-member countries (reaching nearly 4 billion USD in EU compared to approximately 1 billion USD in the non-member countries), even though it is obvious that the overall amount of Chinese FDI was larger in the EU member countries and it will probably continue on this trend in the next years, judging from the development and patterns of the Chinese FDI after the year 2015. The amount of Chinese FDI in the non-member countries have exceeded the volume of Chinese FDI in the member countries twice in the 2006-2017 period, first in 2010 when the volume of FDI into EU countries was only 429 million USD and the amount of Chinese FDI in non-member countries was 1.3 billion USD and secondly in the 2013-2014 period when the amount of Chinese investments into non-member countries was more than double than what it was in the EU member countries (2.7 and 3.6 billion USD and 1.5 and 1 billion USD respectively).

From the Figure 5-4 it is obvious that there isn't a very clear distinction between the number of FDI projects in EU-countries and non-EU countries apart from the last year when there were considerably more investments located in the EU-countries. The overall increasing trend of Chinese investment into the EU member countries agrees with the hypothesis that Chinese investors want to utilize the access to the EU market through cheaper labour in the new EU

member countries of CEE region. CEE is argued to be a “gateway” to Europe and a manufacturing hub for Chinese companies wanting to gain access to Western Europe (Meunier, Burgoon, & Jacoby, 2014) or to the EU-15 market.

Comparison of EU member countries and non-member countries

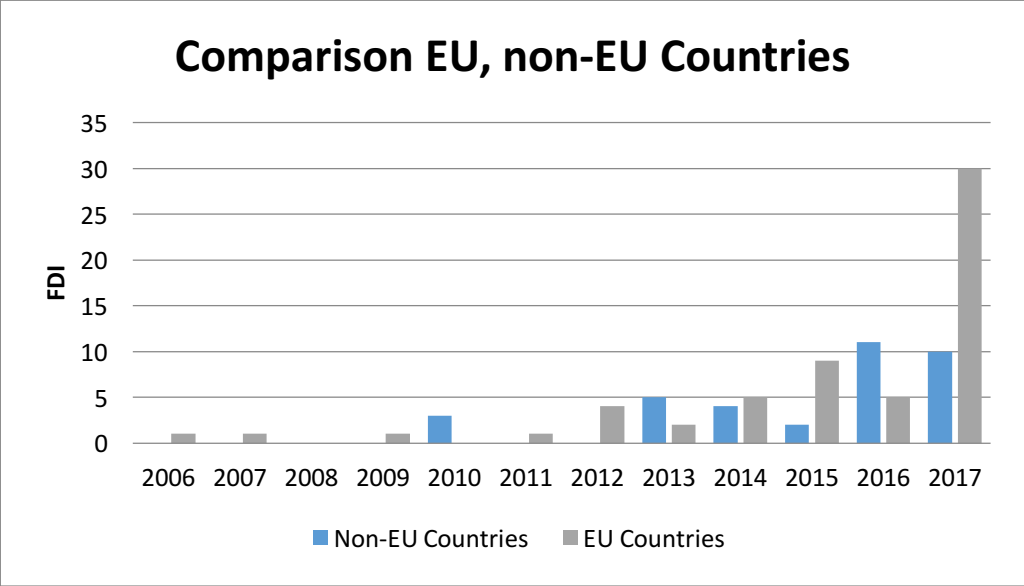


Figure 5-4 Comparison of the number of Chinese FDI projects into EU countries and non-EU countries in the period 2006-2017 (in thousand USD adjusted for inflation)

The data on joint ventures was extracted from the Orbis database, and in case the percentage of ownership was missing, the information was found in the official press releases. It can be seen from the Figure 5-5 that the choice of degree of ownership of Chinese investors in the CEE countries has not changed dramatically from the 2006-2012 period to the 2013-2017 period. The slight majority of investors were choosing joint ventures over wholly owned subsidiaries; this could be due to the fact that the Chinese companies investing in the CEE region do not have a lot of knowledge of the host market and in order to reduce the liability of foreignness (as theorized in the Uppsala model) will choose to enter into a partnership with a European company that is already experienced in the market. The increase in the amount of joint ventures formed in the second period could be because more and more new companies tend to invest in the CEE region and the sample is much larger compared to the first period.

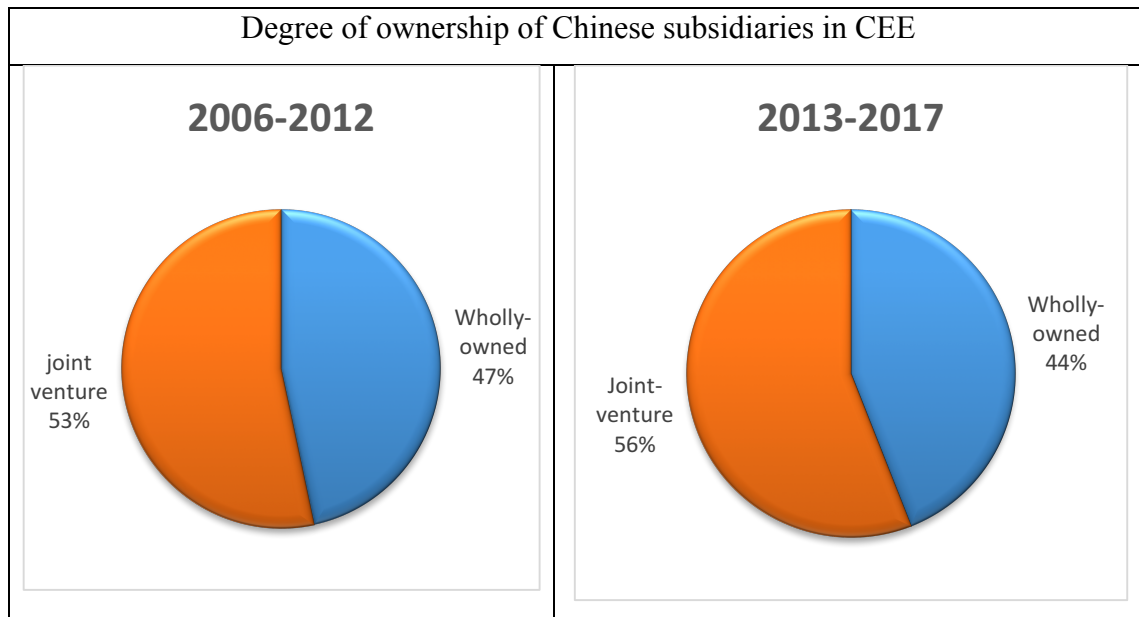


Figure 5-5 Degree of ownership of Chinese subsidiaries in CEE

The number of M&As were determined from Zephyr’s list of deals. According to (Svensson, 1998), the greenfield investment relies more on firm’s own capabilities and resources that is linked to its home country, companies that are more technologically advanced tend to choose greenfield over M&A (Caves, 1996), whereas the M&A are undertaken by companies that want to exploit opportunities (Davies, Desbordes, & Ray, 2015) and rely on the transfer of ownership. In the 2006-2012 time period where the amount M&As prevailed is in link with Mathews (2006), LLL framework and Y. Luo and Tung (2007) Springboard theory’s argument that firms initially do not necessarily need to possess the traditional firm-specific advantages as argued by the monopolistic advantage theory to internationalize, but rather they internationalize to gain strategic assets by acquiring foreign firms. The ratio of M&A versus GI has not changed in the sense that the M&As were still prevalent in the second time period, however, the percentage of GI has increased. This could be because SOEs that possess many ownership advantages (such as the size of the company, preferential government treatment) were encouraged to invest in the CEE region starting from 2013 as part of the OBOR plan of the Chinese government, therefore, the higher amount of greenfield investments could be explained by the political strategy of the Chinese government.



Figure 5-6 Degree of ownership of Chinese subsidiaries in CEE

Previous international experience of the Chinese companies that invested in the CEE region was estimated by finding out whether the Chinese company had any foreign subsidiaries prior to the investment in the CEE country. This information was determined by searching the given company and its subsidiaries in the Orbis database. If there was no information on the company in Orbis,



Figure 5-7 Previous International experience of Chinese companies investing in CEE

the company's website was used. Previous international experience could be considered a part of the monopolistic advantage of a firm. Firms that have previously invested abroad have more experience dealing with different systems and procedures in different institutional and cultural

environment which, in turn, makes them less susceptible to failure. The authors of the Uppsala model argue that firms first need to acquire sufficient international experience to expand into further markets (more geographically, psychically and culturally distant). This assumption partially holds for the first studied period. It can be seen that there was considerably less companies with previous international experiences that were investing in 2013-2017 period than in the first time period, however, the behavior of Chinese companies in the 2013-2017 has changed and follows more the pattern of latecomer companies theorized by Mathews (2006) and L. M. Luo, Qi, and Hubbard (2017), who argue that firms don't need to possess any ownership advantages prior to internalization, but on the other hand, they will gain their advantages by internationalization.

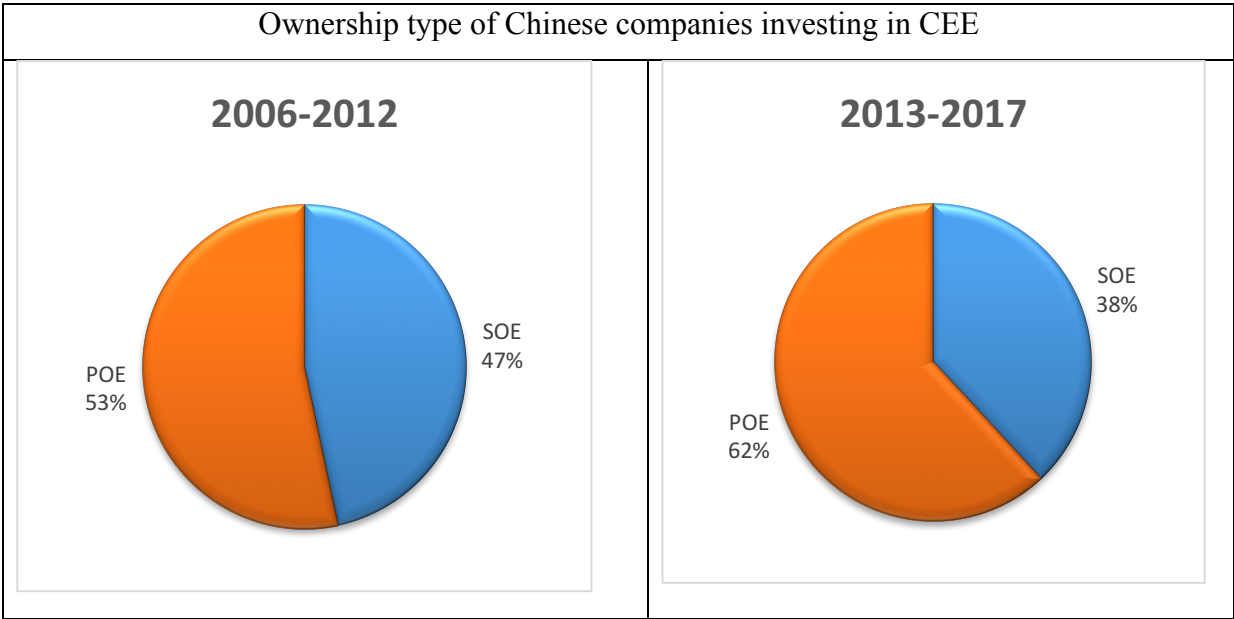


Figure 5-8 Ownership type of Chinese companies investing in CEE

From the Figure 5-8, it follows that POEs tend to invest more into the CEE countries than SOEs, the number of investments by POEs has even increased in the second studied period. It follows that SOEs tend to make less larger investments, while POEs will typically make smaller investments. This assumption corresponds to the Figure 5-1 and Figure 5-2 that depict the total volume and number of Chinese investments in the CEE region, where the investments after the 2013 tend to be smaller in volume but larger in numbers. On the other hand, the fact that the percentage of Chinese POEs investing in CEE has increased in the second period is quite surprising considering that SOEs would typically be more politically incentivized to invest in the countries that are part of the OBOR initiative which corresponds to majority of the CEE countries.

The size of Chinese firms investing in CEE was determined according to the Orbis’ definition of very large, large, medium and small companies that were divided based on the total assets, revenue, or number of employees as described in more detail in Appendix 1. In the first studied period, there were only very large and large Chinese firms found to make investments into the CEE region, it is probably because before the Chinese investments into the CEE region really took off, only the companies that were large possessed competitive advantages (as argued by the traditional theories – Dunning, Vernon, Hymer) to invest in a region that has been relatively unexplored for Chinese investors in the beginning of the studied period as it can be seen from the low level of investments in the Figure 5-9. In the second period, the level of Chinese investments by small and medium companies has increased from 0% to 11%, however, the majority of Chinese companies investing in the CEE countries is still either very large or large.

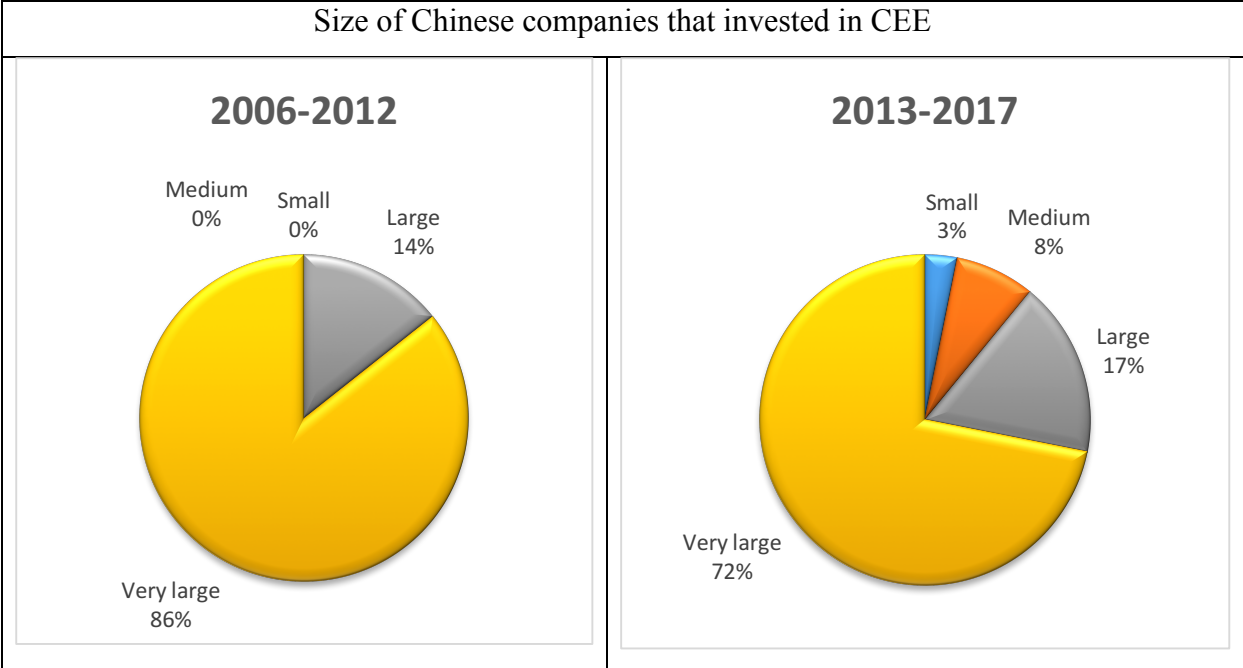


Figure 5-9 Size of Chinese companies that invested in CEE

The classification of economy sectors by Fisher (1939), Clark (1940) and Fourastié (1949) is utilized in this thesis. There are three sectors in the economy according to the abovementioned authors – the primary, the secondary and the tertiary sector, where the primary sector refers to the extraction of raw materials, the secondary sector refers to manufacturing (includes machinery, equipment, furniture, recycling; chemicals, rubber, plastics, non-metallic products; construction and design; energy sector) and the tertiary sector refers to services (wholesale and retail; other services). The Chinese companies that have invested in the CEE countries in the 2006-2012 period

were majorly companies in the secondary sector with 87% (manufacturing and industry), with only small part in the tertiary sector (13%). The sectorial division has changed for the secondary sector, however the investments into this sector remained high (63%), but the investment into tertiary sector has increased almost threefold (to 33%). There was also an increase in the investment into construction and design (from 0% to 10%) after the change of Chinese government’s investment strategy in 2013 that encourages building infrastructure as part of the OBOR plan. This means that there was a substantial change in terms of shifting the investment from the secondary to the tertiary economic sector, Chinese investors are slowly moving from concentration on manufacturing and industry sector (which is typically argued that it is central to Chinese investments into CEE due to lower manufacturing costs than in the rest of the EU) to the service sector.

