FDI Determinants to Transition Countries.

A CAGE Model Approach.

The Case of Serbia.

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“Ko zna sta te tamo ce ka 
u maglama iz daleka.
Al’ ako se i pozlatis,
il’ sve tesko,
gorko platis,
uvek idi samo napred.
Nemoj nikad da se vratis.”

Posveceno mojim roditeljima
To my parents
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Chapter I

Introduction
CHAPTER I. Introduction

1.1. Globalization vs. Semiglobalization

The term globalization first appeared in a dictionary (of American English) in 1961, but its roots have a long pedigree. The term “globe”, which took on the meaning of “the planet” several hundred years ago, the term “global” began to entitle “world scale” in the late nineteenth century and “globalize” which appeared in the 1940s are all forerunners of the term globalization (Scholte, 2002).

Today, the concept of globalization expands across scientific disciplines. A plethora of book, research institutes, articles, and blogs now focus on globalization. In the early 1990s, the U.S. Library of Congress catalogue listed less than 50 publications per year related to globalization- from 2002 to 2008 there were more than 1100 every year (Ghemawat Official Website). Speaking about globalization, we are facing two problems. The first is how old is globalization, and the second is how we can define it.

We have three competing views about the history of globalization. The first view connects globalization with the two most important events in recorded history- 1492 when Colombus stumbles on the Americas and 1498 when Vasco da Gama makes an end run around Africa. In his work, Bentley says that “…the modern age, extending from 1500 to the present, a period during which all the world's regions and peoples ultimately became engaged in sustained encounter with each other, thus a period that inaugurated a genuinely global epoch of world history” (Bentley, 1996, pp. 768). The same opinion shares Andre Gunder Frank who says that “…there was a single global world economy with a worldwide division of labour and multilateral trade from 1500 onward” (Frank, 1998, pp. 52).

According to other world historians, globalization stretches back even earlier. One of them was Frank himself (Frank, 1998). As reported by Janet Abu- Lughod, an international trade economy was stretched from North-western Europe to China between 1250 and 1350. This trade was based on the pax Mongolica which transformed Central Asia into “a ‘frictionless medium’ through which trade and exchange moved relatively freely” (Abu-Lughod, 1993, pp. 286). Frank and Gills
went a step further arguing that “the existence of the same world system in which we live stretches back at least 5,000 years” (Frank & Gills, 1993, pp. 3).

There is a third view claiming that globalization did not begin 5000 years ago or even 500 years ago. It began in the early XIX century (O’Rourke & Williamson, 2000). Before that, the world economy was fragmented and completely deglobalized. According to this view, globalization is a very modern phenomenon. Many economic historians argue that before 1800 the international economy was poorly integrated and a revolution (if there was one) happened in the nineteenth century (Menard, 1991).

No universal definition of globalization is available, because defining this term is anything but easy. Globalization involves economic integration; the transfer of policies across borders; the transmission of knowledge; cultural stability; the reproduction, relations, and discourses of power; it is a global process, a concept, a revolution, and an establishment of the global market free from sociopolitical control (Nayef, 2006, pp. 3). Some scholars are supporting that defining globalization is a useless task. Kumar claims that “the debate about what to do about globalization is still very much a debate about what globalization is” (Kumar, 2003, pp. 87).

Kenichi Ohmae presents globalization as “the onset of the borderless world” (Kenichi, 1992, pp. 14). Similar definition is given by the World Bank Group: “Globalization-the growing integration of economies and societies around the world” (The World Bank Group, 2001). These definitions do not have positive or negative connotations, they are a little bit too vague and do not contribute more to the discussion.

Nayef (2006) sees globalization as a process that is changing as human society is developing. It is not something that cannot be defined today and then be forgotten. It has impact on communities, cultures and economies; it is a result of the transnational and transcultural integrations and it encloses the causes, the course and the consequences of these integrations.

Anthony McGrew has the same opinion. According to him, “Globalization is a process which generates flows and connections, not simply across nation- states and national territorial boundaries, but between global regions, continents and
civilizations. This invites a definition of globalization as: ‘an historical process which
engenders a significant shift in the spatial reach of networks and systems of social
relations to transcontinental or interregional patterns of human organization, activity

The challenge of defining globalization will also exist in the near future. The best
eexample of that is a thought of a sociologist Cesare Poppi who suggests: “The
literature stemming from the debate on globalization has grown in the last decade
beyond any individual’s capability of extracting a workable definition of the concept.
In a sense, the meaning of the concept is self-evident, in another, it is vague and
obscure as its reaches are wide and constantly shifting. Perhaps, more than any other
concept, globalization is the debate about it.” (Poppi, 1997, pp. 300).

Globalization exists at different times and that is why it means different things to
different people of different nations. Also, it can never take one definition that will
satisfy all who are impacted by its implications. However, the rising question here is
how globalized we are today?

Professor Levitt (1983) in his article “The Globalization of Markets” indicates that
world markets are becoming more homogenous. He argues that technology is a force
that drives the world towards “a converging commonality” and makes “homogenized
demand”. Thanks to technology, even third- world populations can get in contact with
the latest products and innovations. Because of that “almost everyone everywhere
wants all the things they have heard about, seen, or experienced via the new
technologies” (Levitt, 1983).

Levitt was clear in his article that the nature of doing business is changing. The era of
multinational corporations was near its end and the future belonged to global
corporations. While multinational companies adapted specific demands for every
closed defined geographic market and adjusted their product or services to each
country, global firms focus on low- cost, standardized products. “Variety costs
money, and the modern consumer demanded the best for less” (Abdelal & Tedlow,
2003, pp 4).
As the example of his theory, Levitt is illustrating the failed attempt of Hoover company (washing machine producer) to deal with the proper marketing orientation throughout Western Europe. Hoover Ltd. had a problem with unsatisfactory demand in the home market (Ohio) and poor export to Europe. That is why the company organized consumer research in the UK and each major continental country. They got the results that clearly showed the consumers’ preferences among several countries. These features made different price for each country, they also drove the price up and they put the company in a poor competitive position on the basis of price. The results were unexpected- two types of washing machines had success: the cheapest one and the most promoted one. It was equally clear that even though the customers said what they want, their behaviour showed that they were influenced by price and promotion. This example refutes the belief that global marketing is impossible because of the strength of national wants and needs.

It will be inevitable, according to Levitt, that the world will become borderless. “Different cultural preferences, national tastes and standards, and business institutions are vestiges of the past” (Levitt, 1983). Language, national rules, distribution channels are distinctions, not differences. Levitt was thinking of the world as a single unit rather than pieces of nations and customers.

However, in 1983 there were only a handful of countries in which corporations had home offices that sold products or services outside the home country borders. “Thus when Levitt spoke about globalization, he was excluding a large portion of the globe as it was at that time” (Abdelal & Tedlow, 2003, pp. 10). Twenty years after Levitt’s article, Thomas Friedman appeared, as the most prominent purveyor of the view of the world as a single unit.

In his book “The World is Flat”, Friedman (2006) is analyzing globalization, mainly in the early 21st century. He says that the world economy is becoming a “level playing field” where each player (country, company or individual) has the same chance of succeeding. According to Friedman, there are three eras of globalization. Globalization 1.0 that started in 1492 when Columbus set sail and it lasted until 1800. This is the era of countries, where the main question was how one country fits global competition.
Globalization 2.0 which lasted from 1800 until 2000 and was interrupted by Great Depression and World Wars I and II. In this era, multinational companies had the main roles. The question was the same, just the actor was different: how multinational companies fit into global economy.

Since 2000, we are the witnessing Globalization 3.0, where the power is in the hands of collaborating and competing individuals, who can go global easily. While Globalization 1.0 and 2.0 were driven by America and Europe, Globalization 3.0 was and is going to be driven not just by individuals, but also by much more differing non-Western and non-white groups of individuals.

Friedman examines ten factors that flattened the world. First one is the fall of Berlin Wall and simultaneous birth and popularity of Microsoft Windows. The fall of the Wall did not just unite the people of West and East Germany, it also influenced the balance of power by allowing people from the East Block to join the same economic ground field. Microsoft Windows 3.0 made people more productive since the digital form can be processed easily in many ways and information became more available.

The second, third and fourth factor are the emergence of Netscape, The Work Flow Software, and The Uploading or Open Sourcing respectively. The day when Netscape went public is significant because it made an overnight success available for every man, woman or child who was willing to serf online. The Software reduced the need for human labour and continued the expansion of programming standards into everyday work life. The Uploading is the era of Internet users which transformed them from consumers to producers.

The next 4 flatteners are related with the emergence of Multinational Corporations. The fifth force is Outsourcing, where many industries ship their work to other countries to be completed at much lower cost to the company. Friedman’s sixth factor is Offshoring. The entrance of China in the WTO changes the rule of the game, because China decided to treat all international firms in the same manner as all domestic firms. So that, companies can operate with the same access to subsidized utilities and tax breaks that domestic firms have enjoyed. Supply-chaining is the
seventh force. Friedman claims that the system had made the consumers enjoying all sorts of goods at lower prices and better quality. As an example of this factor, he describes a company Wal-Mart, the biggest retail company in the world. The last flattener generated from the emergence of big multinational company is Insourcing. Friedman describes it as “a whole new form of collaboration and creating value horizontally [that] made possible by the flat world and flattening it even more” (Friedman, 2006, pp. 169). Insourcing is development of a supply-chain in terms of the scale and scope between companies.

The ninth flattener is labelled as Informing. Informing is nothing else but a supply-chain between individuals. Using Google, Yahoo, MSN, etc. every individual is capable of entertaining and informing themselves without relying on traditional channels.

Friedman names his last force as Steroids. Steroids are all new technologies that allow people to be connected much faster and easier. Some of the new technologies are the increasing computational capability, the breakthrough in instant messaging and file sharing, the breakthrough in making phone calls over the internet, the new level of videoconferencing, the advances in computer graphics, and the invention of new wireless technologies and devices.

The main key of “flattening” the world is technology (computers, Internet, wireless network) that allows us to enter global markets from anywhere in the world. Also, the great degree of globalization is driven by the collapse of political barriers, such as the fall of Berlin Wall in 1989, the rapid industrialization of China and the opening of India.

The events that Friedman is mentioning in his book are really important for humanity, but are they really the keys for the new “flattened” world? In early 1990s, a new sort of economy was rising. It used to be enough to have a computer and a dial up connection, and you could surf online. This new “Dotcom” economy has started to change our lives and for investors and speculators it was clear that internet has created a whole new market. It has inspired many hopes for the future of online commerce.
That is why many internet companies were lunched and investors assumed that this kind of companies was going to be worth millions.

Investors realized that the dot-com dream had evolved into a classic speculative bubble and this bubble burst in 2000. As it is showed, the new economy theory was proven wrong. Society’s expectations of what the internet could offer were unrealistic. They forgot that the traditional economic principles still hold. That was the last time when the world was going far in front of its time.

Considering that the last internet bubble cost investors a lot of money, we should stop and see if the theory “the world is flat” could trigger off the next bubble.

In contrast, some economists do not support the “apocalyptic” future where national borders no longer matter at all. One of them is Pankaj Ghemawat, one of the most prominent authors on globalization in business circles today, describes this world as semiglobalized.

1.2. A CAGE Model Approach

Two years after Friedman’s book, Pankaj Ghemawat published his view of globalization in the Foreign Policy magazine in titled “Why the World Isn’t Flat”. It received a lot of critiques; some of them came from Friedman himself highlighting that the data presented in his article were too narrow (Foreign Policy Magazine, May-June 2007). A few months later, Ghemawat published a book “Redefining global strategy” where he argues that borders still matter for evaluating cross-border moves and the world is in a state of semiglobalization and will remain this way for decades to come.

In his second book “World 3.0”, Ghemawat claims that we are far away from the complete globalization. Putting into percentage the question how much globalized are we, the answer lays between 10 to 25%. He was using data in order to support back his assertions. “While many methods exist for measuring globalization, the samples, most intuitive one that I have found is to consider flows or activities that can take
place either within or across national borders, and then to figure out the international components as a percentage of the total.” (Ghamawat, 2011, pp. 25)

He started with mails and phone calls, stating that about 1% of letters physically mailed in the world cross national borders and only 2% of telephone calling minutes involve international calls. The situation is slightly different with internet traffic, where 17-18% of all internet traffic was routed across national borders between 2006 and 2007 (Ghemawat, 2011, pp. 26).

Someone can say that nowadays world’s economies are much more integrated, because economy and trade have accelerating growth over the last decades. Thus, globalization in economy is almost close to complete. However, data does not confirm this statement. Ghemawat (2011) has measured trade intensity as products and services exported from one country to another as a percentage of GDP and the results were 29% in 2008 and 23% in 2009, respectively. In reference to FDI, the picture is quite similar. Even thought we all know the quote “investment knowing no borders”, FDI are only 9% of all fixed investments in 2009 (Ghemawat, 2011).

According to Ghemawat’s data, the levels of internationalization among observed cases are much closer to 10% then to 100%. Ghemawat suggests that if we have to guess the internationalization level of some activity about which we do not know a lot, it would be more “safe” to say 10% than 100. This is what he calls “10% presumption”.