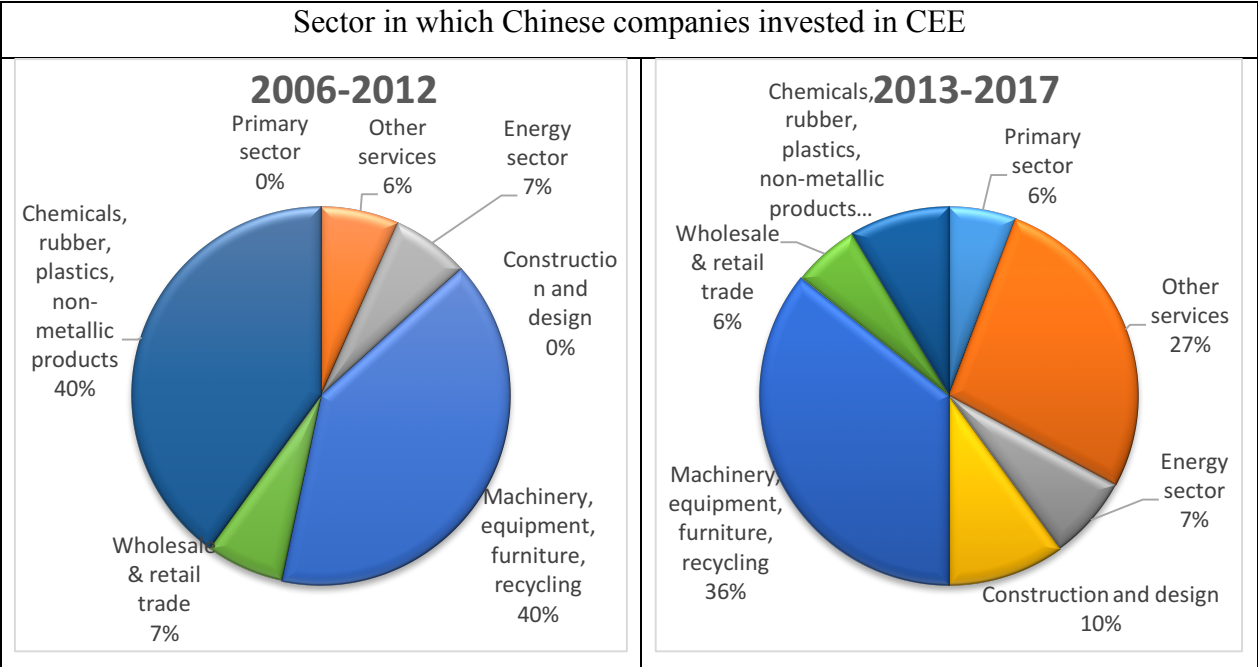


Figure 5-10 Sector in which Chinese companies invested in CEE

Summary

The descriptive analysis in this section has revealed that both the volume and number of Chinese investments has been increasing since the 2006, and has reached considerable amounts in the recent years, especially after 2013. Looking at the geographical distribution, there seem to be more investments located in the EU member countries which can be explained by market-seeking firms wanting to access the EU-15 market. The sectoral distribution of Chinese OFDI in CEE shows that in 2006-2012 period, most investments were in manufacturing, whereas in the latter period, the investments into the manufacturing sector have remained high, however, the percentage of

investments by Chinese firms in services has more than doubled. The majority of Chinese investments were made by either very large or large firms in both of the periods, even though the latter period has seen an increase of investments made by SMEs. Even though the majority of the Chinese firms investing in CEE were POEs, the percentage of investments made by SOEs has slightly diminished. The majority of investment entry modes were acquisitions; however, the percentage of GI has increased in the latter period. In terms of investments made by firms with the advantage of previous international experience, it was found that the percentage of Chinese firms without having any previous international experience investing in CEE has increased. In this section, it was also found that the majority of Chinese firms were entering into JVs with local partners in both of the time periods.

5.3 The influence of firm and investment characteristics on the volume of Chinese FDI in CEE

Firm characteristics and the impact on the volume of investment

In order to better understand the character of investments by the sample Chinese firms into the CEE countries, it was studied whether firm and their investment characteristics (such as the firm size, the type of ownership, previous international experience, and entry mode) had any influence on the volume of FDI, an ANOVA analysis was performed. Two analyses were conducted, the first one was to find out whether specific firm characteristics have any influence on the volume of investments, and the other analysis was to determine whether the entry mode, the degree of ownership and membership in the European Union has any influence on the volume of Chinese FDI. The volume of FDI was calculated as a share of foreign capital x Shareholder capital (Ablov, 2015). The assumptions of ANOVA analysis are described in the Appendix 2.

The ANOVA analysis was conducted in the SPSS statistical software. After running the ANOVA, the model studying the dependence of the volume of investments on the individual firm characteristics was found to be statistically significant ($F= 3,395$ $p=0,000<0.5$, $R\text{ Squared}= 0,716$), from which two of the firm characteristics were found to have an influence on the volume of FDI - the firm size ($F=7,151$ $p=0,001$) and the sector in which the firms operate ($F=2,838$ $p=0,020$). Other firm characteristics – the ownership type or having previous international experience prior to investing in the CEE region were not found to be significant, neither were the combinations of the individual firm characteristics.

Firm size

‘A firm’s asset power’ is determined by the level of international experience and the firm size (Agarwal & Ramaswami, 1992; Horst, 1972). This means that the volume of investments by Chinese companies depends on the size of the firm, since the bigger the size of the firm, the more able it is to leverage its resources without compromising its other activities or can more easily determine profitable opportunities (Kundu, Kumar, & Peters, 2008). Larger firms are able to absorb the costs related to international expansion, such as the costs of achieving economies of scale or the cost of contract enforcement (P. J. Buckley & Casson, 1976). Larger companies can make larger investments.

The ANOVA analysis revealed that the mean value of investments made by very large companies (VL mean = 263.359 mil USD) is bigger than the mean value of investments made by small companies (S mean = 852.820 thUSD). Furthermore, the number of investments by very large firms (N=57) is much greater than the number of the investment by small firms (N= 2). More detailed descriptive statistics of the influence of firm characteristics on the volume of FDI can be found in the Table 2 in Appendix 2. Several researchers have empirically proven that the firm size is related to its propensity to invest abroad (P. J. Buckley & Casson, 1976; Caves & Mehra, 1986; Grubaugh, 1987). This is in line with Dunning’s (1980) argument that firms with ownership advantages, in this case referred to as specific firm characteristics (such as having previous international experience, the size of the firm, the state ownership, specific sector), are more likely to engage in the international activities. Big firms can more easily absorb the risks and costs related to operating in unfamiliar environments (P. J. Buckley & Casson, 1976).

Ownership type

Another ownership advantage of Chinese firms is the state ownership. Firms that are state-owned in China can benefit from several advantages normally not available to the private owned companies, such as preferential government support, access to more resources through bank loans (Huang & Renyong, 2014), which was, however, not confirmed in the case of Chinese companies investing in CEE countries that this ownership advantage would have any influence on the volume of FDI.

Previous international experience

Another ownership advantage – having international experience prior to investing in the CEE region also does not seem to matter for Chinese firms investing in the CEE region, contrary to

what the Uppsala model predicts. Therefore, it can be concluded that even though the Chinese companies investing in CEE do behave according to some of the traditional theories, there are also some characteristics that can be more easily explained by the newcomer theories, such as not having to have previous international experience yet investing abroad in CEE countries which are cultural and geographically far from the companies' home country of China.

Sector type

In regards to whether the sector in which firm operate has any influence on the volume of investment, it was found that in the case of the Chinese companies investing the CEE region, the sector of the parent company does influence the volume of FDI by these companies. This means that companies from a certain sector are investing more in the CEE region. From the Table 3 in Appendix 2, it can be seen that most investments and the largest volume of investments were made in the manufacturing sector – the machinery, equipment, furniture and recycling (N=31) with the total value of 11.756 billion USD. The lowest number of investments made by Chinese companies went to the primary sector (N=3) and the wholesale and retail trade sector (N=3) which is part of the services sector. The largest individual investments were in the energy sector (Mean=1.479 billion USD), even though the number of investments wasn't very high (N=6). From this data it can be assumed that the main motives of Chinese companies investing in the CEE countries are market combined with efficiency seeking.

Combination of firm and investment characteristics and the impact on the volume of investment

The second ANOVA analysis was to find whether the membership in the EU, the degree of ownership and the mode of entry have any influence on the volume of FDI by Chinese companies in the CEE region. The analysis was conducted in the analogical way with the previous ANOVA analysis on the firm characteristics and volume of FDI. When the data was checked for the assumptions of the ANOVA analysis, it was found that one outlier exists, so this outlier needed to be removed from the sample that contained 75 values after that, and the volume of FDI needed to be transformed by natural logarithm, because of data homogeneity. In order to be able to employ the ANOVA analysis. The ANOVA analysis revealed that the three factors – EU membership, the degree of ownership and the mode of entry, nor the combination of these factors doesn't have any statistically significant influence on the volume of investments by Chinese companies, where Corrected Model $F=0.704$ $p=0.669>0.5$; $RSquared = 0.068$.

Since it was found that sector and firm size significantly influence the volume of investments, the third analysis was conducted that contained these two firm characteristics (firm size and sector) as well as the three factors characterizing investments (EU membership, the degree of ownership and the mode of entry). The data was checked for assumptions the same way as with the first and the second analysis, and in order to satisfy the conditions of ANOVA, one outlier had to be removed from the sample (so $N=75$) and the volume of FDI was transformed by a natural logarithm, so that Levene's test of equality of error variances $p=0,140 >0,05$. In case of testing for normality of data sample, some of the Shapiro-Wilk tests confirmed that the conditions weren't met, however, in all of these cases the values for skewness and kurtosis were from the interval $(-2, 2)$, which according to Garson (2012) can be accepted in case of ANOVA analysis.

The model that includes the combined firm and investment characteristics on the volume of investment was found to be statistically significant at the 5% level ($F= 4.921$ $p=0.000 < 0.5$, R Squared= 0.807). This model explains the relationship between firm/investment characteristics better than the first model on the relationship between firm characteristics and volume of investments, since the value of R-squared is larger (Model 1: R -squared=0.716 and Model 2: R -squared=0.807), which means that 80% of change in the volume of investment can be explained with the firm/investment factors included in the model. However, since the difference between the R-squared of model 1 and model 2 is only about 0.1, this means that by including the investment characteristics (type of entry mode, EU membership and the degree of ownership) the explanatory power of the model has increased only by 10%, thus the firm characteristics that were found to be significant (firm size and sector) have a strong influence on the volume of investments of Chinese companies in the CEE region.

The firm size and sector were found to be significant ($p=0.000 < 0.05$ and $p=0.013 < 0.05$) as well as entry mode as an interaction effect – the $Entry_mode * Company_size$ ($p=0.002 < 0.05$), $Entry_mode * Sector$ ($p=0.30 < 0.05$), $Company_size * Sector$ ($p=0.026 < 0.05$), which means that the firm size influences the volume of investments differently, with larger firms opting for GI and smaller firms for M&A. Furthermore, the entry mode depends also on the sector of the Chinese firms, ergo, in some sectors, such as construction and design firms tend to choose GI, whereas in other sectors such as in machinery and equipment, other services, energy sector firms are more likely to choose M&A as a form of investment.

Sector and ownership

When looking at the how the combination of firm factors, it is obvious that SOEs were more concentrated in the primary and secondary sector, such as in manufacturing (SOE=17.5%, POE=14.6% of total sum; SOE=22.4% POE=18.4% of total No.), whereas the POEs tended to invest more in the tertiary sector (services: SOE=0.1%; POE=11.1% of total sum; SOE=2.6% POE=18.4% of total No.). In overall, SOEs have made bigger investments on average (mean=558.823 mil USD) which was to be expected, since large companies subsidized by government can afford to make larger investments, however, in the case of energy sector, the opposite is the case – the POEs have made the same number of investments as the SOEs, however, with a higher average volume of the investment (POE= 1.610 bill USD and SOE= 1.347 bill USD as seen in Table 7 in Appendix 2), which is contrary to the literature (Huang and Renyong (2014), where it is argued that SOEs are primarily motivated by acquiring natural resources (resource-seekers) whereas POEs are more oriented towards market and efficiency-seeking.

Sector and EU membership

The amount of investments into manufacturing sector is many times higher in the EU countries (N=29, 28.8%) than in the non-member countries (N=2, 3.3%). The only, even though the investments in other sectors are also predominantly located in the new EU member countries, the differences are not as stark, apart from other services sector, where there were no investments observed in the non-EU countries.

This finding is in line with Gammeltoft and Fasshauer (2017) who argue that Chinese companies choose to invest in the new member EU countries because of easier access to Europe, while maintaining lower production costs that are in the new member countries where there are lower wages.

Sector and entry mode

There were primarily M&As taken by the Chinese firms, in all of the sectors falling under the secondary sector (including construction and design, chemicals, rubber, plastics and non-metallic products, machinery, equipment, furniture recycling and energy sector). M&As have prevailed over GI, even though the average volume of the investment was higher when choosing GI over M&A, what is not consistent with the literature (Alessia Amighini, Cozza, Rabellotti, & Sanfilippo, 2014; Cozza, Rabellotti, & Sanfilippo, 2015; Deng, 2012; Gammeltoft & Fasshauer,

2017). All the information regarding volume of FDI grouped by sector and entry mode can be found in the Table 8 in Appendix 2.

Summary

To supplement the descriptive output in this section, two ANOVA analyses were employed to find whether the firm characteristics (such as the size or previous international experiences) or the investment characteristics (e.g. the entry mode choice) had any effect on the volume of Chinese investments. The firm size and the sector of the firm were indeed found to have an impact on the volume of investments. Additionally, the interaction effects of the entry mode and firm size, the sector and the entry mode, and the firm size and the sector were all found to have an impact on the volume of Chinese investments into CEE.

5.4 Classification investments

Investments can be defined by several characteristics that can divide them into distinctive several categories. This categorization can be helpful for the future investors or the governments of the countries trying to attract more FDI. For the CEE countries, attracting more investors is an important part of the governments' strategy (Zabojnik, 2016). Therefore, this section will be concerned with attempting to find whether the investments by Chinese companies into CEE can be divided into two categories based on their characteristics using the cluster analysis in the SPSS statistical software.

In order to characterize investments and group them, it is important to find whether they possess any similar characteristics, which can be done easily if only one group of category is present. For example, in case of having only one category, such as the degree of ownership, it is elementary to sort the investments that were Greenfield or M&A. However, with more categories this classification into distinctive groups becomes more complicated and can be done using a classification method such as the cluster analysis (W. L. Huang, Chen, & Li, 2002). Cluster analysis can be employed if there are binary variables of the categories (Sarstedt & Mooi, 2014), therefore, following firm and investment categories were chosen for grouping the investments:

The investor can be described by several attributes, some of which are relevant in this thesis - the company ownership (SOE; POE), previous experience of a foreign investment firm (international experience: Yes; No) and the company size at the time of the investment (company size: Small; Medium; Large; Very Large). Some companies have made multiple investments at different times in multiple countries. In this case, the company's characteristics (if changed) were applied to the

investment in question. More detailed classification of companies by size is described in Appendix 1.

Furthermore, there are several characteristics that are pertinent to investments - the volume of investment (in 2010 constant USD), the entry mode (GI and M&A), the degree of ownership for the realized investment (WO and JV), the year of investment and the industry sector of the Chinese company (assigned according to BvD major sector of Orbis classification into three sector economy classification. For simplicity reasons and to achieve binary variables, primary and secondary sector were grouped together), the country in which the investment was placed (EU membership – yes or no).

In order to use the cluster analysis, the categories had to be converted to binary values of 0 and 1 that described the absence or presence of a certain category, respectively. For categories that contained more than two possible values, ergo the volume of the investment, size of the firm and the industry sector, the values were grouped in the following way. For the volume of investment, the large investments (XL, of 500 mil. USD and above) were given the value 1 and the smaller investments (SM, under 500 mil USD) were given the value 0. For the firm size, the small and medium firms were grouped together as SM and given a value of 0 whereas the large and very large firms were together (XL) assigned the value of 1.

The industry sector was transformed to binary values according to the three economy sectors, where primary and secondary sector were grouped in one category and the tertiary sector in another category. To classify the investments according to their characteristics, a hierarchical clustering framework was used (W. L. Huang et al., 2002; Vasilescu, Stanila, Cristescu, Popescu, & Sgem, 2014). When the single linkage method and Jaccardi's coefficient was employed to check for any outliers, there weren't any outliers or a large cluster formed, instead only a chain with clusters containing two objects as it can be seen in the Figure 1 in Appendix 3. The average linkage method occurs when the clusters are formed based on average distances between all pairs of objects in the clusters (Sarstedt & Mooi, 2014)

When the Jaccardi's coefficient and the average linkage method were used, it was difficult to form any clusters. All the matching coefficients were tested in order to identify the matching coefficient and method that would yield visible clusters. Only the Yule's Q matching coefficient proved to work in this case. When employing the Yule's Q association measure, only the Average linkage

method have yielded two clusters – investment type A and investment type B and four smaller clusters (1,2,3,4) as part of the two clusters.

Since only employing the Yule's Q matching coefficient has worked for forming clusters, a two-step cluster analysis was employed to more closely investigate categorization of the investment characteristics into two clusters (Shih, Jheng, & Lai, 2010). Two-step cluster analysis is utilized in the presence of both ordinal (volume of FDI) and nominal (other categories, such as the degree of ownership: WO, JV) variables, therefore, it is feasible to employ this method of analysis for categorization of investment cases into two clusters. Two-step cluster analysis shows to which degree the two clusters that were formed are disjunctive in the individual characteristics. From the Figure 2 in Appendix 3 which was obtained after running the two-step cluster analysis, it is obvious that there isn't a cluster that wouldn't contain both of the characteristics at the same time (for example, in case of mode of ownership, there are both WOs and JVs in the same cluster). This means when interpreting the dendrogram obtained during the hierarchical cluster analysis, it is important to keep in mind that even though there might be one characteristic dominant in the cluster, it doesn't mean that the investments in the same cluster didn't have the other characteristic (cluster A could contain investments made by POEs and SOEs, or the mode of entry chosen in the case of investments in the first formed cluster could have been JV or WO). The strongest predictors for clustering the individual characteristics were the firm size and firm sector (Figure 3 in Appendix 3) which was also confirmed by ANOVA analysis and it's more clearly explained in the ANOVA analysis section.

Only the dendrogram after using the average linkage method has yielded two comprehensive clusters with showing different distances between the individual characteristics of investments, therefore, this dendrogram will be used to characterize the investments of Chinese firms into the CEE countries. From the dendrogram (Figure 5-12) can be seen that there are two main clusters—the two clusters will be labeled as the type A investment and the type B investment. Each of the two main clusters also contain two smaller clusters (subgroups) that will be described in the following section.

Type A investments

The first cluster contains two subgroups – first subgroup of investments contains small and medium firms with no previous international experience that have made small investments (under 500 mil USD) and formed JV with a local partner through M&A, whereas the other subgroup (II)

characterizes investments where the firms were private, predominantly in the tertiary (services) sector and have mainly invested in the EU region.

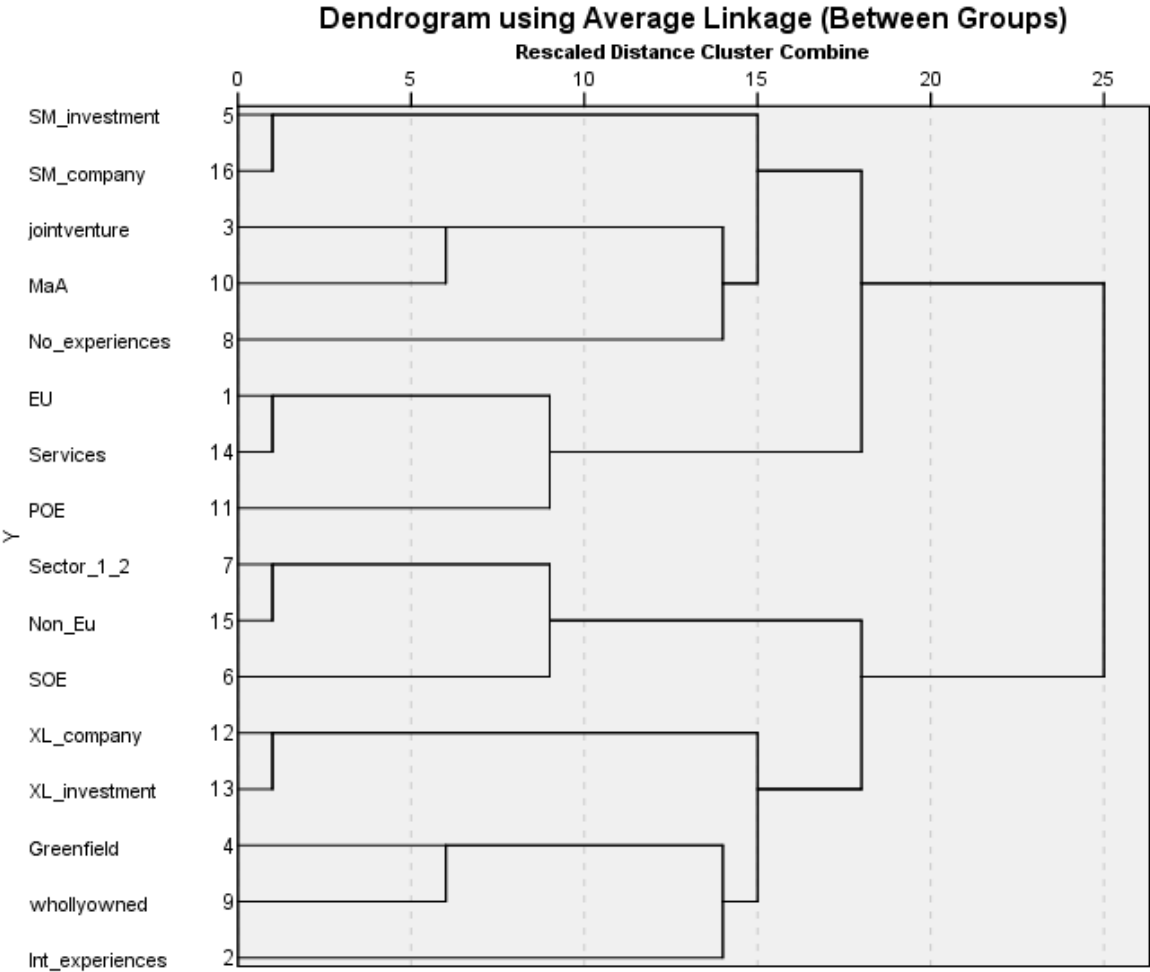


Figure 5-11 Final Dendrogram of Hierarchical clustering method

The connection between the two subgroups in dendrogram is relatively on the right side (rescaled distance=18) which means that the connection between these two subgroups isn't very strong, ergo the probability of occurrence of all the characteristics from both of the subgroups in one investment is lower.

Greater portion of the investments in the type A investment was in the tertiary (services) sector made by small and medium sized firms that were investing in the CEE for the first time. By looking at the data from the descriptive statistics, it can be seen that almost all of the investments made by small and medium firms were in the wholesale and retail trade and transport sector or in the other services sector. There is a strong connection between investments in the EU and investments made by the tertiary sector firm, as visible from the dendrogram, this means that almost all of the

investments into the service sector (tertiary sector) were made into the EU member countries in the CEE. These firms have chosen to form joint ventures with the local firms through mergers and acquisitions. This type of investment of the Chinese companies can be explained as the expansion strategies.

Since the small and medium Chinese firms without any previous international experience probably don't possess many ownership advantages, yet invest abroad, it can be assumed that they can take advantage of the global economy and acquire resources through internationalization and M&A with the foreign firm in the CEE (Mathews, 2006). Furthermore, due to not having international experience, these firms might prefer to choose lower equity entry mode as a way of compensating for the lack of international experience or knowledge about the local market thanks to the partner's familiarity with the local market can reduce the risks related to entering culturally distant markets (Tihanyi, Griffith, & Russell, 2005). Moreover, POEs tend to be market and efficiency seekers, because they do not need to follow political agenda.

Type B investments

The second large cluster of investments with similar characteristics that was formed also contains two smaller subgroups – in the first subgroup (III), the investments were mainly characterized by SOE firms from the first and secondary economy sector, investing predominantly in the non-EU member CEE countries. The second subgroup (IV) of the B cluster shows investments of firms that were mainly large, making large investments, who have had previous international experiences, chose higher equity modes (wholly-owned subsidiaries) rather than a lower equity mode (joint venture) and greenfield investment as the mode of entry. Again, it is obvious that most of the large investments were made by large companies since they are closely connected in the dendrogram, which was also confirmed with the ANOVA analysis in the previous section which can be explained as large firms usually have more assets at hand, therefore, they can make larger investments. Similarly, large firms tend to choose wholly-owned subsidiaries as a mode of entry, because they possess enough resources.

Several studies (Huang & Renyong, 2014; L. M. Luo et al., 2017) have found that the SOEs are more likely to make investments in the countries that are less politically stable (such as the non-EU member countries in the CEE region), whereas the primary motive of these firms was resource seeking, which is partially confirmed by the fact that all of the primary sector investments were placed in the non-EU-member countries, even though there wasn't a substantial amount of such

investments, since these European countries aren't as well-endowed with natural resources as some countries on the African continent, for example. While the investments in the large cluster A were mainly located in the EU region, most of the investments into countries outside of EU were in the second large cluster (B). The countries that are not part of the EU yet (such as Bosnia and Herzegovina or Montenegro) have been most likely targets of Chinese investors due to their relevance in the OBOR plan, therefore, there were more SOEs investing in this region compared to the countries in the EU region – to fulfill a political agenda. Since these large state-owned firms are more likely to have previous international experience (as it is seen in the dendrogram), they can afford to invest in more risky location (from the investment point of view). Since the connection between the subgroup III and IV isn't very strong (as the linkage is quite far) it is quite possible that the cluster also contains large investments in the primary or the secondary economy sector made by firms who are not only SOEs but also POEs investing in the CEE countries that are members of the EU, since the formation of the clusters was greatly influenced by the firm size.

5.5 Summary

To sum up, there are two main types of investments that were identified - investments made by private firms that tended to be smaller, make smaller investments and didn't have any previous international experience. These investments were made as M&A and the equity mode chosen by firms making these investments was mostly joint ventures with the local partners. Furthermore, these investments were concentrated mainly in the service sector and in the countries which are members of the European Union.

On the other hand, the other main type of investments (cluster B) was made predominantly in the non-EU CEE countries by large SOE firms with previous international experiences making investments over 500 mil. USD and choosing Greenfield investment and wholly-owned subsidiaries as the mode of entry. These findings are partially supported by the literature (Deng, 2012; Huang & Renyong, 2014) where large SOEs tend to make investments based on political agenda by the Chinese state, whereas the POEs tend to be market and efficiency seeking, looking to expand their influence into Europe and access the European Union through investment in the EU-member states of CEE.

It is important to state (as proven by the two-step cluster analysis) that the incidence of investments made only with the group of characteristics in each cluster is not very high, it is important to keep in mind that the cluster analysis only points to the fact that the proportion of investments made by

POEs were more likely to be in the service sector, investing in the EU countries, through M&A and establishing JVs in the cluster A, however, there were also POEs present in both of the clusters, only that the cluster A contained larger proportion of POEs. Using parallel logic, the cluster A also contained investments made by firms in non-member EU countries, however, the incidence of POEs investing in EU countries was proportionally larger and so on.

6 REGRESSION ANALYSIS

This chapter presents the regression analysis and the proxies for relevant variables.

After having collected the data, three groups of data samples were obtained. The first sample of data was concerning the characteristics of Chinese investments, such as the time of investment, the location of investment, the volume of investment, the entry and the equity mode. The second sample contained indexes for the host country data for each year. The third sample comprised of data describing the characteristics of investors - type of ownership, sector, previous international experiences, company's turnover (average for the studied period), company's total assets (average for the studied period), number of employees (average for the studied period).

6.1 Proxies for relevant variables

Dependent variable

There were two groups of data samples available to use for the regression – the volume of Chinese investments (calculated in thousand USD and adjusted for inflation by 2010 GDP deflator) and the number of Chinese investment projects in individual countries in the 2006-2017 period. The number of investment projects was chosen to be used in the regression analysis because some of the data on the volume of FDI were missing and if the volume of investments were to be used in the regression analysis, the already small data sample would be reduced even more. In order to account for the difference between the time that the decision to invest took place and the actual investment, the values for the number of FDI projects were lagged by one period (one year).

Independent variables

Market size

The relative market size was proxied by GDP/capita (in constant 2010 USD). The data on GDP/capita were obtained from the World Bank database, where GDP/capita is defined as the “gross domestic product divided by midyear population. GDP is the sum of gross value added by

all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products.“ (WorldBank, 2017b) Since it is assumed that the number of FDI projects will be higher in the locations with higher GDP/capita, a positive coefficient for GDP/capita variable is expected (+)

Trade relations

The reason why only Chinese exports are used as a proxy for trade relations is that this variable was usually found to be significant in the previous empirical studies e.g (P. J. Buckley et al., 2007) (Blomkvist & Drogendijk, 2016), unlike the imports variable. The values for the amount of Chinese exports in the individual countries were taken from China’s statistical yearbook for respective years and adjusted for inflation using GDP deflator (in constant 2010 USD). Since export is a predecessor of FDI, it can be assumed that the higher the Chinese exports into the host country, the higher the number of FDI projects will be, therefore, the exports variable is expected to be positively related to FDI and the coefficient for this variable will have a positive expected sign (+).

Host country infrastructure

The host country infrastructure is proxied by fixed broadband subscriptions (per 100 people) obtained from the World Bank database. Fixed broadband subscriptions is a measure of the amount of subscriptions to the high-speed internet, which consists of “cable modem, DSL, fiber-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband and terrestrial fixed wireless broadband” (WorldBank, 2017b), but it doesn’t include internet in cellular phones. The number of fixed broadband subscriptions in the host country is expected to be positively related to the amount of Chinese FDI projects (+).

Host country innovation and technology

As a proxy for host country innovation and technology, the Research and development expenditure (% GDP) was used which was obtained from the World Bank database. WorldBank (2017b) defines research and development expenditure as the “Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development. The expected sign for R&D expenditure is positive (+), because the amount of R&D expenditure is assumed to be positively related to the amount of FDI projects.

Regulatory institutions

The regulatory institutional pillar can be proxied with a composite of four indices - political stability and absence of violence/terrorism, the control of corruption, the level of economic freedom and intellectual property rights. Political stability and absence of violence/terrorism and the control of corruption variables are part of the Worldwide governance indicators developed by Kaufmann, Kraay, and Mastruzzi (2010). The values of both governance indicators were retrieved from the World Bank database.

Political stability and absence of violence/terrorism refers to “the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically motivated violence and terrorism.” (Kaufmann, Kraay, and Mastruzzi, 2010, p.4). Political stability ranges from approximately -2.5 (weak) to +2.5 (strong) governance performance. Political stability is expected to create favorable conditions for investment, therefore, political stability is expected to be positively related to the number of Chinese FDI projects and its coefficient is expected to have a positive sign (+).

Control of corruption captures “the perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption as well as ‘capture’ of the state by elites and private interests.” (Kaufmann, Kraay, and Mastruzzi, 2010, p.4). Similarly to the political stability indicator, the control of corruption ranges from approximately -2.5 (weak) to +2.5 (strong) governance performance. The control of corruption is not expected to be related to the amount of Chinese FDI projects, therefore, the coefficient of control of corruption will have no sign (0).

The third indicator related to regulatory institutional pillar is the **Economic Freedom** index. The data used for measuring economic freedom are taken from the Fraser Institute of Economic Freedom. The economic freedom index is available with data from 1970 and consists of 42 variables that are grouped into five categories and taken from various sources such as International Country Risk Guide, the Global Competitiveness Report, and the World Bank. The categories that constitute economic freedom are: legal structure and security of property rights, government size, freedom to trade internationally, regulation and access to sound money. Government size refers to the extent “to which a country relies on personal choice and markets rather than government budgets and political decision-making” (Fraser Institute, 2017). Sound money refers to “policies and adopt institutions that lead to low (and stable) rates of inflation and avoid regulations that limit

the ability to use alternative currencies”(Fraser Institute). The freedom to trade internationally measures “a wide variety of restraints that affect international exchange: tariffs, quotas, hidden administrative restraints, and controls on exchange rates and the movement of capital.” (Fraser Institute, 2017) Regulation refers to the credit market, the labor market and the business regulation in the host country (Fraser Institute, 2017). All components of the economic freedom can be in range of 0-10, whereas the composite index is measured on the interval of (0,100). High economic freedom indicates friendly environment for foreign investment, therefore, economic freedom is expected to be positively related to the number of Chinese FDI projects and its coefficient is expected to have a positive sign (+).

Normative institutions

Normative pillar of institutions refers to the values and norms in the society. It can be proxied by Hofstede’s indices of national cultures (Ionascu, Meyer & Estrin, 2004). The Hofstede indices are based on IBM employee survey conducted in the period 1967-1973 in more than 70 countries globally and consists of the power distance, individualism vs collectivism, uncertainty avoidance, masculinity vs femininity, long term vs short term orientation and indulgence vs restraint. Power distance “expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally” (Hofstede Insights). Individualism is a “preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families.” (Hofstede Insights, 2017), whereas collectivism signifies the polar opposite of individualism. The third index, uncertainty avoidance, “expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity.” (Hofstede Insights, 2017) The masculinity index is defined as the “preference in society for achievement, heroism, assertiveness, and material rewards for success.” (Hofstede Insights, 2017) and the long-term orientation refers to cultures that “take a more pragmatic approach...they encourage thrift and efforts in modern education as a way to prepare for the future.” (Hofstede Insights, 2017). The last index, indulgence, “stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun” (Hofstede Insights, 2017). This thesis will employ a cultural distance measure - Kogut and Singh index (1988) based on Hofstede’s dimension with the following formula: The Kogut and Singh index measures the cultural distance between two countries and has a following formula:

$$KS_{ij} = \frac{1}{n} \sum_{d=1}^n \frac{(I_i^d - I_j^d)^2}{v^d} \dots\dots\dots(1)$$

Where KS_{ij} captures the cultural distance between China (i) and the host country j ; I_x^d represents the score of the country x (China or host country) in dimension d ; and V^d represents the variance of the index for the dimension d and n is the number of cultural dimensions – in this case it was six (Drogendijk & Slangen, 2006). The data on Hofstede dimensions was accessed from the Hofstede Insights website. The cultural distance is expected to be negatively related to the number of Chinese FDI projects, ergo the larger the cultural distance between China and the host country, the lesser number of Chinese investments will be located in the country, therefore, the cultural distance measure is expected to have a negative sign (-).

Cognitive institutions

Foreign subsidiaries are influenced by the way the employees process information, and more educated people tend to be more traveled and adaptable to different environments and able to process information more easily (Delia Ionascu et al., 2004). This factor might be quite difficult to measure, however, it can be proxied by the level of tertiary enrollment. The level of tertiary enrollment was adopted from the World Bank database and is measured as the “gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.” (World Bank, gross enrollment ratio, tertiary, both sexes, %) (WorldBank, 2017a). It is expected that the level of tertiary enrollment in the CEE countries will be positively related to the number of Chinese FDI projects, therefore, the anticipated sign for the level of tertiary enrolment coefficient is anticipated to be positive (+).

Since the values for the variables Political Stability and Control of Corruption had negative values (in the interval of -2.5 to 2.5), they were transformed into positive values from the interval (0,1) in case that the values weren't normally distributed in which case they would need to be transferred into logarithm (Kurul, 2017; Stoian, 2013) and only positive number can be transformed into logarithm, using the following equation:

$$x' = \frac{x-min}{max-min} = \frac{x+2.5}{5} \dots\dots\dots(2)$$

The summary on the variables can be found in Table 6-1.

6.2 Model and method description

In order to determine how the explanatory variables (host country institutional factors) affect the number of Chinese OFDI projects in the respective host countries in the CEE region, a regression analysis will be performed. When employing the Poisson regression analysis, in order to obtain valid results, several conditions must be met. Firstly, the endogenous variable, ergo the number of FDI projects in CEE countries should be discrete and secondly, the values of the endogenous variable have to follow Poisson distribution, ergo the mean and the variance of the data should be equal. Thirdly, the explanatory variables (host country factors) must be on a continuous scale. The fourth condition of the Poisson regression is that the observations must be independent of each other. After the data on FDI count was checked for Poisson distribution, it was found that the Poisson distribution does not hold for the endogenous variable since the

Table 6-1 The determinants of Chinese FDI

Variable	Hypotheses	Code	Proxy/Measurement	Source	Exp. sign
Dependent variable					
Count FDI		C_FDI	Count FDI 2006-2017	Orbis, Zephyr, CGIT	
Independent variables					
Relative market size	H1a	GDPpC	GDP per capita (In constant 2010 US\$)	World Bank	+
China's exports to the host country	H1b	EXP	Chinese exports to the host country	China statistical yearbook	+
Host country infrastructure	H2	BROAD	Fixed broadband internet subscribers per 100 people	World Bank	+
Host country innovation and technology	H3	RD	Research and development expenditure (% of GDP)	World Bank	+
Control of Corruption	H4a	CORR	Index (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)	World Bank	+
Host country political stability	H4b	PSTAB	Index of Political stability and Absence of Violence/Terrorism (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)	World Bank	+
Economic Freedom	H4c	ECFREE	Index of Economic Freedom (score 100 is maximum freedom)	The Heritage Foundation	+
Cultural distance	H4d	CDIS	Kogut and Singh index	Hofstede Insights	-
Skilled labour endowments	H4e	TENROL L	School enrollment, tertiary (% gross)	World Bank	+

mean and the variance were not equal to each other (mean = 0.90; variance = 5.05), therefore, it means that the data is over dispersed and the Poisson distribution is not viable to employ in this

case (Yang & Berdine, 2015). In a case where Poisson distribution can't be used, an alternative approach for count models is the Negative binomial regression.

$$\ln(C_FDI) = \beta_0 + \beta_1 CDIST + \beta_2 CORR + \beta_3 ECFREE + \beta_4 PSTAB + \beta_5 BROAD + \beta_6 EXP + \beta_7 GDPpC + \beta_8 RD + \beta_9 TENR \dots\dots\dots (3)$$

where $\ln(C_FDI)$ refers to the number of Chinese FDI projects in the host countries and β_i are the coefficient of the determinants that are be estimated

6.3 All countries regression

Several assumptions need to be held when using the Negative binomial regression: linearity, normality and homogeneity. The model should be checked whether the assumption of linearity, normality and homogeneity of variance is present (Garson, 2012). This was done by conducting the residual analysis and plotting the residuals that should not follow any patterns, the residuals should be normally distributed and the residual variance should be constant. Most of the residuals lie in the interval (-2, 2), and don't deviate much from 0, and are constant in variance, which means that the model fits data well. The normality assumption was checked through displaying the histogram of residuals which shown that the data are quite normally distributed which can be accepted in the case of techniques that use the Maximum likelihood estimation method (like the Negative binomial regression model), because they are more robust against moderate departures from normality (Garson, 2012).