The idea of a world without borders enables the use of one-size-fits-all strategy. There are a lot of examples of global companies with experience and success that were in peril of failing because this strategy was appealing to them and they were following it. One of those cases is Coca Cola.

Coca Cola was founded in 1886 and its first move outside the USA was made in 1902. After 20 years, Coke was available in 26 countries around the world (Coca Cola Official Website). Roberto Goizueta was a CEO of the company from 1980s and set an aggressively globalized strategy. According to Goizueta, “the only fundamental difference between markets in the United Stated and other countries was the lower
average levels of market penetration overseas” (Ghemawat, 2007, pp.18). He highlighted that the company has to set high volume target and increase international volume growth because there is no more distinction between international and domestic. His logic was followed by the next CEO, Douglas Ivester. However, the situation changed. The volume growth could not reach the targeted peak, stock valuation had declined, relationships between company, bottlers and some governments got fray, so Ivester was replaced by Douglas Daft who could not improve the situation, because he did extreme decentralization and localization of markets. After him, Coke hired Neville Isdell. He understood the differences between markets, so he did not treat them in the same way. In addition, he emphasized in formulating diverse accent on variety making strategies that exhibit more variations at a country level.

Followers of globalization claim that while the world is not totally flat today, it will be tomorrow. They are stating two drivers that will complete cross-border integration: technology and policy changes. In their work, Levitt and Friedman were highlighting that “flatness” is forced primarily by technology as well. One more supporter of this theory, Frances Cairncross, in his book “The Death of Distance” asserts that “the death of distance is only one of the astonishing changes taking place as communications and computers are combined in new ways” (Cairncross, 1997, pp. 1). According to Cairncross, three technologies are going to make revolution - telephone, television and computer. Communication technologies have had enormous rate of improvement since the first phone was invented in 1876. A cost of a three-minute call from New York to London was $350 at the beginning of XX century and it dropped to 40 cents in 1990s and now is for free for calling through internet (Ghemawat, 2007). Although, the calls are free nowadays, the data presented by Ghemawat and mentioned above shows that less than 10% of all calls are international.

Furthermore, Cairncross (1997) mentions that due to digital signal, more channels are available in far-distance countries; the number of audience increases and the news are transmitted whether from satellite, through cable or over the air. Yet again, Ghemawat (2011) has presented data that showing that only 21% of news coverage in USA was international. On top of that, half of these percentages were dealing with USA foreign
policy. In Europe, this number is 38%. What is more, almost half of international news is related with the news involving Europe within other countries.

Empowering of computers together with internet is the third technology that is going to abolish borders, according to Cairncross. However, in his book Ghemawat (2007) uses the example of Google to explain barriers at borders and their effects. Google has been rated as the top global web search engine, but the company is facing problems in some markets. In Russia, for example, Google is challenged by cultural barriers. More precisely, Google has a problem with the linguistic complexity of Russian language (Russian nouns have three gender and up to six cases, verbs are very irregular, and the meaning of words can depend on their ending or on the context). As a result, local competitors Yandex and Rambel account for 91% of the Russian market for web searching. In China, Google is stuck with administrative differences and in India with economic discrepancies. The latter case study, Google had to offer more offline and mobile offerings because the population in this country is more offline than online and the use of mobile devices exceeded the number of internet connections.

Policy changes are the second driver that will push forward globalization. In this sense, many countries will stop being closed economies and start participating in the international economy. In his book, Freidman (2006) categorizes China, India and ex Soviet Block as those economies. In their paper, “Economic Reform and the Process of Global Integration”, Sach and Warner (1995) claim that integration will reach its peak after the collapse of communism. Then, impressive institutional harmonization (trade policy, legal codes, tax systems, ownership patterns, and other regulatory arrangements) and economic integration will start among nations in world history. In addition, international institutions (WTO, IMF, etc) will help this integration as well as trade agreements among countries.

NAFTA is North American Free Trade Agreement signed by Canada, Mexico and USA. USA and Canada share the world’s longest undefended border and their trade accounts “for the world’s largest bilateral trading relationship” (Ghemawat, 2011, pp. 42). Yet still, in recent years economists are wondering why the trade is not nearly as large as someone would expect. Ghemawat (2011) shows by using the example of
Canada’s oldest candy company, Ganong Brothers, that borders still matter even though two countries are neighbouring countries and they are in the same trade agreement.

The company had intention to sell jelly beans in the US market. Two things were going in their favour- there are no tariffs on jelly beans because of free trade agreement and the location of the company is just 1.8 kilometres away from the American state Maine. However, the company decided not to export due to the differences between these two markets.

To start with, one of the problems was labelling. In Canada, labels are written with the space between the number and the unit of measures. Yet, in America it is written without the space. This means that Ganong Brothers should have separate packaging for these two countries. As a result they required more money and different organization in the warehouse.

Additionally, the company had to create an accounting package for their shipment. It required a lot of papers. When it is done and the shipment is reported to the government, the company will get transaction number. Processing the papers demands a lot of time; especially since 11th of September 2001, delays became an extensive problem. The calculation made by company shows that they would have 5 weeks delay in candy shipment, because the American government has to check if all the ingredients are FDA approved.

Moreover, the company was facing a geographic issue. It is located just 1.8 kilometres from the US state Maine. But this state is small with only 1.3 million people. Boston is more than 500 kilometres away, New York 900, and because of its consistency, jelly beans should not be shipped very far.

Last but not least, exchange rate differentials (volatility) affected the company. The exchange rate for the Canadian dollar against the US dollar was 1.5:1 during the 1990s and at the beginning of 2000s. Recently, the rate is 1.1:1, which means decline in export profit for Ganong Brothers.

Using this example, Ghemawat underpinned that differences between countries still have large effect on trade. He grouped those differences in four broad categories-
cultural, administrative, geographic and economic. Thereafter, he coined the CAGE model.

The term CAGE is an abbreviation for four components of distance: cultural, administrative, geographic and economic. In his book, Redefining global strategy, Ghemawat (2007) divides the CAGE framework at country level and industry level.

*The CAGE framework at country level*

“Culture as used here refers to the attributes of a society that are sustained mainly by interaction among people, rather than by the state” (Ghemawat, 2007, pp. 40). Cultural differences will have a negative influence on economic interaction between countries. One of the most common cultural differences is language. Furthermore, different ethnicities, religions or values, norms and dispositions tend to reduce the interaction.

Administrative features are developed by government and include laws, policies and institutions. Here, we can also add treaties and international organizations. It has been observed that the cross-border economic activities will increase if there is a colonial relationship between countries, they are in the same regional trading block and they have the same currency. For example, during the period from 1997 until 2001, approximately one half of FDI from Spain went to Latin America, and Europe was at the second place. The best effort to diminish the administrative distances by integrating into one union and using a single currency was the establishment of the European Union.

People usually connect geographic distance with physical distance between two countries or between capitals of two countries. However, in this framework, geographic distance includes much more: two countries have the same land border, or it is easy to make good transportation and communication infrastructures (if they are connected with river, have access to the same sea…), or they belong to the same time and climate zone. Ghemawat (2007) claims that 1% increase in the distance between two countries is generally predicted to decrease trade between them by about 1%.
Economic distance is connected with GDP and economic size. Research shows that rich countries are making more cross-border activities than the poorer ones. In addition, more activities are known between countries only. Studies indicate that 1% increase in the size of economy is typically estimated to lead to 0.7-0.8% increase in its total volume of trade.

_The CAGE framework at industry level_

As it is mentioned above, the key determinant of cultural distance at country level is language. Presented at industry level, differences in languages influence more the industries where language is important factor. For example, language matters more in software industry than in car production industry. Furthermore, cultural distance matters the most when products depend on “cultural or national identity” (Ghemawat, 2007, pp. 50). In Europe, beef meat is a commodity, but in India, cow is a sacred animal.

It is not rare that even today governments, in order to protect their economy and industry, use barriers, tariffs, regulations, etc. Reasons for government to erect barriers are numerous, but they all influence the administrative sensitivity.

Geography plays a more important role when products have a low value-to-weight or value-to-bulk ratio and when products are fragile or perishable. For instance, one of the reasons why the Canadian company, Ganong Brothers, could not sell its jelly beans in the US market was distance. The closest town was more than 500 kilometres away and because of its consistency, jelly beans could not be shipped very far.

Ghemawat has divided the economic features at two kinds of determinants of economic sensitivity: supply side and demand side. “On the supply side, economic distance is likely to have the greatest impact on products whose cost structures are dominated by factors with absolute costs that vary a lot internationally.” (Ghemawat, 2007, pp. 53). On the demand side, eagerness to pay makes people to look beyond their national borders. Low level of cross-border interaction is likely to appear when an industry produces fragile or demanding products, because the total costs increase.
In the Table 1 below, the key attributes underlying the four dimensions of distance are listed.

<table>
<thead>
<tr>
<th>Attributes creating distance</th>
<th>Cultural distance</th>
<th>Administrative distance</th>
<th>Geographic distance</th>
<th>Economic distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different languages</td>
<td>absence of colonial ties</td>
<td>political hostility</td>
<td>lack of a common border</td>
<td>differences in consumer incomes</td>
</tr>
<tr>
<td>Different religions</td>
<td>absence of shared monetary or political association</td>
<td>government policies</td>
<td>lack of sea or river access</td>
<td>differences in costs and quality of:</td>
</tr>
<tr>
<td>Different social norms</td>
<td>political hostility</td>
<td>institutional weakness</td>
<td>size of country weak transportation or communication links</td>
<td>• natural resources</td>
</tr>
<tr>
<td>Different ethnicities; lack of connective ethnic or social networks</td>
<td>government policies</td>
<td>physical remoteness</td>
<td>differences in climates</td>
<td>• financial resources</td>
</tr>
<tr>
<td></td>
<td>institutional weakness</td>
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<td></td>
<td>• human resources</td>
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<td></td>
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<td></td>
<td>• infrastructure</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>• intermediate inputs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• information or knowledge</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Industries or products affected by distance</th>
<th>Cultural distance</th>
<th>Administrative distance</th>
<th>Geographic distance</th>
<th>Economic distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>products have high linguistic content (TV)</td>
<td>government involvement is high in industries that are:</td>
<td>products have a low value-to-weight or bulk ratio (cement)</td>
<td>nature of demand varies with income level (cars)</td>
<td></td>
</tr>
<tr>
<td>products affect cultural or national identity of consumers (foods)</td>
<td>• producers of staple goods (electricity)</td>
<td>products are fragile or perishable (glass, fruit)</td>
<td>economies of standardization or scale are important (mobile phones)</td>
<td></td>
</tr>
<tr>
<td>product features vary in terms of:</td>
<td>• producers of other “entitlements” (drugs)</td>
<td>communications and connectivity are important (financial services)</td>
<td>labor and other factor cost differences are salient (garments)</td>
<td></td>
</tr>
<tr>
<td>• size (cars)</td>
<td>• large employers (farming)</td>
<td>local supervision and operational requirements are high (many services)</td>
<td>distribution or business systems are different (insurance)</td>
<td></td>
</tr>
<tr>
<td>• standards (electrical appliances)</td>
<td>• large suppliers to government (mass transportation)</td>
<td></td>
<td>companies need to be responsive and agile</td>
<td></td>
</tr>
<tr>
<td>• packaging</td>
<td>• national champions (aerospace)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>products carry country specific quality associations (wines)</td>
<td>• vital to national security (aerospace)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• exploiters of natural resources (oil, mining)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• subject to high sunk costs (infrastructure)</td>
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</tr>
</tbody>
</table>


1.3. Scope of the Thesis

The aim of this thesis is to define the meaning and the role of distance in determining cross border investment transactions. Specifically, it aims, using a transition country i.e. Serbia as a case study, at demonstrating the implementation of a model based on Ghemawat's culture, administrative, geographic, and economic distance framework modified by substituting administrative by institutional distance for testing the relevance of distance in determining Foreign Direct Investment (FDI) inflows to a country. In addition, this thesis also illustrates how each of the above distance
dimensions, i.e. cultural, institutional, geographic and economic, correlates with FDI at different industries categorised by technological level in manufacturing, i.e. high technology, medium high technology, medium low technology, low technology subsectors, and in services sectors, i.e. low knowledge intensive and high knowledge intensive service sectors. The first step done in this thesis was the replacement of administrative/political distance by institutional distance, while the rest of CAGE dimensions, i.e. cultural, geographic and economic remain as Ghemawat (2001) suggests. Therefore, the “CAGE distance framework” in this thesis is being transformed into “CIGE distance framework”.

The research was instigated by the lack of literature on the topic regarding this specific area. More specifically, while there are numerous empirical studies dealing with transition economies worldwide, the literature on the Serbian economy is quite limited. Eventually, the reasons why Serbia has been chosen as a case study are as follows: Serbia has grown into one of the premier investment locations in Central and Eastern Europe. It was the home of the biggest greenfield projects in South East Europe for three consecutive years (2004-2006), as awarded by the OECD. It is well proven as one of the leading investment locations in CEE with key strengths in highly capable human capital and customs free access to the 15% of the world market (SIEPA, http://ras.gov.rs/en). Nowadays, some of the biggest names across the board are successfully doing business in Serbia - FIAT, Microsoft, BOSCH, Siemens, Panasonic, Schneider Electric, NCR, STADA, Continental, Swarovski, Michelin, Telenor, and more than 500 companies from around the globe. In January 2014 Serbia has officially started the EU membership negotiations.