Multicollinearity in regression models is a high level of correlation among the explanatory variables (in this case the host country factors) and it can occur when there are too many independent variables in the model. Multicollinearity can be as issue because it can cause the standard errors to be very high and thus it can distort the estimation accuracy of the independent variables coefficients (Berenson et al., 2012). Multicollinearity can be detected by calculating the variance inflator factor (VIF). The VIF detects effect of collinearity among the variables in the regression model. There is no official limit on what VIF values are no longer acceptable, however, a general rule of thumb is that the values should be from the interval (1,10) as indicated by (Berenson et al., 2012). Some of the VIF values for variables the independent included in the first model were outside of this interval, therefore in order to see which explanatory variables correlated with each other the most, a correlation matrix was plotted.

Afterwards, the collinearity test was performed, however, some of the VIF values were outside of the recommended interval of (1, 10). Therefore, an explanatory variable (TENR) that correlated the least ($r=0.040$) with the endogenous variable (C_FDI) and at the same time correlated strongly with other exogenous variables - with variable $CORR$ ($r=0.556$), with variable $PSTAB$ ($r=0.556$), with the variable $GDPpC$ ($r=0.594$), and variable RD ($r=0.621$), was chosen to be excluded from the model.

The final model had the following form:

$$\ln(C_FDI) = \beta_0 + \beta_1 CDIST + \beta_2 CORR + \beta_3 ECFREE + \beta_4 PSTAB + \beta_5 BROAD + \beta_6 EXP + \beta_7 GDPpC + \beta_8 RD \dots\dots\dots (6)$$

After the $TENR$ variable was excluded from the model, the VIF values were in the desired interval of (1, 10). The model development process is depicted in the Table 6-3. After the $TENR$ variable was excluded from the model, the VIF values were in the desired interval of (1, 10) as it can be seen in the Table 6-2.

Table 6-2 Final collinearity diagnostics results of model development

Variable	VIF value
CDIST	2.804
CORR	6.191
ECFREE	3.314
PSTAB	4.790
BROAD	2.425
ln_EXP	1.981
GDPpC	8.019
RD	3.447

After the assumption of Negative binomial regression were checked, the regression was performed using IBM SPSS software which generated an output containing tables with the results that are presented in the following section. The goodness of fit table determines how well the model fits. This table presents the Pearson-Chi square value that should be larger than 0.05 in order for model to fit the data well. Since the Pearson-Chi square value was 0.803, the model was quite robust.

Another statistical test is the Omnibus test, which informs about whether the overall model is statistically significant by providing a p-value. The Omnibus test provides a likelihood-ratio Chi square value that compares the fitted model to the ‘null model’ (without any predictors), meaning

whether all the independent variables collectively improve the model compared to the intercept-only model. The p-value calculated for the regression model was in this case $p = 0.00 < 0.05$, which means that the model is in overall statistically significant and that all the independent variables collectively improve the overall model.

Another model important to look at is the test of model effects that provides the Wald Chi-Square test. Wald Chi-Square test provides information on significance of individual variables in the model. The indicator of significance, the p-value, was found to be significant for the following variables: the EXP variable ($p=0.000$), the BROAD variable ($p=0.002$) and the GDPpC variable ($p=0.019$), were all significant at the 5% level (0.05) and the CDIST variable ($p=0.073$), and the RD variable ($p=0.078$) were statistically significant at the 10% level. The results can be seen in greater detail in the Table 6-3.

6.4 FDI dynamics for all CEE countries

In order to find whether there was any difference in the effect of FDI determinants on the amount of Chinese FDI projects, (P. J. Buckley et al., 2007) approach was followed and the studied period of investments was divided into two groups. The two time periods chosen for the analysis of FDI dynamics were 2006-2012 and 2013-2017, in order to see whether the implementation of OBOR strategy in 2013 had any effect on the amount of Chinese FDI projects undertaken in the CEE countries. This was done by adding a categorical variable into the regression model, which had a value of L for 2006-2012 and value H in the years 2013-2017. The regression model used for determining FDI dynamics was the same – Negative binomial model, as the original model for the whole time period. Based on the SPSS output statistics, it can be determined that the model fits data well for both of the time periods, because Pearson Chi-Square = 0.689 and 1.004, respectively, so both values are > 0.05 . Both models are also statistically significant, because the Omnibus test $p=0.011$ and $p=0.006$ for 2006-2012 and 2013-2017 respectively, which is < 0.05 . From the Wald Chi-Square test it can be seen that in the period 2006-2012, only the EXP variable ($p=0.027$) was statistically significant at the 5% level and the GDPpC variable ($p=0.093$) was statistically significant at the 10% level. Similarly, in the latter period (2013-2017), only the EXP variable ($p=0.004$) was found to be significant (at the 5% level).

6.5 FDI differences among EU and Non-EU countries

Similar approach was employed to determine whether there were any differences in the effect of determinants on the amount of Chinese FDI projects in the EU- member and non-member CEE

countries. A categorical variable was added to the Negative binomial regression model – Y when the country was a member of the EU and N when the country wasn't a member of the EU. Since there were not enough data for running the regression for the non-member countries, only output for the EU countries was obtained. Based on the SPSS output, the model can be said to fit the data well (Pearson Chi-Square = 1.002 >0.05) and is, in overall, statistically significant (Omnibus test $p=0.01 <0.05$). Wald Chi-Square test indicated that only the variables BROAD ($p=0.006$) and EXP ($p=0.000$) were statistically significant at the 5% level, whereas the variables CDIST ($p=0.093$) and PSTAB ($p=0.091$) were significant at the 10% level, which can be seen in the Table 6-4.

6.6 FDI dynamics for the EU members CEE countries

In order to compare the how the FDI determinants influenced the number of Chinese FDI projects in the EU-member CEE countries in two different periods, another regression analysis was performed, in an analogous way to the regression in the FDI dynamics section. From the output, the values of Pearson Chi-Square =0.692 and 0.702 for 2006-2012 and 2013-2017 periods respectively, both values are >0.05 and thus both of the models fit the data well and are statistically significant (Omnibus test $p=0.025$ and $p=0.001$, both <0.05). The results of the Wald Chi-Square showed that in the 2006-2012 period, only the variable EXP($p=0.038$) was found to be significant at the 5% level. In the latter period, the variable EXP ($p=0.002$) was found again to be significant at the 5% significance level. Furthermore, the variable PSTAB ($p=0.080$) was also significant in the latter time period, but at the 10% significance level.

6.7 Results and interpretation of the regression analysis

Host country political stability

Hypothesis H4b stated that the number of Chinese FDI projects will increase with an increase in the level of political stability. The host country political stability was found to be a significant determinant in two instances – in the regression model for all of the EU countries for all the years and in the regression model in the years 2013-2017. Nevertheless, the expected sign of the political stability coefficient (+) did not agree with the sign of the coefficient obtained in the regression analysis (-). This means that even though the level of political stability in the host country does influence the decisions of the Chinese investors, it is negatively related to the amount of Chinese FDI projects in the EU member countries of the CEE region. Therefore, the hypothesis H4b is rejected. This finding is line with Ramasamy, Yeung, & Laforet (2012), who distinguished between SOEs and POEs and found that SOEs tend to be attracted to locations with high political

risk, whereas the POEs tend to look for opportunities abroad to escape the constraints of the institutional environment at home and thus are averse to economic and political risks when choosing an investment location.

Table 6-3 Significant home country determinants

Variables	All CEE countries			EU CEE countries		
	All years	2006-2012	2013-2017	All years	2006-2012	2013-2017
Cultural Distance	- 0.073			-0.093		
Control of Corruption						
Economic freedom						
Political stability				-0.091		-0.080
Infrastructure	+ 0.002			+ 0.006		
Export	+ 0.000	+ 0.027	+ 0.004	+ 0.000	+ 0.038	+0.002
GDP per Capita	+ 0.019	+ 0.093				
Innovation and technology	+ 0.078					

This finding is also in contrast to the results of the cluster analysis where it was determined that for the type A investments, POEs tend to mainly invest in the EU-member countries. Moreover, the fact that the political stability factor was significant in the latter period, 2012-2017 could be explained due to the fact that countries with lower political stability, such as Bulgaria, Romania and Croatia have been the targets of several investments from Chinese MNEs after they have entered into the EU. Furthermore, the fact that the political stability was significant in period 2013-2017 for EU countries means that probably the investments which were fuelled by the OBOR strategy have already taken of in this period and the Chinese companies might have received incentives to invest in the countries that are important for the development of the OBOR plan, which might be less politically stable than other countries.

Gammeltoft and Fasshauer (2017) have also found that the number of Chinese subsidiaries in Eastern Europe are negatively related to the political stability, which they theorize to be the result of either some unexplained factors not included in the analysis. For example, these various market factors could include the host country government policies that create incentives for investment, favorable political relations with the Chinese government or similarity of the institutional environment with China. Furthermore, the fact that the political stability was significant in period 2013-2017 for EU countries means that probably the investments which were fuelled by the OBOR

strategy have already taken of in this period and the Chinese companies might have received incentives to invest in the countries that are important for the development of the OBOR plan, which might be less politically stable than other countries. On the other hand, other researchers didn't find any relationship between political risk and investments in the CEE countries. For example, (Stack, Ravishankar, & Pentecost, 2017) didn't find the political risk variable to be significant, however, they have employed other proxy for measuring political risk.

Cultural distance

Hypothesis H4d stated that the cultural distance between China and the host country will be negatively related to the number of FDI Chinese projects in the CEE countries. Therefore, the hypothesis can be accepted for the general case for all of the CEE countries as well as for the EU countries for all years, otherwise, the hypothesis is rejected. The cultural distance was measured by the Kogut and Singh (1988) index and found to be significant at the 10% level. Most of the studies that have employed a different proxy, such as the percentage of ethnic Chinese in the host country, have found that cultural/relational factor is significant (Buckley et al, 2007), however, the cultural distance approximated by Kogut and Singh (1988) index was found to be significant by some authors (Blomkvist and Drogendijk (2016) and not significant by others (Quer, Claver, & Rienda, 2012). Nevertheless, (Bailey, 2018) and (Bailey, 2018; Nielsen, Asmussen, & Weatherall, 2017), who have conducted a meta-analysis studies on the relationship between all the institutional factors and FDI have identified that most of the research papers have found that cultural distance indeed does deter the investment flow into the host country, which is in line with the results of this thesis. The reason why the cultural distance was not significant in the individual time periods could be due to small number of investments in those periods.

Host country's GDP per capita

According to the hypothesis H1a, the number of FDI projects should be positively related to the size of GDP per capita. After employing the regression analysis, it was found that GDP per capita was significant in the general regression for all of the CEE countries for the whole time period as well as for the 2006-2012 period. Therefore, the hypothesis H1a can be accepted for these two cases, otherwise it is rejected. The significance of GDP per capita is in line with several other studies, such as (Ramasamy, Yeung, & Laforet, 2012; (X. Zhang & Daly, 2011). Nielsen, Asmussen, & Weatherall (2017) have found that 74% (in 85 out of 115) of papers in the meta-analysis that market size (proxied by GDP/capita or GDP) determinants were positively related to FDI. The reason why the GDP per capita was found to be significant only in the general model

and in the period 2006-2012 could be explained by the fact that the Chinese investment into CEE in the earlier period was less diversified and consisted of mainly market-seekers or other factors that were not included in the regression analysis. For example, the Chinese investors might view the CEE market as one block due to the high level of European integration, and thus don't base their investment decisions on the size of the market (Villaverde & Maza, 2015). Another reason could be that with increasing GDP per capita, the demand for cheap products has diminished, which would explain why the GDP per capita factor was significant in the earlier time period 2006-2012 when the countries had lower GDP per capita than in the latter period. This could be corroborated by the fact that GDP per capita is significant for the whole CEE region which also includes non-EU member countries that have lower levels of GDP per capita than the EU-member countries in CEE.

Chinese exports to host country

Hypothesis H1b predicted that the number of Chinese FDI projects in CEE countries will be positively related to Chinese exports to these countries. Exports were found to be significant in all the regression analyses. A strong significance (at a 99% level) was found for the general regression and in the 2013-2014 period, as well as in the EU-member countries regression general model and in the 2013-2017 period, therefore, the hypothesis H1b was accepted in all cases. These results are supported by other studies (e.g. Buckley et al, 2007; Ramasamy, Yeung, & Laforet, 2012; Zhang & Daly, 2011; Quer et al, 2012; (Y. W. Cheung & Qian, 2009), because the conventional knowledge suggests that FDI follows exports (Buckley et al., 2007) and that the firms are looking to invest in locations they have had some experience or connection to. Furthermore, by choosing to invest in the CEE countries apart from only exporting to these countries has some benefits, especially in the case of EU-member countries. For example, by directly investing into the EU-member countries, Chinese investors can gain barrier-free entry to the EU market or the products made in the EU area will be labelled EU-made and thus deemed as more desirable.

The number of fixed broadband subscribers per 100 people

The number of fixed broadband subscribers per 100 people was found to be strongly significant at the 99% level with the correct sign, thus the hypothesis H2 is accepted both for the CEE location and for EU-member countries. This finding that good infrastructure is still important for attracting FDI is in line with (Stack et al., 2017) and (Koyuncu & Unver, 2016).

Research and development expenditure (% of GDP)

Hypothesis H3 predicted that the number of Chinese FDI projects will be positively related to R&D as a percentage of GDP expenditures, which was found to be true for all CEE countries in all years, therefore, this hypothesis was accepted for the general regression analysis. However, since the factor was only significant at the 10% level, the effect of the R&D expenditure as percentage of GDP will not have a strong influence on the Chinese investments. This finding is in line with studies by (Gammeltoft & Fasshauer, 2017); Dreger, Schüler-Zhou and Schüller (2015), Xie et al., (2017) and (Amendolagine, Cozza, & Rabellotti, 2015). Huang & Renyong (2014) specify that the presence of strategic assets is primarily important for large POEs in the manufacturing sector that are more interested in the viable technology rather than R&D content (Ramasamy et al., 2012). Chinese MNEs are increasingly showing interest into investing in technologies in the CEE countries, as they are gaining competitive advantages through acquiring technology in CEE countries, such as laser production in Lithuania, automobile industry in the Czech Republic, aviation and biotechnology sector in Poland (OSW, 2017).

Control of corruption

The hypothesis H4a predicting that the number of Chinese FDI projects in CEE countries will not be affected by the level of control of corruption was confirmed, therefore, the hypothesis is accepted for all the country and period cases. This finding suggests that corruption levels do not affect Chinese investors from investing in certain locations. This could be either because the investors are more averse to the negative effects of corruption because of China's own business environment characterized by high levels of corruption, or because the investments of SOEs are politically motivated and based on either good political relations with the respective countries or on following the OBOR initiative. This finding is not supported by the empirical literature, where institutional factors such as corruption or cultural distance were found to be significant and negatively related to the level of Chinese investment (Bailey, 2018) (Habib & Zurawicki, 2002) (Y. W. Cheung & Qian, 2009).

Economic freedom

The hypothesis H4c, the number of Chinese FDI projects is positively related to the economic freedom in the host countries, was not confirmed as the variable wasn't found significant in any of the conducted regression analyses. This means that Chinese companies investing in CEE do not place significant importance on the business environment of the host country. This could be due to Chinese investors being significantly influenced by their home government in the investment

decisions which they don't make purely based on market factors. Moreover, in the home market, the Chinese companies are exposed to some adverse business conditions, especially the POEs that do not enjoy government's preferential treatment. This, in turn, could mean that the fact whether the host country's business environment is attractive or not would not influence a company's decision to invest. Furthermore, the Economic Freedom Index is a composite of several indices, where each could have individual impact on the company's decision to invest abroad, but when they are aggregated together their power to is lost. Therefore, using individual measures rather than one aggregated measure could have yielded different results.

6.8 Summary

In this chapter, proxies for individual determinants were introduced together with the regression analysis and the rationale behind employing the count data regression model. Thereafter, six regression analyses were run in order to find the economic and institutional determinants of Chinese investment in the CEE countries. The six regression analyses results provide a better insight into the impact of each of the tested determinants on Chinese OFDI in the CEE countries as a whole as well as on the CEE sub-groups of the CEE countries for three different time periods. Regression for a subgroup of non-EU member CEE countries could not be made due to the lack of data. The largest influence on the Chinese investors' decision making has the volume of Chinese exports to the host country. Host country infrastructure proxied by number of fixed broadband subscribers has also a strong positive impact in the all countries group and for a subset of EU countries. The positive impact of GDP per capita on Chinese FDI has only been reflected in the general regression for all countries, which is in line with expectations since the group of EU countries are part of an integrated market and therefore, GDP per capita should not play a significant role for market-seeking companies.

In terms of strategic assets seeking that was proxied by the R&D expenditures, it turned out that it was significant only for CEE countries as a whole group. From the institutional variables, two variables were found to be significant – the cultural distance and the political stability. The significance of cultural distance confirmed the expectations of lower number Chinese investments flowing into countries that are more culturally distant. The political stability variable was contrary to expectations negatively related to the number of Chinese investments in the CEE countries, and it was found significant only for the EU-member countries.

7 CONCLUSION

This concluding chapter will briefly summarize the results of the analyses conducted in this paper, as well as it will present main contributions made by this thesis. Furthermore, the limitations of the study will be discussed and the suggestions for future research will be presented.

This thesis has tried to find an answer to the following question and subquestions: Why do Chinese companies choose to invest in the Central and Eastern European region? What are the characteristics of Chinese investments in the Central and Eastern Europe and how has Chinese FDI developed in this region over time? How do economic and institutional factors of the Central and Eastern European countries influence the investment decisions of Chinese multinational companies?

The questions were attempted to be answered through studying the background and development of Chinese FDI in the CEE region, by performing cluster analysis to find common characteristics of investments and by conducting the regression analysis to determine host country factors that attract Chinese investments. To answer the first sub-question, an account of descriptive analysis was given. Furthermore, the ANOVA analysis was employed to verify the assumptions made in the section geographical and sectoral distribution of Chinese investments. The ANOVA analysis revealed that Chinese firm size and sector have influence of the volume of investment, which is supported by the extant theories (such as the OLI framework). Other firm or investment characteristics were not found to be significantly affecting the volume of Chinese FDI, but the interaction between company size and sector, the entry mode and sector and the entry mode and size of the company were found to be significant, ergo affecting the volume of Chinese investments into CEE.

Two types of cluster analyses were conducted in this thesis to help answer the first sub-question. Firstly, the hierarchical analysis has grouped investments with similar characteristics into two main clusters that contained two smaller groups each. First main type of Chinese investments is characterized by small companies, usually service POEs without any previous international experience that enter market through M&A and form JVs with the local partners in the EU-member countries. This behavior is quite typical and can be explained as the attempts of these small POEs to integrate their value chain.

The second main type of Chinese investments is characterized by large SOEs that tend to invest in the primary and secondary sector in the non-EU countries. These firms are large, make large investments are more likely to have previous international experience and tend to choose high equity modes and GI to enter the market. This finding was not in line with the literature, where several authors (such as Deng, 2012; Huang & Renyong, 2014) concluded that SOEs have problems with choosing WOS and GI as an entry strategy, because of host government's fear of growing Chinese influence in their countries. The results of the cluster analysis could be explained by the fact that it is mainly the western European governments that fear the increase in China's influence in their countries and the investments made by SOEs were classified as being located mainly in the non-EU countries that might not have the same fear. Another explanation could be the implementation of OBOR strategy, which is corroborated by the results of the regression analysis where it was found that Chinese investments are attracted to EU-member countries that are more politically risky. During the interpretation of the results obtained from the hierarchical cluster analysis it is important to bear in mind that the cohesion in the clusters is not very large, which was proven by the two-step cluster analysis. For example, there was also high number of large POEs that invested in manufacturing.

The last analytical part of this thesis presented the regression analysis which helped to answer the second sub-question of this thesis concerning economic and institutional determinants of CEE countries and Chinese investments. It was found that Chinese investors are influenced by some, not all of the economic and institutional factors employed in the regression analysis. Chinese OFDI into CEE countries was found to be related to the volume of Chinese exports, market size, strategic-assets, good infrastructure and the cultural proximity to the host countries (in all countries and EU-members) and high political risk in the host countries (EU-members). The institutional variables, control of corruption and economic freedom, weren't found to be related to Chinese OFDI into CEE countries.

7.1 Main contributions

This thesis contributes to a better understanding of the patterns and motivations of Chinese investment in the CEE countries by conducting an analysis on constructed firm-level dataset that is more accurate than the aggregate measure of FDI, as argued in the previous sections. Moreover, this thesis provides a detailed empirical literature review on the studies concerning Chinese

investments in CEE was quite scarce or not easily available. The results of this thesis could be used by the governments of CEE countries to shape their strategies for attracting FDI.

7.2 Limitations of the study

This section presents several limitations to this study that need to be considered – the small data sample, incomplete dataset, omitted variable bias and the data collection problems.

Firstly, the firm dataset was small, therefore, in some cases there were zero investments in some years, which could cause skewness of data. In overall, there were 67% of zero observations in the model. However, the regression model that was employed is quite robust against zero observations, therefore, this limitation could be partially mitigated. Additionally, with the validity and generalizability of results increases with the increase in the sample size. Since there were only a few observations of Chinese investment recorded in the years 2006-2012, and in the non-EU CEE countries, some caution needs to be exercised during the interpretation of results.

The firm dataset that was constructed is only based on the information from the databases, so it might not contain every firm that has invested in CEE in the selected period. Another limitation of the study is that some data, such as information on the previous international experience of the firm, was only estimated by searching the Orbis database for its previous subsidiaries. However, the Orbis database is being continuously updated and thus some companies might have dissolved by the time the information was extracted. Moreover, the possibility of having previous international experience from forming a JV with a foreign partner in China before investing abroad was also not taken into account.

Furthermore, the firm dataset was not complete, ergo, some firms were missing information, for example the volume of investment. However, by exclusion of the firms with missing values would be the dataset even smaller. The regression analyses and the descriptive analysis were done with different number of firms in the sample. Moreover, since there were not many Chinese FDI projects in the non-EU CEE countries in the period of 2006-2012, the data could not be modelled in the regression analysis for this period.

Another possible limitation of this study is that only limited number of variables could be included in the regression analysis, because the explanatory power of the model would diminish if it contained too many independent variables. Therefore, there is a possibility of omitted variable bias where quite a lot of factors that could be potentially related to the investment decisions of Chinese

firms are omitted from the regression analysis, such as the effect of agglomeration. Moreover, the proxies used for determinants might not have been the most suitable proxies. However, these proxies were chosen because of data availability, as in the case of cognitive institutional pillar that was proxied by the tertiary enrollment level.

In addition, the influence of home country institutions was only briefly described, however, for a more accurate analysis, the home country determinants would need to be included in the regression analysis. Since there are several regions that differ institutionally, culturally, and politically, the inclusion of these variables would be complicated and even more so because the Chinese data are often not accessible or biased. Thus, the home country determinants were not considered in the regression analysis, even though they are assumed to influence the investment decisions of Chinese firms.

7.3 Suggestions for future research

This purpose of this thesis was to describe the investment patterns on Chinese firms in the CEE countries, as well as the investment motivations behind these investments. The limitation of the research can be used as a basis for the next research. The amount of Chinese investments is increasing every year, therefore, this research could be replicated few years later which could provide more data, the size of the data sample would increase and therefore its validity and generalizability would also increase. Moreover, some surprising results from this thesis could be studied in order to understand why such result was obtained. For example, the reason why was the level of political stability negatively related to the number of Chinese investment projects in the EU-member countries, but not in the regression for all the countries could be studied further. Since this thesis is only quantitative, even though the generalizability of the results from quantitative analyses is good, the analysis might lack richness that could be achieved with case studies on Chinese subsidiaries in the CEE region.

REFERENCES

- Ablov, A. (2015). The firm-level and regional determinants of FDI distribution in Poland: Does sector of economy matter? *Ekonomia XXI Wieku*, 4, 74-98.
- Agarwal, S., & Ramaswami, S. N. (1992). Choice of foreign market entry mode: Impact of ownership, location and internalization factors. *Journal of International Business Studies*, 1-27.
- Alon, T. (2010). Institutional analysis and the determinants of Chinese FDI. *Multinational Business Review*, 18(3), 1-24.
- Amendolagine, V., Cozza, C., & Rabellotti, R. (2015). Chinese and Indian Multinationals: A Firm-Level Analysis of their Investments in Europe. *Global Economic Review*, 44(4), 452-469. doi: 10.1080/1226508x.2015.1099235
- Amighini, A., Cozza, C., Rabellotti, R., & Sanfilippo, M. (2014). Investigating Chinese Outward Foreign Direct Investments: How Can Firm-level Data Help? *China & World Economy*, 22(6), 44-63. doi: 10.1111/cwe.12091
- Amighini, A., Rabellotti, R., & Sanfilippo, M. (2013). Do Chinese state-owned and private enterprises differ in their internationalization strategies? *China Economic Review*, 27, 312-325. doi: 10.1016/j.chieco.2013.02.003
- Aw, T.-Y., & Tang, T.-C. (2010). The determinants of inward foreign direct investment: The case of Malaysia. *International Journal of Business and Society*, 11(1), 59.
- Bailey, N. (2018). Exploring the relationship between institutional factors and FDI attractiveness: A meta-analytic review. *International Business Review*, 27(1), 139-148. doi: <https://doi.org/10.1016/j.ibusrev.2017.05.012>
- Bénassy-Quéré, A., Coupet, M., & Mayer, T. (2007). Institutional determinants of foreign direct investment. *The World Economy*, 30(5), 764-782.
- Berenson, M., Levine, D., Szabat, K. A., & Krehbiel, T. C. (2012). *Basic business statistics: Concepts and applications*: Pearson higher education AU.
- Berning, S. C., & Holtbrügge, D. (2012). Chinese outward foreign direct investment - A challenge for traditional internationalization theories? *Journal fur Betriebswirtschaft*, 62(3-4), 169-224. doi: 10.1007/s11301-012-0086-5
- Beugelsdijk, S., Kostova, T., Kunst, V. E., Spadafora, E., & van Essen, M. (2018). Cultural Distance and Firm Internationalization: A Meta-Analytical Review and Theoretical Implications. *Journal of Management*, 44(1), 89-130.
- Blaikie, N. (2000). *Design social research: the logic of anticipation*: Polity Press, Cambridge.
- Blomkvist, K., & Drogendijk, R. (2016). Chinese outward foreign direct investments in Europe. *European Journal of International Management*, 10(3), 343-358. doi: 10.1504/ejim.2016.076242
- Blomström, M., & Kokko, A. (1998). Multinational corporations and spillovers. *Journal of Economic Surveys*, 12(3), 247-277.
- Blonigen, B. A. (2005). A review of the empirical literature on FDI determinants. *Atlantic Economic Journal*, 33(4), 383-403.
- Blumentritt, T. P., & Nigh, D. (2002). The integration of subsidiary political activities in multinational corporations. *Journal of International Business Studies*, 33(1), 57-77.
- Böckem, S., & Tuschke, A. (2010). A tale of two theories: Foreign direct investment decisions from the perspectives of economic and institutional theory.
- Boisot, M., & Meyer, M. W. (2008). Which Way through the Open Door? Reflections on the Internationalization of Chinese Firms. *Management and Organization Review*, 4(03), 349-365.

- Bouchoucha, N., & Ammou, S. B. (2015). Political and Institutional Determinants of Foreign Direct Investment: An Application for MENA Region Countries. *International Journal of Science and Research (IJSR)*, 4(8), 1866-1871.
- Buckley, P. J., & Casson, M. (1976). The future of the multinational enterprise. *New York, Holmes and Melers*.
- Buckley, P. J., & Casson, M. C. (1998). Analyzing Foreign Market Entry Strategies: Extending the Internalization Approach. *Journal of International Business Studies*, 29(3), 539-561.
- Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, 38(4), 499-518. doi: 10.1057/palgrave.jibs.8400277
- Buchanan, B. G., Le, Q. V., & Rishi, M. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis*, 21, 81-89. doi: <https://doi.org/10.1016/j.irfa.2011.10.001>
- Cambridge dictionary. (2017). Retrieved 28. 12., 2017, from <https://dictionary.cambridge.org/dictionary/english/developed-country>
- Cantwell, J., & Hodson, C. (1991). Global R&D and UK competitiveness. *Global research strategy and international competitiveness*, 133-183.
- Carstensen, K., & Toubal, F. (2004). Foreign direct investment in Central and Eastern European countries: a dynamic panel analysis. *Journal of comparative economics*, 32(1), 3-22.
- Casi, L., & Resmini, L. (2010). Evidence on the determinants of foreign direct investment: the case of EU regions. *Eastern Journal of European Studies*, 1(2), 93-118.
- Caves, R. E. (1996). *Multinational enterprise and economic analysis*: Cambridge university press.
- Caves, R. E., & Mehra, S. K. (1986). Entry of foreign multinationals into US manufacturing industries. *Competition in global industries*, 449, 481.
- Clark, J. M. (1940). Toward a concept of workable competition. *The American Economic Review*, 241-256.
- Cozza, C., Rabellotti, R., & Sanfilippo, M. (2015). The impact of outward FDI on the performance of Chinese firms. *China Economic Review*, 36, 42-57. doi: 10.1016/j.chieco.2015.08.008
- Dacin, M. T. (1997). Isomorphism in context: The power and prescription of institutional norms. *Academy of management journal*, 40(1), 46-81.
- Davidson, W. H. (1980). The Location of Foreign Direct Investment Activity: Country Characteristics and Experience Effects. *Journal of International Business Studies*, 11(2), 9-22.
- Davies, R. B., Desbordes, R., & Ray, A. (2015). Greenfield versus merger & acquisition FDI: Same wine, different bottles?
- Davis, L. E., North, D. C., & Smorodin, C. (1971). *Institutional change and American economic growth*: CUP Archive.
- Deng, P. (2012). The Internationalization of Chinese Firms: A Critical Review and Future Research*. *International Journal of Management Reviews*, 14(4), 408-427. doi: 10.1111/j.1468-2370.2011.00323.x
- Di Minin, A., Zhang, J. Y., & Gammeltoft, P. (2012). Chinese foreign direct investment in R&D in Europe: A new model of R&D internationalization? *European Management Journal*, 30(3), 189-203. doi: 10.1016/j.emj.2012.03.004
- Dijk, B. v. (2017). Orbis| Detailed global private company information: Recuperado.
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147-160. doi: 10.2307/2095101

- Dreger, C., Schüler-Zhou, Y., & Schüller, M. (2017). Determinants of Chinese direct investments in the European Union. *Applied Economics*, 1-10.
- Drogendijk, R., & Slangen, A. (2006). Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises. *International Business Review*, 15(4), 361-380.
- Du, J., Lu, Y., & Tao, Z. (2009). Property rights protection and allocation of investment: Evidence from China's private firms. Available at: <http://dx.doi.org/10.2139/ssrn.1222842>.
- Du, Y. (2009). *Institutional distance and location choice of multinational enterprises*. Singapore Management University (Singapore).
- Dudas, T., & Dudasova, M. (2016). Growth of Chinese investments in Europe after the global economic crisis of 2008-2009. *Economic Annals-Xxi*, 160(7-8), 9-13. doi: 10.21003/ea.V160-02
- Dunning, J. (1993). The international operations of national firms: a study of foreign direct investment. *The Theory of Transnational Corporations, London: Routledge*, 23-43.
- Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach *The international allocation of economic activity* (pp. 395-418): Springer.
- Dunning, J. H. (1979). Explaining Changing Patterns of International Production: In Defence of the Eclectic Theory. *Oxford bulletin of economics and statistics*, 41(4), 269-295.
- Dunning, J. H. (1980). Towards an eclectic theory of international production: some empirical tests.
- Dunning, J. H. (1982). Explaining the international direct investment position of countries: towards a dynamic or developmental approach *International Capital Movements* (pp. 84-121): Springer.
- Dunning, J. H. (2014). *Economic analysis and multinational enterprise*: Routledge.
- Dunning, J. H., & Lundan, S. M. (2008). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, 25(4), 573-593. doi: 10.1007/s10490-007-9074-z
- Eiteman, D. K. (1992). *Multinational business finance*: Pearson Education India.
- Éltető, A., & Szunomár, Á. (2016). Chinese investment and trade-strengthening ties with Central and Eastern Europe. *International Journal of Business and Management*, 4(1), 24-48.
- Engwall, L. (2006). Global enterprises in fields of governance. *Transnational governance: Institutional dynamics of regulation*, 161-179.
- Faeth, I. (2009). Determinants of Foreign Direct Investment – a Tale of Nine Theoretical Models. *Journal of Economic Surveys*, 23(1), 165--196. doi: 10.1111/j.1467-6419.2008.00560.x
- Fisher, A. G. (1939). Production, primary, secondary and tertiary. *Economic Record*, 15(1), 24-38.
- Forbes, K. J. (2010). Why do foreigners invest in the United States? *Journal of International Economics*, 80(1), 3-21.
- Fourastié, J. (1949). Le grand espoir du XXème siècle. *Progrès technique, progrès économique, progrès social*. Presses Universitaires de France, Paris.
- Frans-Paul van der Putten, John Seaman, Mikko Huotari, Alice Ekman, & Otero-Iglesias, M. (2016). Europe and China's New Silk Roads. Retrieved 19, 04., 2017, from https://www.clingendael.nl/sites/default/files/Europe_and_Chinas_New_Silk_Roads_0.pdf
- Fraser Institute. (2017). Retrieved 07. 12, 2017, from <https://www.fraserinstitute.org/economic-freedom/approach>

- Gammeltoft, P., & Fasshauer, K. (2017). Characteristics and host country drivers of Chinese FDI in Europe: a company-level analysis. *International Journal of Technology Management*, 74(1-4), 140-166. doi: 10.1504/ijtm.2017.10004277
- Garson, G. D. (2012). Testing statistical assumptions. *Asheboro, NC: Statistical Associates Publishing*.
- Globerman, S., & Shapiro, D. (2002). Global foreign direct investment flows: The role of governance infrastructure. *World Development*, 30(11), 1899-1919.
- Greene, W. H. (2003). *Econometric analysis*: Pearson Education India.
- Greener, S. (2008). *Business research methods*: BookBoon.
- Grubaugh, S. G. (1987). Determinants of direct foreign investment. *The Review of Economics and Statistics*, 149-152.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105.
- Gugler, P., & Boie, B. (2009). The rise of chinese MNEs. *Expansion of trade and FDI in Asia: Strategic and policy challenges*, 25-57.
- Habib, M., & Zurawicki, L. (2002). Corruption and Foreign Direct Investment. *Journal of International Business Studies*, 33(2), 291-307.
- Hall, R. E., & Jones, C. I. (1999). Why do some countries produce so much more output per worker than others? *The quarterly journal of economics*, 114(1), 83-116.
- Hofstede, G. (1980). Motivation, leadership, and organization: Do American theories apply abroad? *Organizational Dynamics*, 9(1), 42-63. doi: [https://doi.org/10.1016/0090-2616\(80\)90013-3](https://doi.org/10.1016/0090-2616(80)90013-3)
- Hofstede Insights. (2017). Retrieved 20. 8., 2017, from <https://www.hofstede-insights.com/models/national-culture/>
- Horst, T. (1972). Firm and industry determinants of the decision to invest abroad: An empirical study. *The Review of Economics and Statistics*, 258-266.
- Huang, X., & Renyong, C. (2014). Chinese Private Firms' Outward Foreign Direct Investment: Does Firm Ownership and Size Matter? *Thunderbird International Business Review*, 56(5), 393-406. doi: 10.1002/tie.21629
- Huntington, S. P. (1968). Modernization and corruption. *Political order in changing societies*, 59-71.
- Hymer, S. H. (1976). *International operations of national firms*: MIT press.
- Chakrabarti, A. (2001). The determinants of foreign direct investments: Sensitivity analyses of cross-country regressions. *kyklos*, 54(1), 89-114.
- Chen, C. (2015). Determinants and motives of outward foreign direct investment from China's provincial firms. *Transnational Corporations*, 23(1), 1-28.
- Cheung, Y., & Qian, X. (2008). *The Empirics of China's Outward Direct Investment*. Munich: CESifo GmbH: Working Paper.
- Cheung, Y. W., & Qian, X. W. (2009). Empirics of China's outward direct investment. *Pacific Economic Review*, 14(3), 312-341. doi: 10.1111/j.1468-0106.2009.00451.x
- IIMF. (1993). Annual Report. Retrieved 14. 11., 2017, from <https://www.imf.org/external/pubs/ft/ar/archive/pdf/ar1993.pdf>
- Ionascu, D., Meyer, K. E., & Estrin, S. (2004). The concept of "distance" in international business—culture, regulation and cognition—and its relevance to multinationals' entry mode decision. *Centre for New and Emerging Markets Discussion Paper Series*.
- Ionascu, D., Meyer, K. E., & Estrin, S. (2004). Institutional distance and international business strategies in emerging economies. Frederiksberg, Denmark: Center for East European