Moreover, Serbia enjoys a favourable geographic position. It is situated in Southeastern Europe, in the centre of the Balkan Peninsula. While Serbia covers part of the Pannonian plain in the north, the country also belongs to Central Europe, albeit due to its southern region, in terms of geography and climate, Serbia is also considered as a Mediterranean country. Serbia’s capital, Belgrade, was named the City of the Future for Southern Europe by FDI Magazine in 2007 based on its economic potential, cost effectiveness, human resources, IT and telecommunications, transport, quality of life, and FDI promotion. In the following years the success was
continued by many regions and cities that were praised for their attractiveness for FDI.

Therefore, this study represents the first attempt to compile, illustrate and discuss in detail the data on FDI inflows to Serbia at country level. This will be achieved by analysing and comparing how each form of distance affects FDI inflows. This aim is based on the premises that Ghemawat’s (2001) conceptual framework is a comprehensive framework which employs a variety of distance determinants.

In addition, another novelty of this thesis is that it applies the CIGE model at industry level, something which has not been thoroughly investigated in the literature so far. The impact of the differences between countries is conditioned by industry characteristics, which must be taken into account for most applications of company strategy.

Another contribution of this thesis is that it conducts a clear distinction between cultural and institutional concept. Scott’s (1995) institutional framework is used in order to categorise institutional distance in three pillars: regulatory, normative and cognitive. However, there are some significant overlapping between cognitive aspects and cultural distance. After observing different empirical studies (e.g. Gaur and Lu 2007, Xu et al. 2004, Estrin et al. 2007, Chao and Kumar 2006, etc.) for the purpose of this thesis, institutional distance is defined using only two of the three aspects of Scott’s theoretical framework: regulative (social aspects) and normative (business aspects), while the cognitive pillar is used separately into the cultural framework.

To sum up, the overall contribution of this thesis relies upon the multidimensional way that the CIGE framework is applied to Serbia and, by offsetting the lack of empirical research on the topic regarding the specific less-developed economy, to provide data that until now has been absent from this field.

In brief, the main findings of the research are summarized as follows. At country level, three of four distances, i.e. institutional, geographic and economic are statistically significant. While institutional and geographic distances are negatively related to FDI inflows to Serbia, the coefficient of economic distance has a positive
sign. Therefore, MNCs that come from countries which have different institutional system than Serbia will invest less than companies that are coming from countries which share the same institutional system with the host country. In addition, the greater the geographic distance between home country of FDI and Serbia, the less FDI is undertaken between the countries. Finally, the positive sign of the coefficient of economic distance shows the presence of economic arbitrage, which means that the main reason why MNEs invest in Serbia is to exploit differences in the cost of labour and capital, as well as variations in more industry-specific inputs (such as knowledge) or in the availability of complementary products.

At industry level, for the manufacturing level, institutional distance is the only statistically significant distance. The sign of its coefficient is negative, which means that government effectiveness, regulatory quality, rule of law, voice and accountability, political stability and absence of violence and control of corruption are still playing an important role in decision making and pose great challenges for MNEs from distant institutions. Regarding the services sector, economic distance is the only statistically significant distance. It is positively related with FDI inflows, which is an indication of economic arbitrage.

For industrial and services subsectors, the empirical application of the model shows that both institutional and geographical distances have a negative impact on FDI flows, while economic distance has a positive impact at low-technology manufacturing subsector. Concerning services subsector, cultural and geographic distances have a negative impact on FDI inflows to Serbian low- knowledge intensive service subsector, while the coefficient of economic distance is positive and strongly statistically significant. For high- technology intensive service subsector, institutional distance is the most important one, while the rest are not statistically significant.

The rest of the thesis consists of the following sections: Chapter II highlights a brief literature review of theories of FDI, paying attention on product-cycle theory, eclectic theory and the market transaction cost approach. Chapter III demonstrates the FDI inflows to Serbia, focusing on distribution of FDI inflows by home countries. Chapter IV offers a framework analysis of each form of distances and develops hypotheses for each of them. Chapter V formulates econometric model appropriate to describe the
relationship between dependent and independent variables, construction of approximations and characteristics of the dataset and the sources. Chapter VI shows the empirical results of multi linear regressions at country and industry level. Finally, Chapter VII presents the conclusions.
Chapter II

Theoretical Background
CHAPTER II. Theoretical background

2.1. Theories of FDI

Different definitions of foreign direct investment exist in large international institutions. According to the IMF Balance of Payments Manual (1977, pp. 136.), FDI is “investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor’s purpose being to have an effective voice in the management of the enterprise”.

According to OECD Factbook (2013), FDI is a cross-border investment made by direct investor from one economy to enterprise resident from the other economy. In this way, they are creating a long term relationship and a significant level of influence from direct investor on the management of the enterprise.

Nowadays, economists are paying more attention to foreign direct investment, because they believe that FDI is an important element of economic development of every country, particularly the developing ones, emerging economies and countries in transition. This conclusion is made after several studies on the relationship between foreign direct investment and economic development.

Blomstrom (1994) made an empirical analysis focused on growth in real income per capita for 78 countries, both developed and developing. His results showed the connection between foreign direct investments and income growth. The correlation was positive, i.e. foreign direct investment has a significant positive influence on income growth rates. However, the results can be applied just for higher income developing countries, because FDI can be a source of growth just in the case when a country has a certain level of development.

Smarzynska (2002) run a test study where she proved that there is a positive correlation between foreign direct investments and productivity in the firms from Lithuania. More precisely, her findings provide the evidence that firms in industries supplying sectors with greater multinational presence enjoy higher productivity. Similar results were found by Borensztein (1998). He made a research collecting data
of FDI flows from 69 industrial developing countries since 1980. His results mark FDI as a special factor of technology spillovers, with a great contribution to the economic growth, bigger than what domestic investments would have achieved.

In his book Multinational Enterprise and Economic Analysis, Caves (1996) explained the effort made by countries to attract foreign direct investments, because of their positive effects on economy. He claimed that FDI would increase productivity, managerial skills, production and selling network, technology and know-how spillover and reduce unemployment.

On the other hand, there are some economists who state that FDI has a negative impact on economic development. One of them is Hanson (2001) who highlighted that countries should be sceptic about the state that FDI has a positive effect on national welfare. In order for one country to attract FDI, it has to have some characteristics, such as low tax rates, educated labour and larger consumer and industrial market. Thus, FDI is attracted by the high productivity countries and high productivity industries. However, there is no evidence that FDI will help to increase the productivity of domestic enterprises. On the contrary, Hanson declares that the industries where multinational companies have majority, are characterised with the lower rates of productivity growth. In this manner, FDI is not a condition for a positive spillover for domestic companies.

Bjorvatn (2002) made a research about the role of FDI in economic development and her results showed that impressive economic growth can be achieved with a low level of foreign direct investments, but high level of domestic savings. Her case country was South Korea and it national welfare has primarily reached by using high domestic saving rates and foreign loans for investments, then providing money for R&D and importing foreign experts for educating local employees and transfer of know-how.

Alfaro (2003) made a study on what extent foreign direct investments and MNEs contribute to growth across primary, manufacturing and services sectors. The research covers the period from 1981 until 1999. Her results showed that FDI flow has a negative impact on growth in primary sector, whereas it has a positive one in
manufacturing sector. For the services sector, the results are inconclusive. Thus, Alfaro claims that not all forms of FDI are beneficial for host country.

Nowadays, foreign direct investments attract more attention than they did in the past. Despite the fact the world was familiar with direct investments, economists were mainly focused on location of investments. One of them was Dunning (1958), who tried to explain U.S. FDI to Britain. However, the role of MNEs in FDI was explained by Hymer in his Ph.D dissertation in 1960. Since then, the phenomenon of MNEs and FDI has begun to gain importance.

Hymer (1960) emphasized that if we want to explain FDI, we have to explain control first. There are two reasons why investor will look for control. First one is that investors want to be sure about the safety of their investment. The second reason lies in investor’s decision to abolish the competition between the mother company and enterprises in other country controlled by the same investor. Furthermore, Hymer claimed that with the market imperfections, interest rates are not the same in every country, so companies are very biased where they will invest their money. With this proposal, Hymer tried to explain the phenomenon of FDI and it can be thereafter called the first microeconomic theory of direct investments named *industrial-organization theory*. Thus, according to this economist, any kind of distortion of markets predisposes the realization of direct investments.

The same opinion was shared by Kindleberger (1969) who agreed that foreign direct investments would not exist in a world with perfect competition. There are also other economists who tried to explain direct investments. One of them is Mundell. In his work from 1957, he tried to explain FDI using the H-O-S model, i.e. model with two countries, two goods and two production factors. In country A, cotton was the good and the factor was labor and in country B, steel was the good and capital was the factor. In the situation where trade barriers are absent and labor and capital are not internationally mobile, country A will export its labor intensive goods and country B its capital intensive goods. Thus, no capital movements will take place.

However, if country A sets a prohibitively- high tariff on imports of capital intensive goods, then the relative price of that good will rise. Subsequently, the factors will
move from the labor intensive sector to the capital intensive one and there is going to be increases in the production of the capital intensive goods that were imported before and decreases of the labor intensive products that were exported before the tariff was imposed. Therefore, country A will face with capital inflows from country B. To recap, increases of tariff lead to changes in the structure of trade which create a stimulus for capital to move across borders. This early Mundell’s contribution showed just one channel through which investments are substitute for trade.

Kojima and Ozawa (1984) tried to explain both FDI and international trade by using Mundell’s model as a background and Japan and USA as their case countries. They developed a theorem highlighting that “direct Foreign Investment should originate in the investing country’s comparatively disadvantaged industry (or activity), which is potentially a comparatively advantaged industry in the host country” (http://www.fep.up.pt/docentes/fcastro/chapter%202.pdf, pp. 6), while international trades are based on comparative advantage.

The theories of FDI are of two major types: microeconomic and macroeconomic. Apart from the industrial-organization theory, the other theories of the microeconomic approach that are the most important in the literature on MNEs are: the product-cycle theory, the appropriability theory, the risk-diversification theory, the intermediate-market-internalization theory and the eclectic theory.

The represented theories of the macroeconomic approach are namely: the currency-premium theory, the development-stage theory and the dynamic comparative-advantage theory.

Product-cycle theory

Vernon (1966) is the father of the product-cycle theory which he used in order to explain specific types of direct investments. In his research, the investors were U.S. companies that were investing in Western Europe during the period after Second World War. In addition, his study encompassed just certain types of products, mainly those products connected with high income, where main factor was capital and not labor.
At the beginning of his work, Vernon stated the assumption that any advanced country in the world has an equal possibility to access the “scientific knowledge and capacity to comprehend scientific principles” (Vernon, 1966, pp. 191). However, this belief does not mean that every advanced country has the same probability of the utilization of these factors in the process of creating a new product. The reason for this lies in the gap between factors and knowledge to make a final product. Thus, knowledge is an important part of the decision-making process.

According to Vernon, for those who are looking for unique opportunities, U.S. market is a perfect place for introducing new products, because its consumers have on average higher income than consumers in other markets and has a need for both consumer and industrial products. Thereafter, Vernon presented the hypothesis that “United States producers are likely to be first to spy an opportunity for high-income or labor-saving new products” (Vernon, 1966, pp. 194).

Vernon suggested three stages of production cycle: new product, maturing product and standardized product. During the first stage, producers have to be very careful while they are choosing a location for introducing their new product. The location will depend on the costs of the irreplaceable input they have to use and a need for daily communication between the producers and their customers, suppliers, etc. In Vernon’s case, products are produced and consumed in the U.S. market.

Once the product is being accepted and used at the market, producers may face a demand that could appear from any developed country. This is the moment when the producers have to start thinking to open a new production facility in the foreign country. Companies that Vernon observed used production cost and transportation cost of products in order to make the correct decision. Since these two costs are lower in the U.S. than the average cost of prospective production at the foreign market, U.S. companies will not make investments abroad.

However, if a producer decides to invest abroad and reaches full economies of scope and scale, then the only difference between the local and foreign facilities will be in labor cost. In addition, a company can start serving developing markets. Moreover, if the labor costs are lower than transportation costs of deportation of products from
foreign facility to home facility, then exports back from foreign market could be one of the possible scenarios, as well.

In the standardized product stage, the characteristics of the product itself and production process are well known; the product is familiar to consumers and the production process to producers. The production will shift to developing countries, because they have lower labor costs and developed countries are busy with introducing new products. In addition, home country and developed countries may start importing the product from developing countries.

To conclude, as the product goes through its stages, the location of its production is moving from innovating country through developed country until developing country, respectively. Later, Vernon said that there is a need for small modification of his theory, because it received a lot of criticism. While Clegg (1987) claimed that product-cycle model is not a complete theory of FDI, because it does not explain the ownership of production or extensions of existing investments by a mature foreign-investing nation, Dunning (1994) highlighted that this is the first model that tries to combine the determinants of international trade and foreign production.

Later on, this model, and more specifically the theory of foreign production, was expanded by Vernon’s students, especially Knickebocker. He pointed out that foreign production does not depend just on locational variables that influence the spatial distribution of economic activity of firms, but on their strategic response to these variables and to the anticipated behavior of their competitors. Knickebocker (1973) explained his view using the expansion of US MNEs abroad. He assumed that the foreign market is characterized by oligopoly instead of perfect competition and therefore, direct investments have to be explained by market imperfection rather than by differences in real or monetary rates of return. According to his view, when a MNE goes to a foreign market and is engaged in direct investments, the local competitors will respond in order to protect their market share. Consequently, the MNE will choose an aggressive behavior at the foreign market as an answer to oligopolistic rivals. To recap, he depends on product-cycle theory and considers it a sufficient reason for aggressive foreign expansion.
**Appropriability theory**

Magee (1981) established the appropriability theory where he claimed that MNEs, paying attention on possible loss of profit from their emulators, decide if they want to make FDI or simple sell their technology abroad. More specifically, every new idea by MNE (innovators) can be copied by imitators. The company’s profit will be thereafter reduced. If appropriability is high and innovators have to transfer sophisticated technology worldwide, they can easily protect their profits should they relocate it inside the firms, i.e. through their subsidiaries, because there is a less possibility of technology being copied or stolen. Conversely, if appropriability is low, it is going to be less profitable for MNE to create simple technology. Thus, the theory explains the reasons that lie behind the multinational company’s behaviour and why they create sophisticated technology rather than a simple one.

The appropriability theory is also connected with Vernon’s theory and it predicts that products from Stage I (new product) will move to Stage II (maturing product) when developed countries start copying the product and from Stage II to Stage III (standardized product) when developing countries will start doing the imitation.

In this theory, both innovators and emulators play important economic roles. Innovators do innovations and charge high premiums for their products. Imitators steal technology, decrease the prices and make new technology available for all.

**Risk-diversification theory**

The advantages of international equity diversification have been debated in both empirical and theoretical research. The theory of portfolio balance was developed by Markowitz (1952), but the first economist who documented the benefits of international diversification was Grubel (1968).

In his article published in March 1952 issued in Journal of Finance, Markowitz stated the trade-off faced by the investor: risk versus expected return. The decision that an investor has to make is not merely which securities to own, but how to divide his risk...
amongst securities. Furthermore, Markowitz has developed the techniques of linear programming to establish the critical line algorithm.

The critical line algorithm identifies all feasible portfolios that minimize risk (as measured by variance or standard deviation) for a given level of expected return and maximize expected return for a given level of risk. Markowitz’s concept was that diversification could reduce risk, but not generally eliminate it. Also, his hypothesis stated that “the investor places all his funds in the security with the greatest discounted value. If two or more securities have the same value, then any of these or any combination of these is as good as any other” (Markowitz, 1952, pp. 78). Moreover, his theoretical model shows that international capital movements are possible when interest rate differentials are zero or negative (Grubel, 1968).

Grubel (1968) calculated the empirical estimates of potential gains of American investors from international diversification of their portfolios. His research covered the period between 1959 and 1966 and his results show that U.S. investors could achieve superior risk and return opportunities by investing part of their portfolios in foreign equity market of 11 major developed countries.

The Markowitz theory was the foundation for modern portfolio management and many different theories emerged from that. 38 years after the publication of his article Portfolio Selection, Markowitz shared a Nobel Price with two more economists, Miller and Sharpe, for what has become a broad theory for portfolio selection.

*Intermediate- market- internalization theory*

As Rugman (1980) encapsulated in his work, MNEs would not exist in the world with a free trade model. However, because of imperfections, both in goods and market factors, trade and MNE activities are taking place. More precisely, when one country has some specific advantage as nation, trade occurs. When a firm has a specific benefit, FDI appears. When a country introduces tariffs and in that way makes imperfections in the goods market, then MNE will invest in its subsidiary in other country in order to avoid the custom duty. The same situation will happen with imperfections in the factor markets. This assumption was first spotted by Hymer and
explained in his Ph.D. thesis. However, in Hymer’s theory FDI is the result of country’s specific advantage or market imperfections due to firm specific favor.

On the other hand, Rugman stated that MNEs will create their own internal market in order to avoid the external imperfections. Once they establish their internal market, MNEs become independent. They will have more efficient use of information and know-how that circulate inside the market. Moreover, apart from the use of internal market for exploration of company’s specific advantages, MNEs are also using it in “an endogenous manner” (Rugma, 1980, pp. 376). Rugman conclude that MNEs are in the business of “internalizing externalities” and that is why market internalization should be the general theory of FDI.

**Eclectic theory**

Eclectic theory or OLI approach of FDI was developed by John Dunning (1961) and was presented at Nobel Symposium in Stockholm in 1976 for the first time. However, the idea appeared in Dunning’s PhD thesis. During that decade (1960s), a lot of researchers were trying to explain the growth and composition of foreign direct investments, as well as production financed by FDI. As stated above, Hymer (Hymer, 1960, 1976) was the first one who formed the separate theory of FDI and explained the reason why MNCs undertake foreign direct investments to operate in an imperfect market. At the same time, the others tried to explain why some companies are choosing one country rather than another. The pioneer at this field was Frank Southard. Yet, the researches about location became popular much later, when scholars had more complete statistics.

However, there was not one theory that will explain FDI from every aspect. The first approach did not explain why foreign firms had better outcomes that the domestic one, while the second approach could not answer to the question how the MNCs were choosing their location. In addition, both approaches did not even try to analyze the dynamic of FDI. Therefore, the product- cycle theory by Vernon (1966) was the first theory during that period that combined both FDI and trade as different stages of the product cycle. Yet, no one after Vernon integrated FDI and trade into one single theory.
In his PhD thesis, that later on was published as a book (Dunning, 1958), Dunning was trying to confirm the hypothesis that the US manufacturing affiliates that operate in UK, but share the same management as parent companies in US, should have at least the same results as their parent companies and perform better than the host competitors. This is, what he called, *ownership-specific effect*, where the intangible asset of the parent company is transferred to its branch that operates in another country. In case if US affiliates do not record better results than their indigenous competitors and their parent companies, it could be due to the non-transferable (i.e. immobile) characteristics of the US economy. Dunning called this effect *location specific component*.

However, the results of his research showed that the US affiliates did not perform so good results as their parent companies, but they were much more productive than their indigenous competitors. This result was explained party by ownership (O) and partly by location (L) specific characteristics. Dunning’s theory got it final shape in 1976, where he was asked to present his paper at the Nobel Symposium. Relying on his earlier researches, he knew that he has to give an answer to the question why some firms prefer to generate and/or exploit their O specific advantages internally, instead of selling and/or acquiring these or their rights, through the open market. Therefore, Dunning expended his O and L advantages and added *internalisation* (I) advantages, which became the third and inseparable part of his eclectic (OLI) theory. OLI theory presents “three potential sources of advantage that may underlie a firm’s decision to become a multinational” (Neary, 2009, pp. 1).

According to Dunning, a firm will start its foreign activities if and when three conditions are satisfied:

1. If it has O advantages in relation to firms of other nationalities that serve the same market. O advantages can be the possession of intangible assets or the advantage of the common governance which is exclusive for the firm that posses them, at least for the first period of time,
2. If the first condition is satisfied, for the company that has these advantages is more beneficial to use them itself, instead of selling or leasing them to the other foreign firm. They could use them or through existing value added chains or by adding the new ones. This is what is called internalization (I) advantages.

3. Considering 1. and 2. conditions satisfied, there must be some input at the foreign market that company would like to use it, otherwise foreign markets would be utilized just for export and domestic market would serve for production. This is the locational (L) advantage of countries.

Using the eclectic theory, the general predictions are the following:
…”At any given moment of time, the more a country’s enterprises possess ownership specific advantages, relative to enterprises of their nationalities, the greater the incentive they have to internalize rather than externalize their use; and the more they find it in their interest to exploit them from a foreign location, the more they (and a country as a whole) are likely to engage in international production. By the same token, a country is likely to attract investment by foreign enterprises when the reverse conditions apply. Similarly the theory can be expresses in a dynamic context; changes in the outward or inward investment position of a particular country can be explained in terms of changes in the ownership and internalization advantages of its enterprises, relative to those of other nationalities and/or changes in its location specific endowments relative to those of other countries, as perceived by its own and foreign enterprises” (Dunning, 1981, pp. 31).

Even though Dunning (2001, pp. 177.) wrote that “the purpose of the eclectic paradigm is not to offer a full explanation of all kinds of international production but rather to point to a methodology and to a generic set of variables which contain the ingredients necessary for any satisfactory explanation of particular types of foreign value-added activity”, the eclectic theory received a lot of criticism. It had been criticized for its broad and loose structure. Furthermore, one more criticism was about the relationship of three OLI variables: are they independent and are they necessary?

However, despite the criticism, the eclectic paradigm provides a helpful framework for categorizing recent analytical and empirical research on FDI (although not all of
them, but the biggest part) and gives a foundation to investigate the significance of factors influencing both the initial expansion of MNEs by foreign production and the subsequent growth of their activities (Dunning and Robson, 1987).

*Currency-premium theory*

Robert Aliber (1970) defines several questions that every theory of foreign direct investment should answer. The first question inquires the source of advantages that one MNE has over domestic companies in host country. Right after, why the U.S. companies were the source of FDI after Second World War? Moreover, the theory of FDI has to explain why the amount of FDI differs between sectors and/or industries? Finally, why foreign firms are investing in the U.S. in the same time when the U.S. firms are investing abroad?

Aliber explains that the key for the second question lies in the high management techniques and huge investments into R&D centres of the U.S. MNEs. Regarding the advantages, market imperfections are the reason why foreign firms prefer to make FDI rather than sell their advantages. Efficiency and economy of scale and scope clarify the differences in the invested amount between the sectors. These answers derive from the Hymer’s industrial-organization theory. However, this theory can not give an explanation for the last question. According to Aliber, the cause of location of FDI “involves capital market relationships, exchange risk, and the market’s preferences for holding assets denominated in selected currency” (Aliber, 1970, pp. 20).

Aliber’s main hypothesis suggests that the world is divided into areas with different currencies which are determinants of the motive for FDI. Also, the differences in capitalization rates determine if a country is going to be a source or a host country for FDI. His findings emphasize that the investor country is going to be the one with the high capitalization rates and vice-versa.

Aliber assumed that a source country has one advantage and he called it “patent”. This patent is a capital asset. The company is facing the decision whether to satisfy foreign demand by exporting its product or to exploit its patent in a foreign country. In
situation with existence of just customs areas, a company can produce a small amount of products in every area.

However, in situation with unified currency areas, but separate custom areas, “FDI would become a problem in the economies of location” (Aliber, 1970, pp. 23). Most likely, demand in each customs area would be satisfied from domestic production (production from that area). Also, tariffs would be a type of transportation cost.

On the other hand, if customs areas were unified and currency areas were separate, interest rates in different areas may differ, because exchange rates might be changed. The decision of a company to expand abroad will depend on the costs of doing business in the host country and differences in capitalization rations between the areas.

This theory gives explanation why the U.S. companies were the largest net source of FDI (during the years when Aliber wrote his article). Also, the Netherlands and Switzerland were as well a large source of FDI, because their currency had a high premium. Furthermore, FDI are going to be larger in the more capital-intensive and research-intensive industries.

Development-stage theory

For the first time in 1979, the economist John Dunning introduced the idea that foreign direct investment (both outward and inward) is connected to the country’s economic development (Dunning, Narula, 1998). He underscored five stages through which countries have to pass in order to become outward or inward direct investors. This concept is called investment development path- IDP and relies on size and arrangements of “the competitive or ownership specific (O) advantages” (Dunning, 1998, pp. 1) of the host company in the observed country; competitiveness of the location of sources of host country (L) and the level to which the foreign company is willing to exploit its O advantages with the location-bound funding of host country (I).
In the first stage of IDP, L of host country is meager to draw attention from foreign companies. The reasons lie in low income of host country, its unsuitable government policies, bad infrastructure, low level of educated and trained employees, etc. As a result, government will take two steps. First, it has to improve the characteristics mentioned in the previous sentence. Second, government will introduce some measures that will affect the structure of its market.

While outward direct investments stay at the very low level, inward investments are rising during the second stage. The O benefits of companies in home country will increase and the sphere of interest of foreign firms will not be just the manufacturing and primary sector, but “semi-skilled and moderately knowledge-intensive consumer goods” (Dunning, 1998, pp. 4). Towards the end of this stage, country’s rate of outward investment is growing.

In Stage 3, host country is facing with a decrease of inward direct investments, but an increase of outward investments. The O advantages in labor-intensive sectors will decay, as well as the O advantages of foreign firms, because they have competition in a form of domestic firms in the same sector. The country’s outward investments will go to the countries that are going through lower stages of IDP.

In order to compete with domestic firms, foreign firms will improve their O advantages by introducing new technology, new marketing strategies and upgraded managerial skills. In the same time, the L advantages are settled at the high level and foreign companies will shift their exploitation through “cross border hierarchies” (Dunning, 1998, pp. 5). They will be able to make economies of scale and invest in more technology intensive and high value added sectors.