- Studies, Department of International Economics and Management, Copenhagen Business School.
- Jacoby, W., & Korkut, U. (2016). Vulnerability and Economic Re-orientation: Rhetoric and in Reality in Hungary's "Chinese Opening". *East European Politics and Societies*, 30(3), 496-518. doi: 10.1177/0888325415604355
- Jakóbowski, J. (2015). China's foreign direct investments within the '16+1' cooperation formula: strategy, institutions, results. 02.03., from <https://www.osw.waw.pl/en/publikacje/osw-commentary/2015-12-03/chinas-foreign-direct-investments-within-161-cooperation>
- Janesick, V. J. (1994). The dance of qualitative research design: Metaphor, methodolatry, and meaning.
- Jinchen, T. (2016). One Belt and One Road': Connecting China and the world. Retrieved 05. 08, 2017, from <https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/one-belt-and-one-road-connecting-china-and-the-world>
- Johanson, J., & Mattsson, L.-G. (1988). Internationalization in industrial systems - a network approach. In N. H. J.-E. V. (eds). (Ed.), *Strategies in Global Competition* (pp. 303-321). New York: Croom Helm.
- Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 23-32.
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four Swedish cases. *Journal of management studies*, 12(3), 305-323.
- Karreman, B., Burger, M. J., & van Oort, F. G. (2017). Location Choices of Chinese Multinationals in Europe: The Role of Overseas Communities. *Economic Geography*, 93(2), 131-161. doi: 10.1080/00130095.2016.1248939
- Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The Worldwide governance indicators: A summary of methodology, data and analytical issues. *World Bank Policy Research*.
- Kogut, B. (1991). Joint ventures and the option to expand and acquire. *Management science*, 37(1), 19-33.
- Kogut, B., & Singh, H. (1988). The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*, 19(3), 411-432. doi: 10.1057/palgrave.jibs.8490394
- Kolstad, I., & Wiig, A. (2009). Is transparency the key to reducing corruption in resource-rich countries? *World Development*, 37(3), 521-532.
- Kolstad, I., & Wiig, A. (2013). Digging in the dirt? Extractive industry FDI and corruption. *Economics of Governance*, 14(4), 369-383.
- Korniyenko, Y., & Sakatsume, T. (2009). Chinese investment in the transition countries.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management review*, 24(1), 64-81.
- Koyuncu, C., & Unver, M. (2016). *The Impact Of Infrastructure On FDI Inflows: A Panel Data Analysis*. Paper presented at the 2nd International Osmaneli Social Sciences Congress, , Bilecik-TURKEY.
- Krifa-Schneider, H., & Matei, I. (2010). Business climate, political risk and FDI in developing countries: Evidence from panel data. *International Journal of Economics and Finance*, 2(5), 54.
- Kühnlénz, A. Chinese Investments in Eastern Europe. Retrieved 16. 07., 2017, from https://www.google.sk/search?q=%E2%80%9CEastern+Europe+is+to+become+China%27s+bridgehead+in+the+EU%E2%80%9D+&ie=utf-8&oe=utf-8&client=firefox-b&gfe_rd=cr&dcr=0&ei=FDfcWqTeBoyq8wey9IL4DA

- Kundu, S. K., Kumar, V., & Peters, S. D. (2008). Impact of ownership and location factors on service multinationals' internalisation. *The Service Industries Journal*, 28(5), 567-580.
- Kurul, Z. (2017). Nonlinear relationship between institutional factors and FDI flows: Dynamic panel threshold analysis. *International Review of Economics & Finance*, 48, 148-160. doi: <https://doi.org/10.1016/j.iref.2016.12.002>
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. *The Journal of Law, Economics, and Organization*, 15(1), 222-279.
- Lansbury, M., Pain, N., & Smidkova, K. (1996). Foreign direct investment in Central Europe since 1990: an econometric study. *National Institute Economic Review*, 156(1), 104-114.
- Lincoln, Y. S., Guba, E. G., & Pilotta, J. J. (1985). Naturalistic inquiry: Beverly Hills, CA: Sage Publications, 1985, 416 pp., \$25.00 (Cloth). *International Journal of Intercultural Relations*, 9(4), 438-439. doi: [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)
- Loree, D. W., & Guisinger, S. E. (1995). Policy and non-policy determinants of US equity foreign direct investment. *Journal of International Business Studies*, 26(2), 281-299.
- Luo, L. M., Qi, Z., & Hubbard, P. (2017). Not looking for trouble: Understanding large-scale Chinese overseas investment by sector and ownership. *China Economic Review*, 46, 142-164. doi: 10.1016/j.chieco.2017.08.006
- Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, 38(4), 481-498.
- Luo, Y., & Tung, R. L. (2017). A general theory of springboard MNEs. *Journal of International Business Studies*. doi: 10.1057/s41267-017-0114-8
- Luo, Y., & Tung, R. L. (2017). A general theory of springboard MNEs. *Journal of International Business Studies*, 1-24.
- Lv, P., & Spigarelli, F. (2016). The determinants of location choice Chinese foreign direct investments in the European renewable energy sector. *International Journal of Emerging Markets*, 11(3), 333-356. doi: 10.1108/ijoem-09-2014-0137
- Makoni, P. L. (2015). AN EXTENSIVE EXPLORATION OF THEORIES OF FOREIGN DIRECT INVESTMENT. *RISK GOVERNANCE & CONTROL: Financial markets and institutions*, 77.
- Markusen, A. R. (2003). The Case Against Privatizing National Security. *Governance*, 16(4), 471-501. doi: 10.1111/1468-0491.00225
- Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, 23(1), 5-27. doi: 10.1007/s10490-006-6113-0
- McCaleb, A., & Szunomár, Á. (2017). *Chinese foreign direct investment in Central and Eastern Europe: an institutional perspective*. Brussels: ETUI.
- Mengistu, A. A., & Adhikary, B. K. (2011). Does good governance matter for FDI inflows? Evidence from Asian economies. *Asia Pacific business review*, 17(3), 281-299.
- Meunier, S. (2014). A Faustian bargain or just a good bargain? Chinese foreign direct investment and politics in Europe. *Asia Europe Journal*, 12(1-2), 143-158. doi: 10.1007/s10308-014-0382-x
- Meunier, S., Burgoon, B., & Jacoby, W. (2014). The politics of hosting Chinese investment in Europe-an introduction. *Asia Europe Journal*, 12(1-2), 109-126. doi: 10.1007/s10308-014-0381-y
- Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic management journal*, 30(1), 61-80.
- Meyer, K. E., & Peng, M. W. (2005). Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions. *Journal of International Business Studies*, 36(6), 600-621.

- Mudambi, R., & Navarra, P. (2002). Institutions and international business: a theoretical overview. *International Business Review*, 11(6), 635-646.
- Net, X. (2016). China Focus: Economic cooperation between China, CEE on fast track. Retrieved 06. 06., 2017, from <http://english.mofcom.gov.cn/article/counselorsreport/europereport/201611/20161101682093.shtml>
- Nielsen, B. B., Asmussen, C. G., & Weatherall, C. D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business*, 52(1), 62-82. doi: <https://doi.org/10.1016/j.jwb.2016.10.006>
- North, D. C. (1990). A transaction cost theory of politics. *Journal of theoretical politics*, 2(4), 355-367.
- North, D. C. (1991). Institutions. *Journal of economic perspectives*, 5(1), 97-112.
- OSW. (2017). China's foreign direct investments within the '16+1' cooperation formula: strategy, institutions, results. Retrieved 03. 01., 2018, from <https://www.osw.waw.pl/en/publikacje/osw-commentary/2015-12-03/chinas-foreign-direct-investments-within-161-cooperation>
- Pauhofová, I., & Svocáková, S. (2014). Analýza priamych zahraničných investícií Číny (Analysis of Chinese FDI). *Ekonomický časopis (Journal of Economics)*, 62(9).
- Peng, M. W., Wang, D. Y., & Jiang, Y. (2008). An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5), 920-936.
- Powell, T. C. (1996). How much does industry matter? An alternative empirical test. *Strategic management journal*, 323-334.
- Quer, D., Claver, E., & Rienda, L. (2012). Political risk, cultural distance, and outward foreign direct investment: Empirical evidence from large Chinese firms. *Asia Pacific Journal of Management*, 29(4), 1089-1104.
- Ramasamy, B., Yeung, M., & Laforet, S. (2012). China's outward foreign direct investment: Location choice and firm ownership. *Journal of World Business*, 47(1), 17-25. doi: <https://doi.org/10.1016/j.jwb.2010.10.016>
- Reiljan, E. (2001). Determinants of foreign direct investment inflows in Estonia *Foreign Direct Investments in the Estonian Economy* (Vol. 9, pp. 31-90): Faculty of Economics and Business Administration, University of Tartu (Estonia).
- Rihab, B., & Lofti, B. (2011). Socio-cultural heritage and financial decisions: An empirical study. *Educational Research*, 2(11), 1685-1707.
- Rodriguez, C., & Bustillo, R. (2011). A critical revision of the empirical literature on Chinese outward investment: A new proposal. *Panoeconomicus*, 58(5), 715-733.
- Roth, K., & Kostova, T. (2003). Organizational coping with institutional upheaval in transition economies. *Journal of World Business*, 38(4), 314-330. doi: <https://doi.org/10.1016/j.jwb.2003.08.018>
- Sarstedt, M., & Mooi, E. (2014). A concise guide to market research. *The Process, Data, and*.
- SASAC. (2017). state-owned enterprises. Retrieved 16.09., 2017, from <http://en.sasac.gov.cn/>
- Sattinger, M. (1993). Assignment models of the distribution of earnings. *Journal of economic literature*, 31(2), 831-880.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). Understanding research philosophies and approaches. *Research methods for business students*, 4, 106-135.
- Scott, P. (1995). *The meanings of mass higher education*: McGraw-Hill Education (UK).
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*: Sage Publications.

- Shih, M.-Y., Jheng, J.-W., & Lai, L.-F. (2010). A two-step method for clustering mixed categorical and numeric data. *淡江理工學刊*, 13(1), 11-19.
- Simon, J. D. (1984). A Theoretical Perspective on Political Risk. *Journal of International Business Studies*, 15(3), 123-143. doi: 10.1057/palgrave.jibs.8490499
- SKANSKA. (2016). Retrieved 17. 09., 2017, from http://www.skanska.pl/cdn-1d20ce1f174efec/Global/startpage/Images/Background/CEE%20Investment%20Report%202016_Mission%20to%20Outperform_12.09.pdf
- Song, L. (2013). From rediscovery to new cooperation: the relationship between China and Central and Eastern Europe. *W: J. Men (red.). EU-China Observer*, 5, 8-14.
- Spigarelli, F., & Lv, P. (2017). Chinese expansion in the international healthcare markets: the role of Chinese OFDI in Europe. *International Journal of Healthcare Technology and Management*, 16(1-2), 108-127. doi: 10.1504/ijhtm.2016.10004745
- Stack, M. M., Ravishankar, G., & Pentecost, E. (2017). Foreign direct investment in the eastern European countries: Determinants and performance. *Structural Change and Economic Dynamics*, 41, 86-97. doi: <https://doi.org/10.1016/j.strueco.2017.04.005>
- Stoian, C. (2013). Extending Dunning's Investment Development Path: The role of home country institutional determinants in explaining outward foreign direct investment. *International Business Review*, 22(3), 615-637. doi: <https://doi.org/10.1016/j.ibusrev.2012.09.003>
- Suetyi, L. (2017). Understanding Europe's Interest in China's Belt and Road Initiative. Retrieved 16. 07., 2017, from <http://carnegieendowment.org/2017/05/10/understanding-europe-s-interest-in-china-s-belt-and-road-initiative-pub-69920>
- Svensson, R. (1998). The Choice of Entry Mode in Foreign Direct Investment. *The Geography of Multinational Firms*, 156-168.
- Szunomár, Á. (2016). The characteristics, changing patterns and motivations of Chinese investment in Europe. *Trade & Investment*, 73-76.
- Szunomár, Á., & Biedermann, Z. (2014). Chinese OFDI in Europe and the Central and Eastern European region in a global context. In Á. SZUNOMÁR (Ed.), *CHINESE INVESTMENTS AND FINANCIAL ENGAGEMENT IN VISEGRAD COUNTRIES: MYTH OR REALITY?* (pp. 7-33). Budapest: Institute of World Economics, Centre for Economic and Regional Studies Hungarian Academy of Sciences.
- Szunomár, A., & McCaleb, A. (2015). *Comparing Chinese, Japanese and South Korean FDI in Central and Eastern Europe: macroeconomic versus institutional factors*. Paper presented at the World Congress of Comparative Economics, Roma Tre University. Retrieved from <http://editorialexpress.com/conference/WCCE2015/program/WCCE2015.html>
- Tihanyi, L., Griffith, D. A., & Russell, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies*, 36(3), 270-283.
- Tintin, C. (2013). The determinants of foreign direct investment inflows in the Central and Eastern European Countries: The importance of institutions. *Communist and Post-Communist Studies*, 46(2), 287-298. doi: <https://doi.org/10.1016/j.postcomstud.2013.03.006>
- Turcsányi, R. (2014). Chinese financial presence in Slovakia and Slovak 'China policy'. 2014): *Chinese investments and financial engagement in Visegrad countries: myth or reality*, 89-107.
- UoP. (2017). Research design and methodology. Retrieved 24.09., 2017, from <http://repository.up.ac.za/bitstream/handle/2263/24016/04chapter4.pdf?sequence=5>
- Vahlne, J., & Nordstrom, K. (1988). *Choice of market channel in a strategic perspective*. Paper presented at the Strategies in Global Competition: Selected Papers from the Prince Bertil Symposium at the Institute of International Business, Stockholm School of Economics.

- Villaverde, J., & Maza, A. (2015). The determinants of inward foreign direct investment: Evidence from the European regions. *International Business Review*, 24(2), 209-223. doi: <https://doi.org/10.1016/j.ibusrev.2014.07.008>
- Voss, H. (2007). *The foreign direct investment behaviour of Chinese firms: does the 'new institutional theory' approach offer explanatory power?*, University of Leeds.
- Voss, H. (2011). *The determinants of Chinese outward direct investment*: Edward Elgar Publishing.
- Wang, C., Hong, J., Kafouros, M., & Boateng, A. (2012). What drives outward FDI of Chinese firms? Testing the explanatory power of three theoretical frameworks. *International Business Review*, 21(3), 425-438. doi: <https://doi.org/10.1016/j.ibusrev.2011.05.004>
- Wei, S.-J. (2000). How taxing is corruption on international investors? *The Review of Economics and Statistics*, 82(1), 1-11.
- Wheeler, D., & Mody, A. (1992). International investment location decisions: The case of US firms. *Journal of International Economics*, 33(1-2), 57-76.
- Wilding, M. (2017). For decades, Western culture touted self-esteem. It got the most important thing wrong. Retrieved 30. 08., 2017, from <https://qz.com/1041679/for-decades-western-culture-touted-self-esteem-it-got-the-most-important-thing-wrong/>
- Williamson, O. E. (1975). Markets and hierarchies: analysis and antitrust implications: a study in the economics of internal organization.
- WorldBank. (2017a). Retrieved 15. 12., 2017, from <https://data.worldbank.org/indicator/SE.TER.ENRR>
- WorldBank. (2017b). Retrieved 21. 12., 2017, from <https://data.worldbank.org/indicator/NY.GDP.PCAP.KN>
- Xie, E., Reddy, K. S., & Liang, J. (2017). Country-specific determinants of cross-border mergers and acquisitions: A comprehensive review and future research directions. *Journal of World Business*, 52(2), 127-183. doi: <https://doi.org/10.1016/j.jwb.2016.12.005>
- Xu Cen, Gao Sen, & Jiayan, P. (2016). CHINA-CENTRAL AND EASTERN EUROPE INVESTMENT COOPERATION REPORT. In L. Jiayuan (Ed.).
- Yang, S., & Berdine, G. (2015). The Negative Binomial regression. *The Southwest Respiratory and Critical Care Chronicles*, 3(10), 50-54.
- Zabojnik, S. (2016). *Analysis of the Contemporary Trends in the Development of Chinese FDI in CEE16 Countries*. Zilina: Univ Zilina, Fac Operation & Economics Transport & Communication.
- Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of management journal*, 38(2), 341-363.
- Zhang, H. (2014). Chinese Outward Foreign Direct Investment in the EU – Opportunities and Challenges for European SMEs to Link into the Global Value Chain of Chinese Multinational Enterprises (pp. 1-25). Beijing,: The EU SME Centre.
- Zhang, X., & Daly, K. (2011). The determinants of China's outward foreign direct investment. *Emerging Markets Review*, 12(4), 389-398. doi: <https://doi.org/10.1016/j.ememar.2011.06.001>
- Zheng, Y., Yan, D., & Ren, B. (2016). Institutional distance, firm heterogeneities, and FDI location choice of EMNEs. *Nankai Business Review International*, 7(2), 192-215. doi: [doi:10.1108/NBRI-10-2015-0022](https://doi.org/10.1108/NBRI-10-2015-0022)