The role of government during this stage will be to attract investments to those sectors that have the strong L advantages but weak O advantages. Simultaneously, they will encourage domestic companies to make outward investments in sectors that are facing with strong O advantages, but anemic L advantages.

A country is in Stage 4 when its outward FDIs are higher than its inward investments and/or when the rate of growth of outward direct investments is rising quicker than
the rate of inward FDIs. Domestic companies are strong competitors to foreign firms and they can also make outward FDI to the countries that are in the lower stages or even in the same stage. On the other side, inward FDI into Stage 4 countries will be mostly from the countries that are in the same stage and “directed towards rationalized and asset seeking investment by firms” (Dunning, 1198, pp. 6).

In addition, the country’s biggest competitors are the countries in the same stage, so government does not make any direct intervention in the market anymore. Instead of that, government is trying to boost domestic resources and capabilities, decrease transaction costs and help the market to operate efficiently.

During the last, 5th stage, both inward and outward FDIs are increasing. At the same time, cross border transactions are mostly done by and within MNEs. Furthermore, the O advantages of MNEs will be now connected to company’s ability to “acquire assets” (Dunning, 1998, pp. 8) and to exploit their advantages in the most efficient way. The country in this stage will face two types of inward FDI. First type will be from the countries at lower stages of IDP. The second type, of course, will be from the countries that are in the stage 4 and 5. Government will pay attention on the behaviour of other governments and will have a more aggressive role in promoting the market. In addition, it will collaborate with business enterprises in order to cut down all types of costs.

*Dynamic comparative- advantage theory*

Kojima (1973) defines two types of FDIs: trade oriented (the Japanese type) and anti-trade oriented (the American type). This classification is a backbone for one more macro theory introduced by Kojima.

Kojima stated that there are three categories of foreign direct investments according to their main motives: resource- oriented, labor- oriented and market- oriented. The motive behind the resource- oriented direct investments lies in the need of investing country to “increase imports of its comparatively disadvantageously produced or domestically unavailable commodities” (Kojima, 1973, pp. 2).
For advanced country where majority of its products are capital and knowledge intensive, it is profitable to transfer its labor intensive, traditional industries to countries with cheaper labor costs. Resource-oriented and labor-oriented are pure trade oriented investments. The third category, market-oriented, can have two classifications. If host country introduces trade barriers on final product, the investor country will export some parts, components and equipment necessary to finalize the production in the host country. In this way, the host country promotes its “import-substituting industry” and FDI is trade-oriented (Kojima, 1973, pp. 2). Yet, if this kind of policy has a positive effect on economy of host country, then this type of FDI belongs to the group of labor-oriented investments.

Kojima introduced two more additional types of FDI. Oligopolistic FDI that are anti-trade oriented and are found in American investments. The last one is internalization of production and marketing investments made by the integration of MNEs.

According to Kojima, Japan is investing in developing countries, mostly in their primarily sector in order to assure import of primary products that have huge importance for its industry. In addition, the country is also investing in the manufacturing industries or in any other industry that has a comparative advantage over the same sector in Japan. Thereafter, Japanese FDI is trade-oriented. On the other side, Kojima stated that the U.S. transfers their industries overseas that have a comparative advantage over the same industry in host country. He added, as well, that his statement is supported by Vernon’s and Hymer’s definitions of FDI. Moreover, American FDI is taking place to innovative and oligopolistic industry groups only and in that way, is anti-trade oriented, because it works “against the structure of comparative advantage” (Kojima, 1973, pp. 7). American industries establish foreign branches abroad, reduce host country’s comparative advantages, increase American imports which will result in country’s balance of payments problems and exports of jobs.

To sum up, if investor country transfers capital, know-how, technology, etc. from its comparatively disadvantageous industries to host country where those industries have comparative advantages, then FDI is considered to be trade-oriented and helps “the reorganization of the international division of labor and trade between them and
upgrade the industrial structure of both countries” (Kojima, 1973, pp. 8). On the contrary, FDI is anti-trade oriented if it comes from the industry that has comparative advantages, because it blocks reciprocal upgrading industries of both countries and rearrangements of international trade.

2.2. The Market Transaction Cost Approach

According to Verbeke (2009), the eclectic theory of Dunning, together with transaction cost approach (TCA) provide the foundation for the current theory of MNE. More precisely, these two theories determine the cornerstone for a various number of theoretical and empirical analyses which characterizes research on MNEs. While OLI theory sets up a main framework to explain FDI decisions with ownership, location and internalization, TCA approach sets up the framework which explains how international expansions occur. Therefore, the market transaction cost approach is going to be described in same detail.

The first ideas of this theory can be found in the works of Coase (1937), Commons (1934), Knight (1921), Simon (1955), while the founder of the modern TCA is considered to be Williamson (1975, 1979, 1981, 1983, 1985, 1991, 1998, 2000, 2010). Meanwhile, there are some authors which have made a significant contribution to the current understanding of the theory, such as Alchian and Demetsz (1972), Porter (1980), etc.

However, Williamson (1975) is the most distinguished contributor to our understanding of TCA. His paper (1975) “Markets and hierarchies, analysis and antitrust implications” and his book (1985) “The economic institutions of capitalism” are his most cited works on TCA.

Williamson (1981) asserted that the TCA to the study of economic organization regards the transaction as the basic unit of analysis and holds that an understanding of transaction costs economizing is central to the study of organizations. As compared to other approaches, transaction cost economics (1) are more micro-analytic, (2) are more self-conscious about its behavioural assumptions, (3) introduce and develop the economic importance of asset specificity, (4) relie more on comparative institutional
analysis, (5) regard the business firm as a governance structure rather than a production function, (6) place greater weight on the ex post institutions of contract, with special emphasis on private ordering (Williamson, 1987, pp. 17-18).

Therefore, Williamson (1985, pp. 61) settled his theory on several key assumptions about human behaviour and environmental characteristics. These assumptions elucidate why firms may face superior costs for market-based transactions and why firms may be relatively more efficient than markets at organizing transactions. There are two assumptions about human and human behaviour.

1. Bounded rationality (BR) is the first one. Herbert Simon developed bounded rationality in response to strict rational models in neo-classical economics, because he wanted economists to incorporate realistic decision-making processes into their research (Bromiley, 2005). Simon’s definition of BR is “human behavior is intendedly rational but only limitedly so” (Simon, 1961: xxiv) because of restricted cognitive capacities. In formulating TCE, Williamson primarily relied on Simon’s definition of BR. Williamson employs the bounded rationality assumption in TCE to suggest that all complex contracts are unavoidably incomplete (Williamson, 2000), which leads to significant contracting issues in the face of opportunism. He suggests that contract incompleteness arises from two distinct mental bounds: cognitive limitations and verbal limitations. The cognitive limitations prevent actors from generating all possible contingencies to include in the contract; while verbal limitations attenuate the contract’s content, because an idea cannot be included if it cannot be expressed in words. Together, Williamson stated that these two limitations naturally led to incomplete contracts because actors could neither imagine all of the possible contingencies that should go into the contract nor articulate them. In the presence of opportunism, Williamson’s second behavioral assumption, incomplete contracts, lead to serious contractual difficulties, that can prevent exchanges from occurring.

2. Opportunism is the second assumption. Williamson (1985) has insisted that opportunism plays an essential role in his analysis. He argues that under conditions of imperfect information, all transactions are affected by the problem of ‘self-interest seeking with guile’. Given the opportunity, agents may serve their own interests rather than those of the other party to the contract. Hence, according to Williamson,
potential or actual opportunism emerges as the major source of the ‘transaction costs’ involved in monitoring and enforcing contracts.

According to Williamson and Ouchi (1981), one of the tasks of this theory is to organize transactions that will economize bounded rationality, while also safeguarding those transactions against opportunism.

Beside the two above explained assumptions, TCA also deals with three assumptions about environmental characteristics. The first one is asset specificity. Williamson defined asset specificity as “durable investments that are undertaken in support of particular transactions, the opportunity cost of which investment is much lower in best alternative uses or by alternative users should be original transaction be prematurely terminated” (Williamson, 1985, pp. 55). In contrast to the neoclassical economics which treats exchanges of standard nature, transactions according to TCT often involve peculiar attributes so that contracts cannot be written costlessly. In this respect Williamson (1985, pp. 53) states that “transactions that are supported by investments in durable, transaction-specific assets experience ‘lock in’ effects, on which account autonomous trading will commonly be supplanted by unified ownership”. Hence contractual and organizational safeguards (i.e., firms) become necessary for transactions involving these nonstandard assets.

It is possible to distinguish six different types of asset specificity: site specificity, physical asset specificity, human asset specificity, dedicated assets, brand name capital and temporal specificity (Williamson, 1989, pp. 141-142). The degree of asset specificity ranges from nonspecific to mixed to idiosyncratic (Williamson, 1979, 1985). The asset specificity assumption might be called the locomotive or driving assumption of TCT as Williamson (1985, pp. 56) himself states “the importance of asset specificity to transaction cost economics is difficult to exaggerate”.

Uncertainty is the second, straightforward assumption. Information about past, current and future states are not perfectly known, for various reasons. Without the existence of bounded rationality and opportunism, uncertainty would be much less of a problem because general rules would generally prevail (Williamson, 1985). However, given these assumptions uncertainty is especially critical. Uncertainty arises from, for
example, not knowing about future states or/and the inability to determine who is more prone to behave opportunistically (Williamson, 1993). Because it is very difficult to determine ex ante who will engage in opportunistic behavior, contracts are not costlessly written and enforced (Williamson, 1993).

Last, but not least assumption is frequency of the transactions. If transactions are infrequent then the costs of alternative governance structures may not be justified. A larger frequency or larger volumes of transactions, however, gives rise to justification for alternative governance structures such as the firm. Therefore the volume, number, and/or temporal spread of transactions are important to be considered because even given the previous assumptions if they are infrequent alternative governance structures may not be necessary or feasible. The degree of frequency ranges from occasional to recurrent (Williamson, 1979, 1985).

To recap, Williamson (1975) identified three determinants of the transaction costs: (a) the agents’ bounded rationality, that originates incomplete contracts due to the impossibility of foreseeing, in the contracting moment, all future situations; (b) opportunism that is originated when one of the partners pursues his own short-term self-interest; and (c) the assets specificity, this originates that the owners of production factors will incur costs if they deviate the assets to another use, and leads to the conclusion that the best use is improved by internalization. Internalization will be preferred to externalization if three conditions are verified: (A) The degree of the transaction uncertainty is high - that is, if it’s difficult to guarantee the execution of the contract - the supplier may have an opportunistic behavior that impairs the customers; (B) If the assets involved in the transaction are specific - if just a restricted number of suppliers possess the necessary equipment to the accomplishment of the activity, his bargaining power increases - affects negatively the price of the transaction; (C) If the transaction is the recurrent type, that is, if the firm has to buy regularly large quantities of the product to the suppliers these will be able to demand better conditions.

Williamson (1985) stated that the TCA faces some limitations: it is crude, it is given to instrumentalist excesses and it is incomplete. The crudeness of transaction cost economics shows up at least four ways: the models are very primitive, the tradeoffs
are underdeveloped, measurement problems are severe, and there are too many degrees of freedom. Even thought Williamson by himself stated these limitations, the TCA has received strong criticism. The most common criticism is that the central assumptions of TCT are flawed. For example, the assumption of opportunism has been criticized for ignoring the contextual grounding of human actions and therefore presenting an undersocialized view of human motivation and oversocialized view of institutional control (e.g. Granovetter, 1985). Williamson responded to such criticisms by re-stating that in his model, opportunism or bounded rationality may differ from person to person much as personality or intelligence do, but when transaction costs change they do so because of changes in the environment, not in the person (Williamson, 1993).

Additionally, Ghoshal and Moran (1996) have attacked the validity of TCA on the grounds that the opportunism with guile is bad practice. TCA is normative or prescriptive theory and if opportunism with guile assumption is taken seriously by managers there will be negative consequences for organizations. Application of TCA will increase the occurrence of opportunism rather than decreasing it. Ghoshal and Moran (1996) also have criticized TCA for failing to point out how opportunism is reduced through alternative governance structures. Jones has argued that the problem with TCA is Williamson’s description of the determinants of opportunism; and that there is a difference between the propensity to behave opportunistically (a behavioral trait) and the psychological state of opportunism. The same uncertainty condition that may lead some individuals to behave opportunistically it may lead others to trust. Under certain circumstances trust or cooperation may be the most rational and efficient self-interested behavior. The propensity to trust or opportunism as a state is a much more realistic assumption about human behavior given uncertainty (Jones, 1998).

The TCT has been further criticized as only looking into two relative extremes methods of facilitating transactions that do not really exist. The critics argued that the market versus hierarchy dichotomy is somewhat misleading since many transactions are actually carried out through a hybrid governance form (e.g., Hennart, 1993). Refuting, Williamson (1985) stated that the distributions of transactions would be a “bell-shaped” normal distribution if discrete transaction would be located at the one
extreme (market), highly centralized and hierarchical transactions on the other, and hybrid transactions (franchising, joint ventures, and other forms of nonstandard contracting) in between.