Company web pages

<http://www.newsilkroad472.com/financial-report.html>

<https://forsmart.en.ecplaza.net/aboutus>

<http://en.cefc.co/category/wmdzghx>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=6326498>

<http://www.cpecc.net:81/col/col850/index.html>

E-mail: business@cpecc.net

<http://www.hktdc.com/manufacturers-suppliers/Masterwork-Machinery-Co-Ltd/en/1X00PV5A/>

<https://masterwork.en.ecplaza.net/aboutus>

https://haijie.en.alibaba.com/company_profile.html?spm=a2700.8304367.topnav.15.79f3a73avzV72M

<http://damongroup.en.made-in-china.com/company-Zhejiang-Damon-Industrial-Equipment-Co-Ltd-.html>

<https://hfwuliu.en.alibaba.com/>

<http://www.pactra.co.kr/eng/company/Introduction>

<http://www.roca.hk/our-company/about-us/a-global-business>

<http://www.tradesparq.com/users/216842/Tony-Guo/contact>

http://www.haier.net/en/about_haier/

<https://www.statista.com/statistics/232831/number-of-employees-at-qingdao-haier/>

<http://www.neusoft.com/>

<http://www.capitalcube.com/blog/index.php/neusoft-corp-600718-cn-earnings-analysis-2015-by-the-numbers/>

<http://www.capitalcube.com/blog/index.php/dalian-rubber-plastics-machinery-co-ltd-600346-cn-earnings-analysis-q2-2016-by-the-numbers-september-1-2016/>

<http://www.haijie.net/>

<http://hebeihaijie.en.china.cn/About-Us/>

<https://www.cml-1872.com/>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=46947038>

<https://www.hkgbusiness.com/en/company/Solaro-Development-Limited>

<http://www.candm-hk.com/company.php>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=99613731>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=278776420>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=6326498>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=251959597>

<http://www.cccme.org.cn/shop/w1001/index.aspx>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=30269671>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=5569976>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=59374575>

<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=59374575>

<https://www.bloomberg.com/profiles/companies/0347828D:CH-zhejiang-damon-technology-co-ltd>

<http://damongroup.en.made-in-china.com/company-Zhejiang-Damon-Industrial-Equipment-Co-Ltd-.html>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=49495528>
<http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=41899907>
<http://gient-china.en.made-in-china.com/>
<http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=252102596>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=310172369>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=5502893>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=5481151>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=9010763>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=132241913>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=44829074>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=264899883>
<http://www.globalsources.com/si/AS/Foshan-Ailihua/6008827447395/CompanyProfile.htm>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=26019317>
<https://www.bloomberg.com/profiles/companies/1341421D:CH-sf-holdings-group-co-ltd>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=106519348>
www.linkedin.com/company-beta/2055531/
<http://www.reuters.com/finance/stocks/analyst?symbol=300360.SZ>
https://www.zawya.com/mena/en/company/China_Railway_International_Group_Limited-16023405/
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=99613731>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=9535407>
<http://listings.findthecompany.com/l/50046432/Chongqing-Light-Industry-And-Textile-Holding-Group-Co-Ltd>
<https://www.bloomberg.com/profiles/companies/CTGCLZ:CH-chongqing-light-industry-&-textile-holding-group>
<https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=29621318>
http://www.haier.net/en/about_haier/
<https://www.cml-1872.com/>
<http://www.wolong.com/en/sitenews!info.htm?info=intro&menuId=intro1>
https://en.wikipedia.org/wiki/Shanghai_International_Group
 SFINX.HG COMPANY LIMITED - 香港公司註冊信息查詢
<http://www.aei.org/china-global-investment-tracker/>
<https://techcrunch.com/2017/08/01/chinas-didi-invests-in-taxify/>
<http://www.balkananalysis.com/blog/2016/06/24/chinese-investment-developments-in-the-balkans-2016-focus-on-albania/>
https://en.wikipedia.org/wiki/Gezhouba_Group
http://en.chinapower.com.cn/2015/08/06/content_2914.html
<http://www.vz.lt/sektorai/energetika/2016/08/24/kinai-ateina-i-kauno-elektrine-is>
<https://www.telenor.hu/en/press/pressreleases/812>
<http://bpcc.org.pl/en/news/cms-advises-on-the-largest-chinese-investment-project-in-poland>
<https://www.aktuality.sk/clanok/318436/senecky-d1-park-ziskal-investora-z-ciny-prve-firmy-pridu-uz-pred-letom/>

APPENDICES

APPENDIX 1

Categorization of firms based on the Orbis database classification

The firms in Orbis are categorized based on the three firm characteristics – the number of employees, the volume of total assets or the total operating revenue (BvD, 2017). The classification of firms is governed by the rule that if at least one of the conditions is met for a specific category, the firm is included in that given category. The firm was classified as very large if it had more than 1000 employees or the amount of total assets was over 280 million USD or if operating revenue was more than 140 million USD. The firm was classified as large if it had more than 150 employees or if the amount of total assets was over 28 million USD or if the operating revenue was more than 14 million USD. The firm was classified as medium if it had more than 15 employees or if the amount of total assets was more than 2.8 million USD or if the operating revenue was above 1.4 million USD. If the total assets or operating revenue per employee was less than 140 USD, the firm was not included in the category very large companies, large companies and medium companies firms not included in the very large, large or medium sized-company category were classified as small firms.

APPENDIX 2

The assumptions of ANOVA analysis

To be able to perform ANOVA analysis, as with any other statistical test, there are several conditions that must be met (Berenson, Levine, Szabat, & Krehbiel, 2012): In ANOVA analysis, the dependent variable, in this case the volume of Chinese FDI, has to be measured on a continuous scale. Furthermore, the independent variables must consist of at least two categorical independent groups (in this case firm size, type of ownership, previous international experience and entry mode) and the observations of dependent variable (in this case the investment projects) have to be independent of each other. The sample also cannot contain any outliers, which can be achieved after applying natural logarithm on the volume of FDI. The fifth assumption of the ANOVA analysis is that the dependent variable must be normally distributed for each combination of the groups for all the independent variables (firm characteristics).

The assumption of normal distribution can be tested by the Shapiro-Wilk test of normality in the SPSS software. However, because ANOVA analysis is quite robust against the violations of normality when employing the multi-factor ANOVA test, approximately normally distributed data can be also accepted. According to Garson (2012), if the values of skewness and kurtosis are in the interval (-2,2), the data still can be accepted. The last condition of the ANOVA analysis is the homogeneity of variances (homoscedascity). It can be tested in SPSS using the Levene's test for homogeneity. Out of the six conditions for ANOVA analysis, two weren't met - the data was not normally distributed in four out of fourteen cases after running the Shapiro-Wilk test, however, the values of kurtosis and skewness were in the interval (-1,1), therefore, as per Garson (2012), ANOVA could still be employed. The dependent variable values also did not satisfy the condition of homogeneity of variances, therefore, the data was transformed using the natural logarithm. After the transformation of the dependent variable, Levene's test revealed that the condition for homoscedascity of variances was met ($p=0,718 > 0,05$) and thus the ANOVA analysis could be employed.

Table 4 The distribution of data on firm/investment characteristics

EU

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	No		9
	Yes		67

International_experiences

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	No		36
	Yes		40

ownership_degree

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	JV		43
	WO		33

Entry_mode

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	GF		27
	M&A		49

FDI_Volume

		Value	Count
Standard Attributes	Measurement	Scale	
N	Valid		76
	Missing		0

Ownership

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	POE		41
	SOE		35

Company_size

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	L		12
	M		5
	S		2
	VL		57

Sector

		Value	Count
Standard Attributes	Measurement	Nominal	
Valid Values	CaD		7
	ES		6
	CHRP		10
	ME		31
	OS		16
	PS		3
	WaRT		3

Table 5: FDI Volume descriptive statistics grouped by Company size

Company_size	N	Mean	Median	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
VL	57	636 837,53	263 359,20	36 299 739,01	1 061,74	3 732 168,69	823 686,81	99,2%	75,0%
L	12	15 695,18	1 561,39	188 342,16	10,03	122 551,00	34 853,89	0,5%	15,8%
M	5	21 746,60	8 812,89	108 733,02	2 836,92	82 053,13	33 897,92	0,3%	6,6%
S	2	852,82	852,82	1 705,64	73,26	1 632,38	1 102,46	0,0%	2,6%
Total	76	481 559,47	146 954,10	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

Table 6: FDI Volume descriptive statistics grouped by Sector

Sector	N	Mean	Median	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
CaD	7	821 898,43	348 555,90	5 753 289,04	167 560,64	2 912 452,30	977 633,26	15,7%	9,2%
ES	6	1 479 129,92	1 155 870,70	8 874 779,49	164 506,47	3 732 168,69	1 220 583,84	24,2%	7,9%
CHRP	10	573 430,31	285 879,95	5 734 303,13	11 546,32	1 718 768,74	699 917,62	15,7%	13,2%
ME	31	379 237,77	59 125,90	11 756 370,90	19,81	2 956 975,50	696 398,96	32,1%	40,8%
OS	16	253 682,60	74 461,02	4 058 921,56	10,03	1 109 843,29	389 018,87	11,1%	21,1%
PS	3	92 731,19	6 744,67	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
WaRT	3	47 554,05	2 836,92	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
Total	76	481 559,47	146 954,10	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

Table 7 Description of Sector codes

Sector code	Sector description
CaD	Construction and design
ES	Energy sector
CHRP	Chemicals, rubber, plastics, non-metallic products
ME	Machinery, equipment, furniture, recycling
OS	Other services
PS	Primary sector
WaRT	Wholesale & retail trade

Table 8 FDI Volume descriptive statistics grouped by EU membership

EU	N	Mean	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
No	9	608 150,07	5 473 350,59	3 676,53	1 731 137,20	565 427,61	15,0%	11,8%
Yes	67	464 554,76	31 125 169,23	10,03	3 732 168,69	786 134,05	85,0%	88,2%
Total	76	481 559,47	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

Table 9 FDI Volume descriptive statistics grouped by Sector and EU membership

Sector	EU	N	Mean	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
CaD	No	3	280 213,28	840 639,83	228 724,73	348 555,90	61 667,84	2,3%	3,9%
	Yes	4	1 228 162,30	4 912 649,21	167 560,64	2 912 452,30	1 181 316,38	13,4%	5,3%
	Total	7	821 898,43	5 753 289,04	167 560,64	2 912 452,30	977 633,26	15,7%	9,2%
ES	No	2	1 333 181,47	2 666 362,93	935 225,73	1 731 137,20	562 794,40	7,3%	2,6%
	Yes	4	1 552 104,14	6 208 416,56	164 506,47	3 732 168,69	1 534 979,28	17,0%	5,3%
	Total	6	1 479 129,92	8 874 779,49	164 506,47	3 732 168,69	1 220 583,84	24,2%	7,9%
CHRP	No	1	486 972,30	486 972,30	486 972,30	486 972,30		1,3%	1,3%
	Yes	9	583 036,76	5 247 330,83	11 546,32	1 718 768,74	741 675,17	14,3%	11,8%
	Total	10	573 430,31	5 734 303,13	11 546,32	1 718 768,74	699 917,62	15,7%	13,2%
ME	No	2	606 781,77	1 213 563,53	3 676,53	1 209 887,00	852 919,60	3,3%	2,6%
	Yes	29	363 545,08	10 542 807,37	19,81	2 956 975,50	699 769,85	28,8%	38,2%
	Total	31	379 237,77	11 756 370,90	19,81	2 956 975,50	696 398,96	32,1%	40,8%
OS	Yes	16	253 682,60	4 058 921,56	10,03	1 109 843,29	389 018,87	11,1%	21,1%
	Total	16	253 682,60	4 058 921,56	10,03	1 109 843,29	389 018,87	11,1%	21,1%
PS	No	1	265 812,00	265 812,00	265 812,00	265 812,00		0,7%	1,3%
	Yes	2	6 190,78	12 381,56	5 636,89	6 744,67	783,32	0,0%	2,6%
	Total	3	92 731,19	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
WaRT	Yes	3	47 554,05	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
	Total	3	47 554,05	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
Total	No	9	608 150,07	5 473 350,59	3 676,53	1 731 137,20	565 427,61	15,0%	11,8%
	Yes	67	464 554,76	31 125 169,23	10,03	3 732 168,69	786 134,05	85,0%	88,2%
	Total	76	481 559,47	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

Table 10 FDI Volume descriptive statistisc grouped by Sector and Ownership

Sector	Ownership	N	Mean	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
CaD	POE	5	515 495,51	2 577 477,54	167 560,64	1 039 450,00	381 708,48	7,0%	6,6%
	SOE	2	1 587 905,75	3 175 811,50	263 359,20	2 912 452,30	1 873 191,70	8,7%	2,6%
	Total	7	821 898,43	5 753 289,04	167 560,64	2 912 452,30	977 633,26	15,7%	9,2%
ES	POE	3	1 610 633,63	4 831 900,89	164 506,47	3 732 168,69	1 877 281,36	13,2%	3,9%
	SOE	3	1 347 626,20	4 042 878,60	960 456,40	1 731 137,20	385 353,43	11,0%	3,9%
	Total	6	1 479 129,92	8 874 779,49	164 506,47	3 732 168,69	1 220 583,84	24,2%	7,9%
CHRP	POE	3	78 150,45	234 451,34	13 392,94	190 000,00	97 266,43	0,6%	3,9%
	SOE	7	785 693,11	5 499 851,79	11 546,32	1 718 768,74	745 960,86	15,0%	9,2%
	Total	10	573 430,31	5 734 303,13	11 546,32	1 718 768,74	699 917,62	15,7%	13,2%
ME	POE	14	381 121,25	5 335 697,57	1 061,74	1 904 616,80	646 709,75	14,6%	18,4%
	SOE	17	377 686,67	6 420 673,33	19,81	2 956 975,50	754 653,04	17,5%	22,4%
	Total	31	379 237,77	11 756 370,90	19,81	2 956 975,50	696 398,96	32,1%	40,8%
OS	POE	14	289 805,65	4 057 279,15	73,26	1 109 843,29	404 197,96	11,1%	18,4%
	SOE	2	821,20	1 642,41	10,03	1 632,38	1 147,18	0,0%	2,6%
	Total	16	253 682,60	4 058 921,56	10,03	1 109 843,29	389 018,87	11,1%	21,1%
PS	SOE	3	92 731,19	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
	Total	3	92 731,19	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
WaRT	POE	2	1 446,97	2 893,95	57,03	2 836,92	1 965,68	0,0%	2,6%
	SOE	1	139 768,20	139 768,20	139 768,20	139 768,20		0,4%	1,3%
	Total	3	47 554,05	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
Total	POE	41	415 602,45	17 039 700,44	57,03	3 732 168,69	715 333,50	46,6%	53,9%
	SOE	35	558 823,41	19 558 819,38	10,03	2 956 975,50	816 274,33	53,4%	46,1%
	Total	76	481 559,47	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

Table 11 FDI Volume descriptive statistics grouped by Sector and Entry mode

Sector	Entry mode	N	Mean	Sum	Minimum	Maximum	Std. Deviation	% of Total Sum	% of Total N
CaD	GF	4	893 024,22	3 572 096,87	167 560,64	2 912 452,30	1 346 867,85	9,8%	5,3%
	M&A	3	727 064,06	2 181 192,17	348 555,90	1 039 450,00	350 161,07	6,0%	3,9%
	Total	7	821 898,43	5 753 289,04	167 560,64	2 912 452,30	977 633,26	15,7%	9,2%
ES	GF	2	1 155 870,70	2 311 741,40	960 456,40	1 351 285,00	276 357,55	6,3%	2,6%
	M&A	4	1 640 759,52	6 563 038,09	164 506,47	3 732 168,69	1 533 977,56	17,9%	5,3%
	Total	6	1 479 129,92	8 874 779,49	164 506,47	3 732 168,69	1 220 583,84	24,2%	7,9%
CHRP	GF	1	12 230,79	12 230,79	12 230,79	12 230,79		0,0%	1,3%
	M&A	9	635 785,82	5 722 072,34	11 546,32	1 718 768,74	712 304,64	15,6%	11,8%
	Total	10	573 430,31	5 734 303,13	11 546,32	1 718 768,74	699 917,62	15,7%	13,2%
ME	GF	13	518 975,27	6 746 678,51	19,81	2 956 975,50	839 750,06	18,4%	17,1%
	M&A	18	278 316,24	5 009 692,38	1 425,23	1 904 616,80	576 490,67	13,7%	23,7%
	Total	31	379 237,77	11 756 370,90	19,81	2 956 975,50	696 398,96	32,1%	40,8%
OS	GF	7	335 917,79	2 351 424,55	73,26	1 109 843,29	523 505,11	6,4%	9,2%
	M&A	9	189 721,89	1 707 497,01	10,03	740 009,92	260 176,02	4,7%	11,8%
	Total	16	253 682,60	4 058 921,56	10,03	1 109 843,29	389 018,87	11,1%	21,1%
PS	M&A	3	92 731,19	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
	Total	3	92 731,19	278 193,56	5 636,89	265 812,00	149 893,41	0,8%	3,9%
WaRT	M&A	3	47 554,05	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
	Total	3	47 554,05	142 662,15	57,03	139 768,20	79 871,89	0,4%	3,9%
Total	GF	27	555 339,71	14 994 172,12	19,81	2 956 975,50	819 277,79	41,0%	35,5%
	M&A	49	440 905,06	21 604 347,70	10,03	3 732 168,69	733 571,92	59,0%	64,5%
	Total	76	481 559,47	36 598 519,83	10,03	3 732 168,69	761 662,33	100,0%	100,0%

APPENDIX 3

Cluster analysis

Hierarchical clustering, or connectivity clustering based on the assumption that objects are more related to other objects that are closer. Clusters are formed based on the distance using the clustering algorithms such as single linkage, average linkage, complete linkage, centroid, and others.

Dendrogram (or the binary tree) plots the Chinese investments into two categories based on similar characteristics; the more to the left are the individual characteristics are connected, the more closely they are related, ergo they are more likely to occur in one event of an investment. The way the dendrogram is plotted is strongly influenced by any existing outliers in the sample (Bernard & Bernard, 2012). Therefore, it is important to check the data for any outliers which can be done by employing the single linkage (nearest neighbor) agglomerative clustering. This method calculates the distance between objects where each object is initially in a separate cluster but based on the distance between two closest objects from the clusters they are sequentially combined into larger clusters until one very large cluster is formed with all of the outliers placed around it (Sarstedt & Mooi, 2014).