A major critic to TCT is its tautological nature. Eccles (1987) claimed that Williamson failed to operationalize the measurements of transaction costs and there is a tautological flavour in his arguments. Eccles (1987: 604) argued that “ex-post arguments can usually be found that any given structure economized on transaction costs by simply defining these costs in a necessary way. When this can not be done, the argument can be made that the existing structure is a ‘mistake’ and will eventually be replaced by one that does economize on these costs”. The simple comparison of transaction costs under different governance structure is meaningless because the governance structure used to manage a transaction changes the nature of a transaction (Dow, 1987). Jones (1998) also noted that transaction costs appear on both the left and the right hand sides of the causality equation, which is one of the typical attributes of tautologies. Although Williamson distinguished ex ante costs (such as negotiation costs) from ex post costs (such as costs associated with contractual failures), it is hard to find any costs that are not transaction costs. Methodologically, case studies have been the prevalent means of assessing TCT because the main variables of interest to TCT researchers, specifically asset specificity, uncertainty, frequency - are difficult to measure consistently across firms and industries (Klein & Shelanski, 1994).

However, TCT does not claim itself as panacea for everything; it only attempts to explain a portion of the organizational phenomena: why and under what conditions transactions are organized in certain ways (Williamson, 1979). At best, TCT deals with relative efficiency question. Therefore, while deserving a prominent place among the theories in organization, TCT can and should not be used exclusively to explain organization phenomena.

Once motivated to expand internationally, companies confront challenges and risks which they need to mitigate and overcome. The most well-know risk is the liability of foreignness, which is defined as additional cost for firms when they do business abroad. Uncertainty is another important risk facing companies when they expand abroad. One social aspect to the challenge is suggested by the concept of “physic
distance”, which concerns the cultural, linguistic, institutional level and other differences between home and host countries. In terms of institutional aspects, scholars have found that high regulatory control affects firm negatively in the host countries, thus influencing incoming companies’ strategies. Although firms need to deal with the local requirements and cope with these regulations, the unexpected additional costs may offset the benefit of internationalization.
Chapter III

Foreign Direct Investment in Serbia
CHAPTER III. Foreign Direct Investment in Serbia

3.1. FDI in Serbia since 1990

Serbia has a 45-year long experience with foreign direct investment (Ristic, 2004, pp. 127). The Socialist Federal Republic of Yugoslavia was the first socialist country that allowed the entry for foreign investments and foreign capital. Investments were regulated by special law that during 1967-1989 period were granted in form of joint ventures only (NBS, http://www.slideserve.com/reid/foreign-direct-investments-in-serbia). Until 1988, the SFR of Yugoslavia received DM 90 million through 367 agreements (Ristic, 2004).

In 1989, the government changed the law and introduced two new models of foreign investments: ownership (where a foreign investor may participate in the management and contribute in the ownership of the enterprise) and concessions and the possibilities of financial design. These two laws made the country more attractive for investments. Data show that until the end of 1991, Yugoslavia signed 5,726 contracts with foreign partners (Ristic, 2004).

1990 was the last year of brotherly coexistence of six republics. The breakdown of Yugoslavia was detrimental for Serbian economy. According to Popov (2004), since 1991 some very unfavourable political and economic developments resulted in the catastrophic decrease of FDI inflow, the collapse of GDP per capita, and the diminishing of the real value of salaries and other personal income in Serbia. The collapse of Yugoslavia, the beginning of civil wars and the sanctions imposed by the UN, led to hyperinflation in 1993. In 1994, the inflation was under control and the main goal of Serbian government was to provide the basic foodstuff for the citizens. As a final stage, NATO bombed Serbia in 1999. In October 2000, Serbia set a new political and economic path. It opened its door to the world and international blockade was abolished.

As a result of internal problems, wars, foreign obstacles and pressure, FDI has been limited during 1991-2000 period. The exception was the year 1997, when
privatization of Telecom\(^1\) was made. The cumulative influx of FDI in the 1992-2000 period was $1.44 billion (Ristic, 2004, pp. 127). It is interesting that, in 2000 and 2001, the inflow of FDI in Serbia was even lower than in Albania (SIEPA Official Website).

**Figure 3.1.**
FDI inflows to Serbia and Montenegro\(^2\), 1992-2000, millions of US dollars

2001 was a starting year of transition in Serbia. The economic reforms started when the new government was established, so no one was expecting a huge wave of FDI in 2001. However, for that year, the inflow of FDI was more than triple compared to the previous year. $177 million were a good start and it was forecasted that 2002 would be a starting point for a serious, continuing and growing inflow of FDI.

The scenario for inflow of direct investments was the same as for the other transition countries. First, investments were coming through privatisation of the state enterprises. Then, as the political and economic stability was increasing, foreign partners were investing in a few sectors, mainly food and tobacco. Finally, FDIs were

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1 Telecom is a Serbian telecommunication company, privatized in 1997, of which 49 per cent was sold to Italian and Greek partners.

2 Montenegro and Serbia used to be part of Federal Republic of Yugoslavia, constituted in 1992 after the disintegration of the Socialist Federal Republic of Yugoslavia, that was transformed into the State Union of Serbia and Montenegro in 2003; in June 2006 Serbia and Montenegro became two independent states. Serbia’s southern province, Kosovo, officially remained part of Serbia after the 1999 conflict (according to UN SC Resolution 1244), but in February 2008 Kosovo proclaimed political independence.
expanding into trade, automotive industry, electronics, telecommunications and financial services (Filipovic, Hadzic, Pavic 2006).

Table 3.1.
FDI inflows, 2001-2007, millions of US Dollar

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serbia</td>
<td>177</td>
<td>503</td>
<td>1,389</td>
<td>987</td>
<td>1,616</td>
<td>5,474</td>
<td>3,569</td>
<td>3,363</td>
<td>2,404</td>
</tr>
</tbody>
</table>

Source: UNCTADstat

FDI in Serbia were increasing, but not as much as it could. Amid all internal political problems, investments were suffering. Furthermore, the assassination of the prime minister interrupted the process of reforms until the last half of 2003. A consequence of bad policy can be seen in 2004, where the inflow of FDI reached just $1 billion. In 2006, Serbia attracted a record amount of FDI, up to $5.2 billion, proving it was one of the most attractive target countries for investments and this trend continued in 2007 reaching its level of $5.94 billion. However, FDI inflows declined in 2008, at $5.4 billion. In 2009, a further decrease of investments was caused by the global economic crisis and in 2010 the level of FDI plummeted at $2.9 billion.

Privatization and selling companies and banks were the main sources of FDI in Serbia during this period. According to Petrovic and Stankovic (2009), 49% of the total FDI value in Serbia was a result of privatization. More precisely, 17 firms invested 93.70% of total FDI, and 8 from these companies did that through privatization. Companies that were privatized were from telecommunication sector, banking sector, cement, oil and tobacco industry.
The Agency SIEPA has its own statistic that is based on their research and documents published by foreign direct investors. According to SIEPA record, IFDI to Serbia by mode of entry is:

<table>
<thead>
<tr>
<th>Mode of entry</th>
<th>Value of investment</th>
<th>Share in total value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenfield</td>
<td>7.193,7</td>
<td>32,0%</td>
</tr>
<tr>
<td>Brownfield</td>
<td>1.485,9</td>
<td>6,5%</td>
</tr>
<tr>
<td>Privatization</td>
<td>6.579,4</td>
<td>29,0%</td>
</tr>
</tbody>
</table>

Source: SIEPA

In 2011, Serbia attracted $6 billion of foreign direct investments, which made it to be the best performer in Southeastern Europe (UNCTAD World Investment Report, 2012).

3 Due to the lack of official data on the amount of investments by individual companies, these data were obtained based on research conducted by SIEPA and include both realized and planned investments in the different stages of implementation. Although SIEPA strives to provide accurate information, the Agency does not accept responsibility for any inaccurate or incomplete data in this table.
Table 3.3.
FDI inflows, 2010-2016, millions of US Dollar

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Serbia</td>
<td>4932</td>
<td>1299</td>
<td>2053</td>
<td>1996</td>
<td>2347</td>
<td>2299</td>
</tr>
</tbody>
</table>

Source: UNCTADstat

In 2012, the country experienced a dramatic drop in foreign investments, attracting just 78 projects. $659 million of FDI created 10,302 jobs in the country, which ranked it sixth in Europe for FDI job creation (Ernst & Young’s attractiveness survey 2013, pp. 17). In 2013, the dominant component of overall foreign investments was brownfield investments. The private equity group KKR (United States) acquired pay-TV and broadband group SBB/Telemach, for $1 billion. Abu Dhabi’s Etihad Airways acquired a 49% stake in Jat Airways, the Serbian national flag carrier (UNCTAD World Investment Report, 2014, pp. 71). In 2014, a net FDI inflow of $2.7 billion was recorded, mostly in manufacturing, finance and trade sectors. The most important foreign partners were the EU, Russia and Switzerland (NBS Official Website).

3.2. Law on Foreign Investment in Serbia

Foreign direct investments in Serbia are regulated by the Law of Foreign Investments (LFI) passed in 2002, when still the Federal Republic of Yugoslavia existed. That is why the Serbian government is preparing a new LFI. Until then, this Law is in force. The aim of the new Law will be to create a business-friendly legal, economic and political environment (Doing Business and Investing in Serbia Report, 2013, pp. 11). A long term goal is to create a Law that will follow the European Union legislation because of the future integration.

According to the LFI, Article 2 says that a foreign investor is:
1. a foreign entity whose headquarters are located abroad,
2. a foreign natural person,
3. a national of Serbia who has residency abroad for a period exceeding one year.
Article 3 gives the definition of FDI:

1. Investment in a local company through which a foreign investor acquires a stake or shares in the initial capital of that company,
2. Acquisition of any other property rights in the sense of a realisation of a business interest in Serbia.

A foreign investor, alone or with another foreign or domestic investor, can establish a company or buy shares or stock in an existing company (Article 4).

According to Article 8 of the LFI, a foreign investor has the same rights, status and duties as domestic natural and legal persons and her or his company operates under the equal terms and manners as Serbian company. Furthermore, a foreign investor enjoys full legal security and protection, the same as domestic companies (Article 9). In accordance with the Article 12, a foreign investor may transfer financial assets related to the foreign investments without any further limitation of delay. As stated in Article 15, a foreign investor enjoys tax and custom benefits.

All specified Articles from the Law promote conditions for stimulating foreign direct investments in order to help development of the economy and achieve social progress, enlarge its competitiveness, enhance its position at the international market and import the advanced technology and, at the same time, increase the export level.

Apart from the LFI, there are some other following laws that enclose the legal framework of FDI in Serbia:

- Law of Foreign Exchange Transactions (new law enacted in 2006)
- Law of Foreign Trade Transactions (enacted in November 2005)
- Customs Law (enacted in 2003, amended in 2005)
- Set of privatization laws:
- Privatization Law
3.3. FDI in Serbia: Stylized Facts

3.3.1. Distribution of FDI inflows to Serbia by manufacturing and services sectors

The services sector of Serbia has constantly been the largest recipient of FDI, attracting more FDI than the manufacturing sector. While stock of FDI in manufacturing reached € 13114, 86 million in 2015, that number is much higher for services sector, reaching € 28670, 77 million in 2015. The impact of FDI in the services sector is especially powerful when it comes to the number of jobs that are supported by foreign firms in this sector. The ration is 1:3, namely three times more people work in services sector than in manufacturing (Statistical Office of the Republic of Serbia, Official Website).
Since the manufacturing sector encompasses a number of different industries, a deeper breakdown of the sector is required in order to get a clearer picture of the FDI inflows. According to EUROSTAT classification, there are four subsectors within the manufacturing sector: low, medium-low, medium-high and high technology subsectors. For the period 2003-2015, medium-high technology subsector received the highest amount of FDI inflows, in total € 5627,87 million. However, the fastest growing subsector was low technology subsector, experiencing compound annual growth of nearly 20% from the observing period and collecting a total of € 3626,90 million of FDI inflows. Knowing that low-technology subsectors are generally less capital-intensive and more labor and/or resource intensive, this kind of FDI inflows distribution between subsectors was expected. Serbia has no entry barriers, while low labor and raw-material costs are low. Medium- low technology subsector is at the third place, reaching € 3215,62 million in total. However, this amount of FDI inflows to this subsector was primarily a result of very high inflows only during the period 2009-2011. All the other projected years, the inflows to this subsector are the lowest on average. Even lower than the inflows to the high technology sector, that is in the last place, but it shows the linear and steady growth throughout the years.
In the services sector, EUROSTAT offers the following classification: low and high knowledge intensive service subsectors. It is revealed that low knowledge intensive service subsector is a primer recipient of the FDI inflows, receiving in total € 17769,05 million during the period 2003-2015, while high knowledge intensive service subsector collected in total € 11276,04 million for the same period. More precisely, the graph below shows the percentage of FDI inflows through the period.
3.3.2. Distribution of FDI inflows to Serbia by home country

Data of National Bank of Serbia is the only official source on foreign direct investment in the country. It is important to note that data on FDI made in cash, were obtained through commercial banks by National Bank of Serbia. As a result, data on foreign investments in cash are calculated by the country of payment and not the country of investment and are heavily dependent of the country in which the company that invests has opened bank account through which payment are made. Also, the National Bank of Serbia publishes and aggregates data on foreign direct investment by country of payment and branches activities, while official data on investments by individual companies are not available.