In order to employ the clustering procedure, a method for calculating the distance between objects has to be chosen. Since the values in the sample are nominal, using numerical values isn't feasible, therefore, matching coefficients can be used. The matching coefficients measure how strong a relationship is between two variables, ergo to which degree the values of variables share similar characteristics (Sarstedt & Mooi, 2014). There are several types of matching coefficients, Jaccard coefficient (JC) and Russel and Rao (RR) being most widely used, but also the Yule's Q, Kulczynski or Ochiai coefficients (Milligan & Cooper, 1986; Sarstedt & Mooi, 2014).

Yule's Q index

Yule's Q measures the strength of association between binary variables, has a ratio of (-1,1) and is given by the following formula (Bernard & Bernard, 2012):

$$Q(x, y) = \frac{ad-bc}{ad+bc} \dots\dots\dots(1)$$

where, after running an experiment a certain number of times

a = the number of investments with both of the binary characteristics (such as e.g. EU and XL)
 b+c = the number of investments with only one of the binary characteristics (EU or XL)
 d = the number of investments with none of the characteristics (Figure 1-11)

		EU	
		1	0
X L	1	a	b
	0	c	d

Figure 1-1 2x2 Table

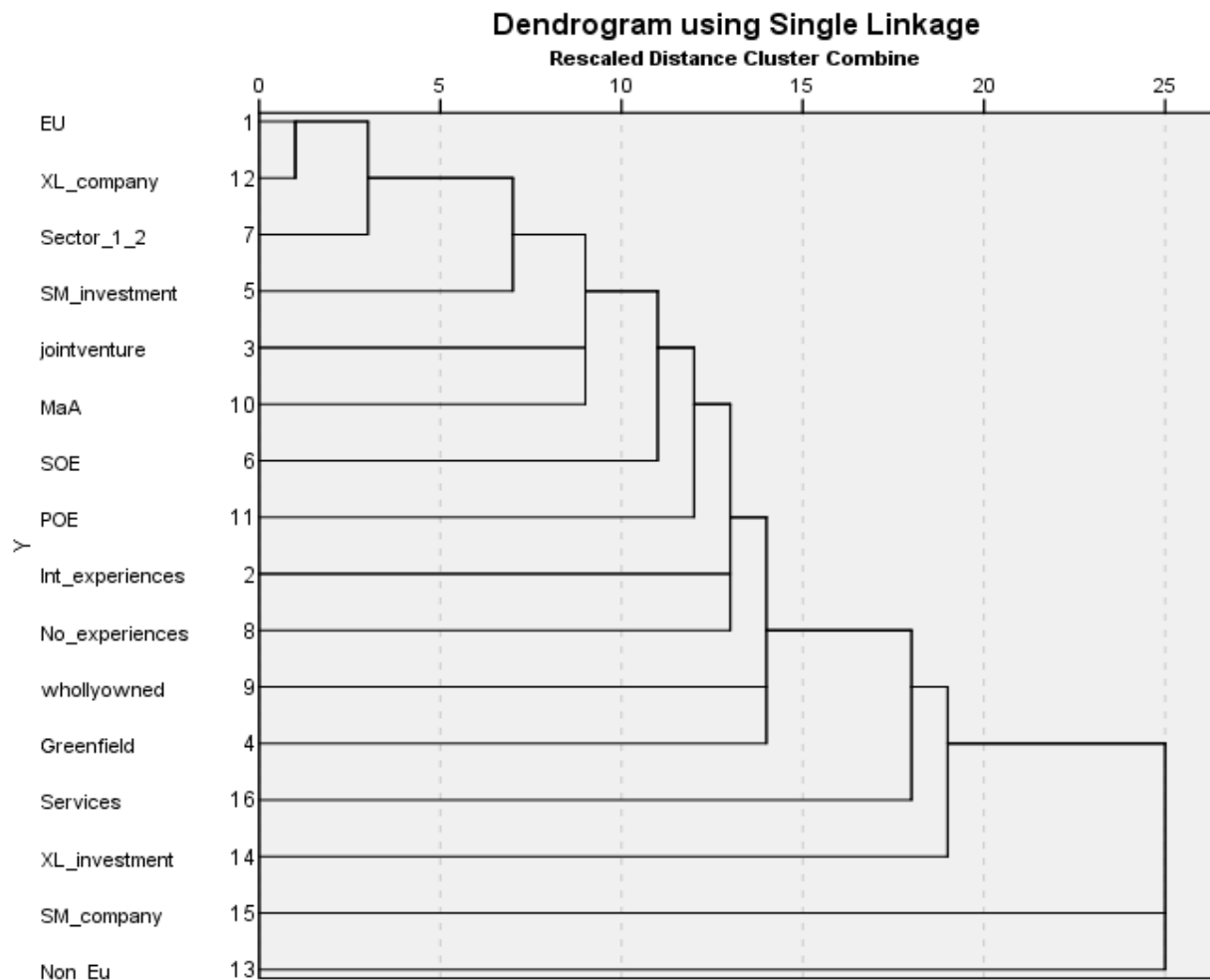


Figure 2 Dendrogram using Single Linkage

Two-step cluster analysis

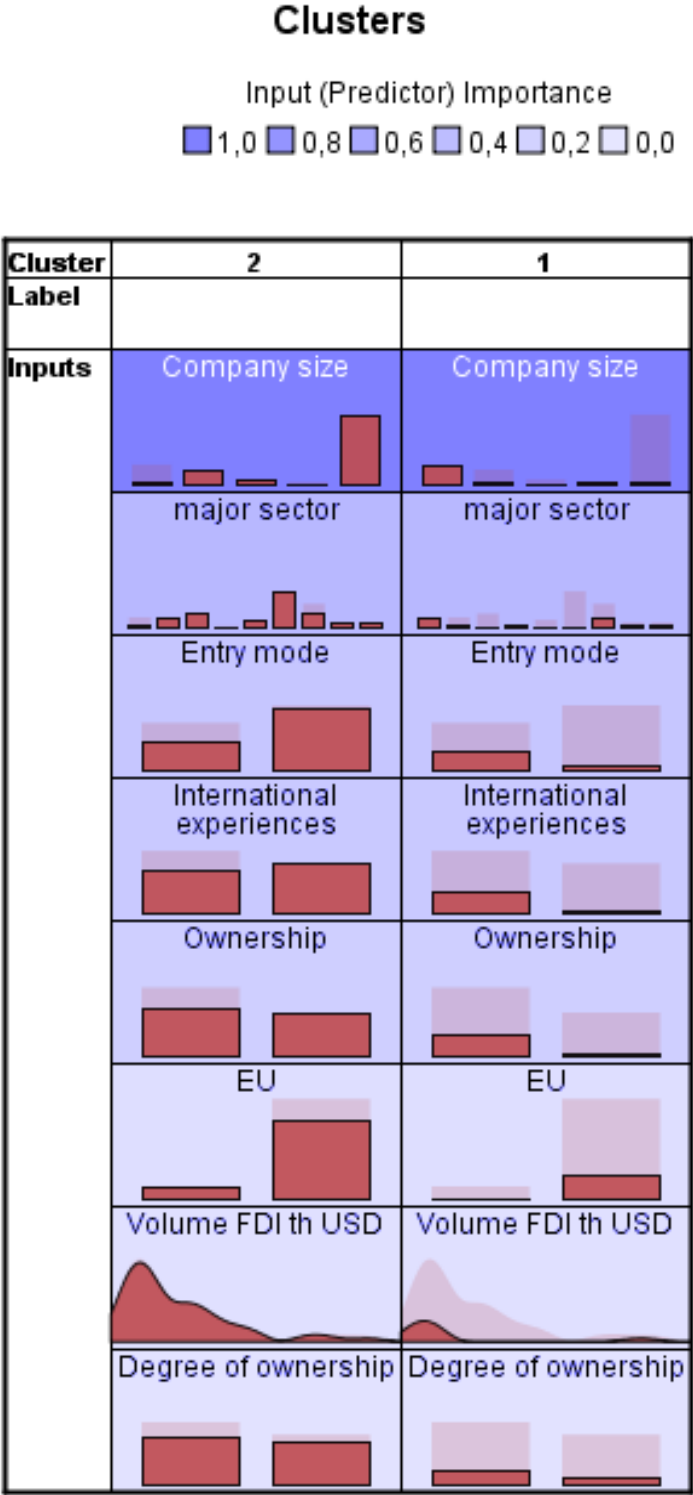


Figure 3 The results of two-step cluster analysis

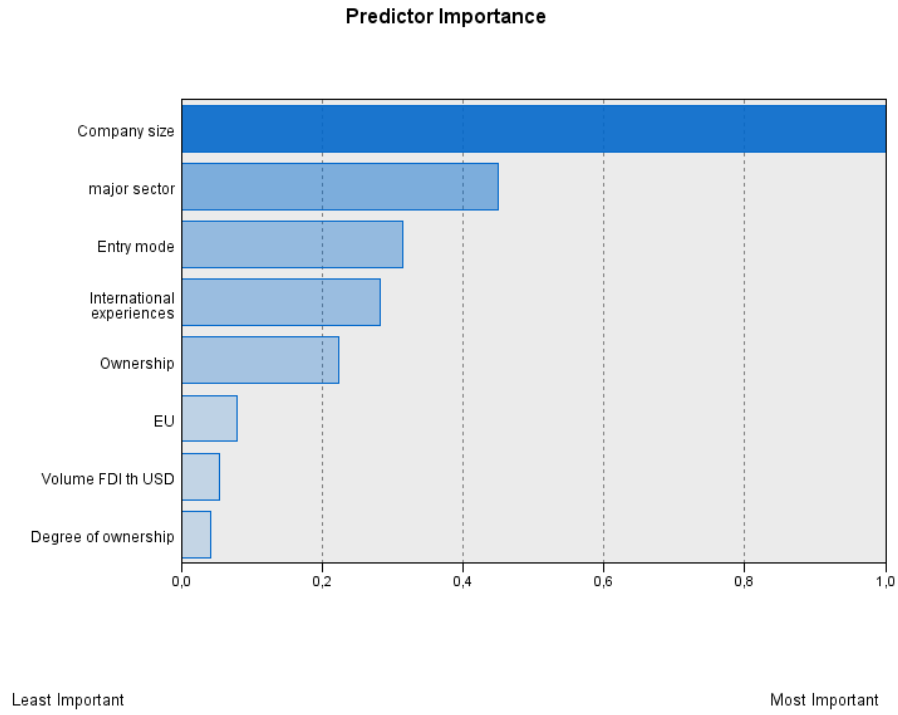


Figure 4 Two-step cluster analysis, Predictor Importance

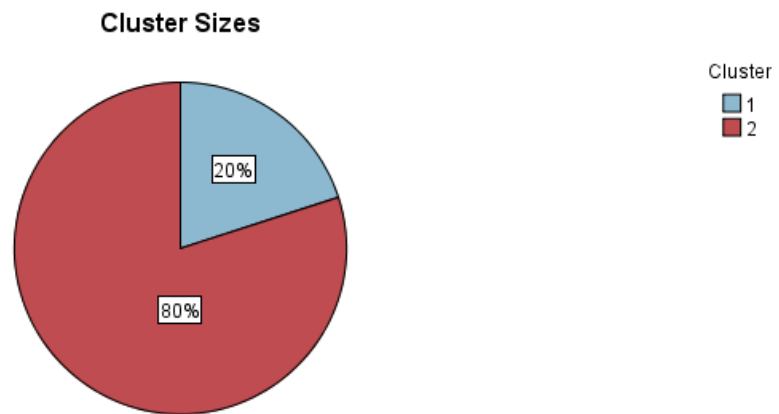


Figure 5 Two-step cluster analysis, Cluster sizes

APPENDIX 4

The Poisson regression is a type of generalized linear model used for modelling count data, and it expects that the logarithm of the expected value of the dependent variable can be predicted by the linear combination of independent variables (Berenson et al., 2012; Cameron & Trivedi, 2013). The Poisson regression is a type of general linear model regression, sometimes referred to as log-linear regression that is usually used for analyzing count data. Other regression analysis methods that could be considered when the endogenous variable is discrete are besides Poisson regression the Negative binomial regression, Zero-inflated regression and OLS regression.

The negative binomial regression is a generalization of the Poisson regression analysis and can be employed when the data is over-dispersed (when the conditional variance is larger than the conditional mean). The Zero-inflated regression can be employed when there are excess zeros that need to be accounted for and there are two types of zeros that exist in the data – ‘true’ zeros and ‘excess’ zeros. However, it is not known whether there are the two different types of zeros in the data, therefore, this regression analysis will not be used.

The OLS regression analysis can be employed for modelling count data if the data are transformed by a logarithm (NBRegression, 2017). Nevertheless, there could be potential issues with this type of regression analysis because the dispersion can't be modelled with this regression analysis and the loss of data when there is lot of zeros present (because the logarithm of zero doesn't exist) (NBRegression, 2017). From these explanations, it follows that Negative binomial regression or Poisson regression can be used to model the data. Poisson and Negative binomial regression models are estimated using the maximum likelihood.

Table 12 Correlation matrix

		Correlations ^a									
		C_FDI	CDIST	CORR	ECFREE	PSTAB	BROAD	EXP	GDPpC	RD	TENR
C_FDI	Pearson Correlation	1	,104	,172	,067	,061	,076	,498**	,089	,142	,040
	Sig. (2-tailed)		,408	,566	,555	,589	,505	,000	,432	,285	,782
	N	80	65	80	80	80	80	64	80	59	51
CDIST	Pearson Correlation	,104	1	,401**	-,209	,137	,210	,486**	,206	,236	,254
	Sig. (2-tailed)	,408		,001	,094	,275	,093	,000	,099	,107	,085
	N	65	65	65	65	65	65	52	65	48	47
CORR	Pearson Correlation	,065	,401**	1	,570**	,677**	,786**	,368**	,805**	,691**	,556**
	Sig. (2-tailed)	,566	,001		,000	,000	,000	,003	,000	,000	,000
	N	80	65	80	80	80	80	64	80	59	51
ECFREE	Pearson Correlation	,067	-,209	,570**	1	,416**	,507**	,230	,397**	,309*	,092
	Sig. (2-tailed)	,555	,094	,000		,000	,000	,067	,000	,017	,519
	N	80	65	80	80	80	80	64	80	59	51
PSTAB	Pearson Correlation	,061	,137	,677**	,416**	1	,621**	,529**	,850**	,655**	,556**
	Sig. (2-tailed)	,589	,275	,000	,000		,000	,000	,000	,000	,000
	N	80	65	80	80	80	80	64	80	59	51
BROAD	Pearson Correlation	,076	,210	,786**	,507**	,621**	1	,232	,803**	,730**	,449**
	Sig. (2-tailed)	,505	,093	,000	,000	,000		,065	,000	,000	,001
	N	80	65	80	80	80	80	64	80	59	51
EXP	Pearson Correlation	,498**	,486**	,368**	,230	,529**	,232	1	,410**	,262*	,157
	Sig. (2-tailed)	,000	,000	,003	,067	,000	,065		,001	,045	,271
	N	64	52	64	64	64	64	64	64	59	51
GDPpC	Pearson Correlation	,089	,206	,749**	,397**	,850**	,803**	,410**	1	,837**	,594**
	Sig. (2-tailed)	,432	,099	,000	,000	,000	,000	,001		,000	,000
	N	80	65	80	80	80	80	64	80	59	51
RD	Pearson Correlation	,142	,236	,691**	,309*	,655**	,730**	,262*	,837**	1	,621**
	Sig. (2-tailed)	,285	,107	,000	,017	,000	,000	,045	,000		,000
	N	59	48	59	59	59	59	59	59	59	47
TENR	Pearson Correlation	,040	,254	,556**	,092	,556**	,449**	,157	,594**	,621**	1
	Sig. (2-tailed)	,782	,085	,000	,519	,000	,001	,271	,000	,000	
	N	51	47	51	51	51	51	51	51	47	51

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 13 Tests of Model Effects

Tests of Model Effects			
Source	Type III		
	Wald Chi-Square	df	Sig.
(Intercept)	2,285	1	,131
CDIST	3,209	1	,073
CORR	,158	1	,691
ECFREE	,783	1	,376
PSTAB	2,088	1	,148
BROAD	10,024	1	,002
EXP	25,203	1	,000
GDPpC	5,494	1	,019
RD	3,114	1	,078

Dependent Variable: C_FDI
 Model: (Intercept), CDIST, CORR, ECFREE, PSTAB, BROAD, EXP, GDPpC, RD

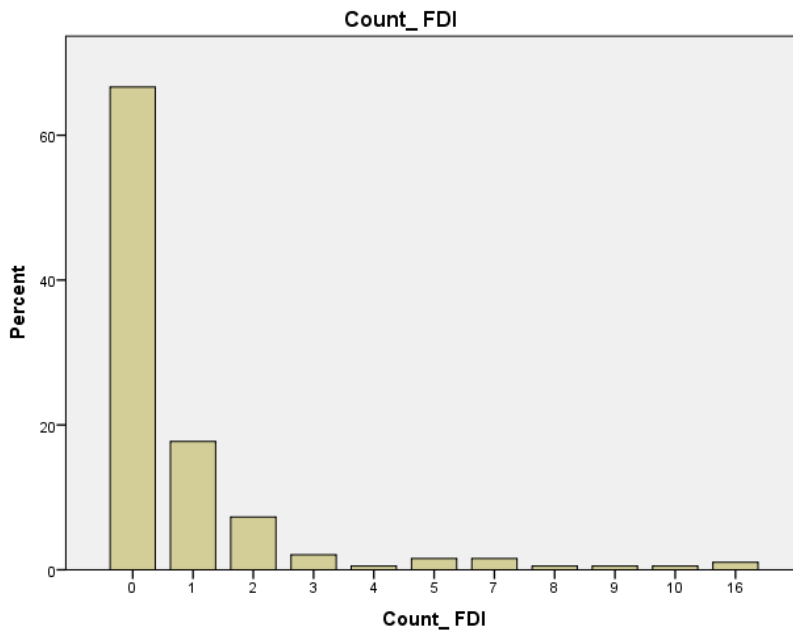


Figure 4-6: Count of FDI frequencies