After political changes at the beginning of this century, Serbia became an attractive investment destination. During 2000-2009 period, the EU countries were the investment leader, especially Austria, Greece and Germany. According to official statistics, only one of the top ten investor countries was not the EU member (SIEPA, 2010, Investment Guide to Serbia, pp. 13). A significant flow of FDI was also coming from the USA. However, it was difficult to follow it, because the American companies were implementing their projects through European subsidiaries. In 2009, the structure of FDI by countries of origin was dominated by Russia (SIEPA, 2010, Doing Business in Serbia, pp. 63).
Table 3.4.
Net FDI in cash by country of origin, 2000-2009, millions US Dollar

<table>
<thead>
<tr>
<th>Country</th>
<th>Total investments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2,955</td>
</tr>
<tr>
<td>Greece</td>
<td>1,753</td>
</tr>
<tr>
<td>Norway</td>
<td>1,556</td>
</tr>
<tr>
<td>Germany</td>
<td>1,533</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,306</td>
</tr>
<tr>
<td>Italy</td>
<td>993</td>
</tr>
<tr>
<td>Slovenia</td>
<td>702</td>
</tr>
<tr>
<td>France</td>
<td>513</td>
</tr>
<tr>
<td>Hungary</td>
<td>477</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>453</td>
</tr>
</tbody>
</table>

Source: National Bank of Serbia

The situation stays the same for the period 2010-2015. According to SIEPA sources, EU countries dominate the FDI environment. Ranking FDI by the number of projects, Italy kept the first place with 16.3%, followed by Germany and Austria (SIEPA, 2015, Doing Business in Serbia, pp. 12). In addition, during this period, Serbia was also a destination for FDI from middle-income countries, such as Turkey, Azerbaijan, China and high-income like UAE. Serbian government sees this trend as a possible “second wave” of privatization (Serbia, an attractive investment destination, 2014, pp. 13).
Table 3.5.
FDI inflows to Serbia, 2001-2012, millions of US Dollar

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>European Union</td>
<td>29</td>
<td>287</td>
<td>1002</td>
<td>554</td>
<td>1333</td>
<td>2439</td>
<td>2532</td>
<td>2317</td>
<td>1159</td>
<td>1093</td>
<td>2378</td>
<td>124</td>
</tr>
<tr>
<td>Russia</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>12</td>
<td>12</td>
<td>13</td>
<td>30</td>
<td>560</td>
<td>5</td>
<td>70</td>
<td>19</td>
</tr>
<tr>
<td>United States</td>
<td>2</td>
<td>16</td>
<td>10</td>
<td>18</td>
<td>17</td>
<td>-26</td>
<td>61</td>
<td>54</td>
<td>18</td>
<td>77</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>China+ Hong Kong&lt;sup&gt;4&lt;/sup&gt;</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>25</td>
<td>3</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: UNCTAD

During 2000s, the EU was the leader in receiving FDI. After the financial crisis, the EU lost its leader position and from 50% of the global FDI inflows in the early 2000s, its share fell below 20% (Vetter, 2014). Furthermore, Vetter also states that 60% of all inward FDI flows into the EU are intra-EU investments. Still, the EU plays a crucial role for developing and countries in transition in creating jobs, establishing business and investing in their economy. For Serbia, the EU is the most important partner and the biggest investments come from the European Union countries. More precisely, the biggest investors in Serbia are Italy, Germany, Austria and Greece (UNCTADstat).

<sup>4</sup> Hong Kong, together with the Cayman Islands and British Virgin Island is an offshore financial centre and a lot of Chinese investments go first there and then to the final destination. That is why we have to observe outflows of both China and Hong Kong.
Table 3.6.
FDI inflows to Serbia, 2000-2014, millions of Euro

<table>
<thead>
<tr>
<th>Country</th>
<th>Total investments to Serbia</th>
<th>Share in total value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU countries, from which:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>3.140.6</td>
<td>13.8%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.555.0</td>
<td>6.8%</td>
</tr>
<tr>
<td>Austria</td>
<td>2.692.2</td>
<td>11.8%</td>
</tr>
<tr>
<td>Greece</td>
<td>1.949.4</td>
<td>8.5%</td>
</tr>
<tr>
<td>Russia</td>
<td>1.167.3</td>
<td>5.1%</td>
</tr>
<tr>
<td>USA</td>
<td>2.789.8</td>
<td>12.2%</td>
</tr>
<tr>
<td>China</td>
<td>41.1</td>
<td>0.2%</td>
</tr>
<tr>
<td>UAE</td>
<td>53.6</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

Source: SIEPA

Austria

For Austria, 2007 and 2008 were boom years as OFDI flaws reached record values, $39 and $29.5 billion respectively. Yet, due to the crisis there was a decline of almost 70% in Austria’s outward direct investments. However, 2011 was the recovering year for this country. During a period 2000-2013 total OFDI was $195.6 billion. The data is presented in the figure below.

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5 Due to the lack of official data on the amount of investments by individual companies, these data were obtained based on research conducted by SIEPA and include both realized and planned investments in the different stages of implementation. Although SIEPA strives to provide accurate information, the Agency does not accept responsibility for any inaccurate or incomplete data in this table.
While strong decrease in Austria’s OFDI, in their majority they remain regional, rather than global (Sauvant, Mallampally and McAllister, 2013). Austrian MNCs are interested in countries that are members of the EU, as well as countries of Central, East and South-East Europe. The group of authors, Sauvant, Mallampally and McAllister (2013), emphasize that, ranking by capital, for Slovenia, Croatia, Bosnia and Herzegovina, Romania, Serbia and Bulgaria, Austria is the most important foreign investor.

Austria plays an active role as an investor in Serbia. The activities of Austrian firms can be explained by geography, but also by cultural and historical ties. The first direct investment that came to Serbia from this country was made by Raiffeisen Bank International in a form of Greenfield investment. It was a first bank established with 100% foreign capital in Serbia after the political changes in 2001 (Raiffeisen Bank Official Website). The value of the investment was €500 million (SIEPA).

A year after, Austrian company OMV came to Serbia in the sector of oil production, also through Greenfield investment worth €140 million. The main activity of this company is to trade with oil and oil products through its 59 petrol station in Serbia with a market share of 20% (OMV Official Website).
In 2005, Erste Group acquired a 83.28% stake in the share capital of Novosadska banka. According to agreement, Erste Bank paid €73.17 million. Until 2009, Erste Bank invested additional €35 million (Erste Group Official Website).

One of the biggest Greenfield investments was made by Mobilkom Austria in 2006. The value of the investment was €570 million, including €320 million that the company spent on acquiring its operating license in Serbia (VIP Mobile Official Website). According to the latest annual financial report, the company has €764 million profit, around 2 million users and 20% of market share (http://www.b92.net/biz/vesti/srbija.php?yyyy=2013&mm=05&dd=07&nav_id=711662).


Germany

The boom years for German OFDI were 2006 and 2007, when the annual German flow of direct investment reached a value of $170 billion (UNCTADstat). In 2009, German FDI outflows dropped markedly at the level of $69 billion (UNCTADstat). The decline was a consequence of the worldwide financial crisis.
In Serbia, German MNCs invested approximately $1.7 billion (UNCTADstat). Siemens is operating in Serbia since 1996, but in 2003 they made a Brownfield investment of €50 million in generators for wind mills and renewable power plants (SIEPA). After Siemens, Metro Cash & Carry made a Greenfield investment of €150 million. It has seven stores in 6 cities now (Metro Official Website). One more extensive investment came from German MNC, Stada Arzneimittel in 2006. Through privatization, they invested €475 million in pharmaceutical sector (Stada Official Website). More recently, a Greenfield investment of €71 million came from a company Bosch GmbH in the area of industrial and mobile machinery drive and control (http://www.bosch-presse.de/presseforum/details.htm?txtID=5922&locale=en).

**Greece**

In 2009 and 2010, the Greek economy was facing with the most serious crisis since 1974, due to the global crisis, uncontrolled government spending, huge corruption and enormous bureaucratic system.
The impact of the crisis on country’s OFDI was seen in 2013, when for the first time during the last decade Greece had a negative value of outward direct investment. The reason for that is the sale of foreign affiliates by Greek MNEs to shore up parents enterprises (Vetter, 2014, pp. 206). Neighbouring countries, including Serbia as well, play an important role as hosts to FDI from Greece. In Serbia, Greek total investments were approximately $2 billion during the period 2000-2012 (UNCTADstat).

According to SIEPA, three biggest investments from Greece went to the banking sector through the process of privatization of state-owned banks. First came Eurobank in 2003. Through investment of €500 million they bought Nacionalna Stedionica. 2 year after, Alpha bank purchased Jubanka for €152 million. The last one was the National Bank of Greece that acquired Vojvodjanska banka for a total investment of €425 million. The investments in the sector of food and beverage made Coca Cola Hellenic. In 2005, the company bought two Serbian companies, Vlasinska and Next sokovi for €142 million (Coca-Cola Hellenic Official Website).
Italy

Italian OFDI flows rose considerably between 2005 and 2008, jumping from an average value of $10 billion per year in 2000-2004 to $61.5 billion in 2005-2008 and reaching $96.2 billion in 2007 (UNCTADstat). The financial crisis had a negative impact on Italian OFDI, which fell to $2.31 billion in 2009. Notwithstanding the negative economic situation, Italian outflow of foreign investment rose again to $53.6 billion in 2011.

Figure 3.9. Italian OFDI in total and to Serbia, millions of US dollar

The first big investment from Italian MNCs came in 2005, when the bank Intesa Sanpaolo purchased Serbian Delta Banka for €450 million. Nowadays, Bank Intesa Serbia is the first bank in Serbia by total assets, total deposits, total income and total placements (Banka Intesa Official Website). The biggest industrial investment was done by FIAT through privatisation process. FIAT company acquired Zastava automobile for €940 million in 2008 (http://www.fiatpress.com/press/detail/11560).
Russia

In the 2000s, Russia became an important player of outward foreign direct investments. According to the Bank of Russia, at the end of 2006, the country was at the 15th place in the world in terms of OFDI stock, and just four years later, Russia’s OFDI stock reached $369 billion, 18 times larger than in 2003.

Table 3.7.
Russian OFDI in total, 1992-2013, billions US dollar

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>1.2</td>
<td>1.2</td>
<td>0.7</td>
<td>2.7</td>
<td>2.6</td>
<td>4.9</td>
<td>2.8</td>
<td>3.3</td>
<td>2.7</td>
<td>2.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Russia</td>
<td>2003</td>
<td>2004</td>
<td>2005</td>
<td>2006</td>
<td>2007</td>
<td>2008</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>Russia</td>
<td>8.0</td>
<td>15.4</td>
<td>15.5</td>
<td>37.6</td>
<td>55.9</td>
<td>74.8</td>
<td>36.6</td>
<td>43.2</td>
<td>55.1</td>
<td>50.1</td>
<td>79.3</td>
</tr>
</tbody>
</table>

Source: UNCTAD

The boom of Russian outward direct investments was mostly supported by oil, gas and metal companies (Kuznetsov, 2010). Even though Russian transnational corporations (TNCs) had foreign subsidiaries during the 1990s, they are considered as a new phenomenon. Two top global companies investing from Russia by projects during the 2003-2013 period are from the coal, oil and natural gas sector: Gazprom and Lukoil. They are followed by Kaspersky Lab and Sofline Company from software and IT service sector and Russian Aluminium (RusAl) from metal sector (FDI Intelligence Official Website).

It is very difficult to obtain detailed statistics on the geographical distribution of Russian OFDI flows, because the Bank of Russia began to publish this kind of data in 2007. According to the statistic of the Bank of Russia, the most important host countries of Russian direct investments are the European Union countries (Germany, Netherlands and Cyprus), the United States, as well as some small CIS countries (Ukraine and Kazakhstan). Countries of Central and Southeaster Europe (Serbia, Montenegro, Armenia) are also among the main recipients of Russian OFDI, due to cultural and language ties, developed industrial chains and business contacts from the Soviet period.
Russia’s direct investments in Serbia clearly show the choice of this country to invest in the energy sector. In 2003, Russia, that took all the foreign debts of the Soviet Union, signed the debt-settlement agreement with a few former Yugoslav states, in which the debts of these states were erased in exchange for Russian investments in their energy sector. More precisely, Serbia and Russia signed this clearing debt agreement in December 2006, and Serbian $243 million debt acquired during 1990s was erased in swap for rights for Russia to work in various Serbian energy sectors. The year after, Russia invested $105 million in Djerdap hydroelectric plant, and $183 million was removed from Serbia’s natural gas import bill from Russia (http://uk.reuters.com/article/2006/12/13/serbia-russia-debt-idUKL1319514120061213).

In 2003, through the process of privatization, Lukoil won a tender and acquired 79.5% of Serbia’s Beopetrol (Lukoil Official Website). The package of shares gained by the Russian giant was valued at $133 million. Moreover, Lukoil took an obligation to invest $97 million in the development of Beopetrol until 2008, and not to spend less than $5.7 million on realizing social programs (http://english.pravda.ru/news/russia/26-09-2003/52781-0/).

NIS Srbija was a 100% state owned company, which was dealing with exploration and production of oil, natural gas, ground water and geothermal energy. NIS has held a monopoly in oil processing since 1999, when NATO bombing heavily damaged its two refineries. The monopoly that was approved by the Serbian government gave NIS time to recover and become competitive. However, in 2009, the Russian Gazprom paid $533.8 million for 51% of NIS’s shares, as a part of energy pact between Serbia and Russia. The Serbian government holds 29% of NIS. The remaining 20% belong to former employees and about 4.8 million citizens, who got shares as a part of government plan to distribute stock in public companies. Gazprom Neft invested €500 million in NIS upgrades during the following three years (http://www.bloomberg.com/news/articles/2014-08-11/serbia-probes-nis-sale-to-gazprom-neft-amid-uae-plans).
As the world’s largest economy, the USA is one of the biggest receiver and investor of foreign direct investments. The US outward FDI rose until the financial crisis and then their flow decreased by 22%, from $394 billion in 2007 to $308 billion in 2008, decreasing further to $288 billion in 2009 and $278 billion in 2010 (UNCTADstat). 2011 was the year of recovery with $387 billion OFDI from the US.

Approximately ¾ of total US OFDI goes to service sector, and the rest to manufacturing and other industries (US Department of Commerce, Bureau of Economic Analysis). According to data available on the website of the Bureau, the biggest part of US direct investment goes to Europe. More precisely, the final destinations are the countries of the European Union, like the Netherlands, United Kingdom, Luxembourg, Ireland and Germany. They are followed by the countries from Asia and Pacific, then Latin America and the rest of the world (US Department of Commerce, Bureau of Economic Analysis).

The relations between US and Serbia have deteriorated since the US recognized Kosovo’s independence in 2008. The night of their recognition, Serbian government sharply accused this US move and demonstrators sacked a portion of the US embassy in Belgrade. In 2009, Vice President of US visited Serbia in order to improve ties...
between these two countries. The goals of the US government are to strengthen institutional capacity of key government bodies, promote transparency through the improvement of adherence to the rule of law, support civil society development, encourage efforts to strengthen regional stability, and create opportunities for economic growth (US Department of State).

Despite the tens political relation between these two countries, the US is one of the largest foreign direct investors in Serbia, with the total investments of over $14 billion (Embassy of the United States in Serbia). Moreover, American companies hire over 8000 Serbians (Embassy of the United States in Serbia).

One of the major US investments in Serbia was the investment made by Phillip Morris International Inc of €636 million in 2003 (Embassy of the United States in Serbia). This company, through privatization process, purchased Nis Tobacco Factory DIN. They also employ more than 1150 people (Phillip Morris International).

In the same year, US Steel Company acquired SARTID, Serbia’s only steel producer. The initial investment was $33 million, with the commitment to further invest as the market develops (Embassy of the United States in Serbia). During the first years, the Company was investing in its facilities and units. In 2005, the US Steel Serbia became the country’s largest exporter (SIEPA). However, when the global economy slowed down during the crisis, the company started to report losses. As a result, in 2011, Serbian government bought a loss-making company for symbolic $1, hoping to avoid its closure and keeping the workers employed.

In 2005, Coca-Cola Co., together with Coca-Cola Hellenic Bottling, acquired 100 per cent of mineral water company Vlasinska d.o.o. Coca-Cola paid €21.5 million for Vlasinska’s capital (Embassy of the United States in Serbia). One more leading global beverage, snack and food company from the US invested in Serbia in 2008. It was PepsiCo Inc, which increased its international presence through acquisition of Marbo, a snack company in Serbia, for €200 million (PepsiCo Annual Report, 2008).
China

In East and North East Asia, the dominant economy is China, together with Hong Kong. The outflows of FDI in China rose from $2.9 billion in 2003 to $84 billion in 2012, making this economy to be the third largest source of FDI in the world, after the US and Japan (UNESCAP, 2014, pp. 32). According to Chinese Ministry of Commerce, the most popular destinations for China’s FDI outflows were Hong Kong, British Virgin Islands, Cayman Islands, the United States and Australia.

China has shown its interest to invest in infrastructure in Serbia. The reason for that is the creation of a good logistics network, so the products that enter Europe through the port of Piraeus of Athens can reach faster the other parts of Europe. Scope and quantity of trade between China and Serbia is rising every year thanks to the joint statement signed in 2009 between these two countries.

To strengthen the bilateral ties, China and Serbia agreed to construct Serbian-Chinese Friendship bridge, that connects Borca and Zemun, two municipalities of Belgrade. The worth of this project is €170 million. 85% of this value was financed by a loan from China’s Exim bank “on friendly terms”. The remaining 15% was added by Serbian government and the city of Belgrade (http://inserbia.info/today/2014/01/zemun-borca-bridge-to-be-completed-by-december-2014/). The project was delivered by China’s state owned company called China Road and Bridge Corporation (CRBC).

The second infrastructure project is a section of a Corridor XI, which will connect Belgrade and south Adriatic. The total value of this project is $334 million, and it will be financed from the load from China’s Exim bank http://www.balkaninsight.com/en/article/chinese-company-offers-to-build-corridor-11).

Chinese investors are also focused on the energy sector. Chinese company China Machinery and Equipment Import and Export Corporation (CMEC) is upgrating the

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6 All loans provided by Chinese banks include a grace period of several years (3 to 5) and low interest rates (3% and less).
thermal power station Kostolac. The value of the project is $1.25 billion and 85% will be financed from a “soft loan” from China’s Exim bank.

United Arab Emirates

According to data of UNCTAD and the Ministry of Economy of United Arab Emirates, outward FDI from the UAE has grown noticeably since 2000, rising from $424 million in 2000 to almost $16 billion in 2008.

Figure 3.11.
UAE OFDI in total, 2000-2013, millions of US Dollar

![Graph showing UAE OFDI from 2000 to 2013](image)

Source: UNCTADstat and Ministry of Economy United Arab Emirates

Despite the huge decline in 2009 and 2010, the UAE remained the leading country in the Middle East and Africa region for outward FDI in 2012 and 2013. The biggest part of OFDI is undertaken by the Abu Dhabi Investment Authority and the largest UAE sovereign wealth fund (Mina, 2012, pp. 2). Following the UNCTAD charts, China and India have become new favoured destinations for Arab investors. Also, the country had made significant investments into Europe, including the UK.

The UAE and Serbia are trying to repair a bad relation they have during the last 15 years. In 1999, the UAE supported the NATO campaign against Serbia and later on, Abu Dhabi sent humanitarian personnel stationed in Kosovo as part of the
international peacekeeping mission. Moreover, in 2008, the UAE was the first Arab country that recognized Kosovo. The direct consequence of this move was the cancellation of the implementation of the diplomatic relations agreement between the UAE and Serbia from 2007. However, during the last few years, the presence of the UAE investments is increasing.

In 2013, the most prominent UAE investment in Serbia was an acquisition of 49% of JAT Airway for $200 million by Etihad (http://www.arabianbusiness.com/etihad-buys-49-of-serbia-s-jat-airways-for-200m-512117.html#.VS-7r_mUdp). The revitalised company flies under the name Air Serbia. In order to make Belgrade to be the transportation hub, Etihad agreed to invest additional $40 million and made a five year management contract for that purpose (AirSerbia Official Website). Furthermore, Etihad and Serbian government will both invest up to $60 million through shareholder loans and other funding mechanisms in order to meet working capital requirements and support network development for the newly created Air Serbia.

Belgrade on Water or Belgrade Waterfront is a project in Serbian capital, developed by the United Arab Emirates construction company Eagle Hills, as a joint venture partnership with Serbian government. The company is headed by Mohamed Alabbar who said that entire investment will be $4.8 billion (http://inserbia.info/today/2014/06/belgrade-on-water-project-officially-presented-photo). The investment is more than six times last year’s total foreign direct investment and 138 times the 2013 tally from the U.A.E (http://www.bloomberg.com/news/articles/2014-03-12/serbia-s-vucic-promises-u-a-e-s-billions-in-election-bid). According to official website of the project, Eagle Hills plans to build 1.85 million square meters of residential, commercial and leisure space on 90 hectares of land. The centerpiece will be the 210-meter Belgrade Tower with a design similar to Emaar’s Burj Khalifa, the world’s tallest building (http://www.belgradewaterfront.com/en/).

One more area of cooperation between Serbia and the UAE is defence industry. The biggest Serbian defence company, Yugoimport and Emirates Advanced Research and Technology Holding, a subsidiary of Emirates Advanced Investments, signed an
agreement worth $267 million to jointly develop advanced light system cruise missiles (Government of the Republic of Serbia Official Website).

In the same year, 2013, one more contract is signed, but in agriculture sector. Serbian government and Al Dahra company agreed that the Arab company will buy eight Serbian farm companies for $400 million and develop them to grow and process food and fodder for export (Government of the Republic of Serbia Official Website). By joint investment in state owned farms, the effort will develop irrigation systems, machinery, agricultural infrastructure, etc. In exchange the Serbian Government is guaranteeing a multi-annual food export to the UAE.

In order to promote investment climate and opportunities in Serbia, Serbian Business Council and Serbian Embassy organised a first Serbian Business and Investment Forum exhibition in five different Emirates in 2013.
Chapter IV

Framework Analysis of “Distance”. Theory and Empirical Considerations
CHAPTER IV. Framework Analysis of “Distance”. Theory and Empirical Considerations

4.1. Framework Analysis of Cultural Distance

4.1.1. Cultural Frameworks

Culture is a concept without a universal definition, therefore a multilateral approach is required. Kluckhohn (1951, pp. 86) stated that “culture consists in patterned ways of thinking, feeling, and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional (e.g., historically derived and selected) ideas and especially their attached values”.

Hofstede (1984, pp. 21.), a Dutch social psychologist and management scholar, explained culture as “the collective programming of the mind which distinguishes the members of one human group from another”. A simpler definition according to Hofstede is also “the unwritten rules of the social game” (http://geert-118hofstede.com/countries.html).

Trompenaars (1993) and Schein (2004) compared culture with an iceberg. Some parts of culture are visible, such as behaviour, language, food, music, etc. However, the most interesting part of culture lies below the surface. This part is invisible, but powerful in its impact. It consists of values that demonstrate how members of one culture clarify the impact of that culture. Finally, the deepest point of the iceberg is formed by beliefs that make the base of each culture.

Guiso, Sapienza and Zingales (2006, pp. 24), defined culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation”. This interpretation, according to the authors, helps analyzing the effect of culture on economic outcomes.

Ghemawat and Reiche (2011, pp. 1) described culture as “a set of shared values, assumptions and beliefs that are learnt through membership in a group, and influence
the attitudes and behaviours of group members”. With this definition, they have covered three basic facts. First, culture is a group phenomenon and helps to separate people from different groups. Secondly, culture is something that people acquire through their process of socialization. This fact supports Hoffstede’s definition. Finally, culture puts in order acceptable and attractive behaviour.

4.1.2. Hofstede’s Cultural Dimensions

In 1980, Geert Hofstede developed a model through which various cultural dimensions were defined. The data he used for his study were collected during the period 1967-1973 and included responses from over 100,000 employees of the multinational IBM in more than 66 countries. He identified four dimensions that illustrate differences among national cultures: power distance, individualism/collectivism, uncertainty avoidance and masculinity/femininity.

Most scholars argued that the most important cultural measure is the power distance or the way culture deals with inequalities (Ghemawat, 2011). Hofstede’s definition is as it follows: “The power distance between a boss B and a subordinate S in a hierarchy is the difference between the extent to which B can determine the behaviour of S and the extent to which S can determine the behaviour of B” (1984, pp. 72). He believed that power distance is something that is learned early in families. For example, people in countries that are characterized by high power distance, are expected to demonstrate respect for those of higher status. Moreover, in that kind of cultures, power and influence are concentrated in the hands of the few instead of being spread throughout the population. Additionally, in a business environment, a superior in a high power distance culture will treat with no dignity those at lower levels and the difference in rank will always be noticeable.

The second dimension is individualism/collectivism. Hofstede defined individualism as “a description of the relationship between the individual and the collectivity which prevails in a given society” (1984, pp. 148). For collectivism, he stated “Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (2010, pp. 92). In individualist
culture, goals are set without taking into consideration group preferences, while in a collectivist culture the interest of a group prevails over the interest of an individual.

The term uncertainty avoidance has been borrowed from the work of James G. March, an American sociologist (Hofstede, 2010). He recognized it in American organizations. The concept explains to which extent people in a group feel threatened by uncertain or unknown situations. Countries that prefer structure and predictability have high levels of uncertainty avoidance. This results in explicit rules of behavior and strict laws. On the other side, in societies with low uncertainty avoidance, people show a preference for unstructured situations and uncertainty.

The fourth Hofstade’s dimension is masculinity/ femininity. Hofstede stated that the biological differences between the sexes can be found in all human societies. However, he also added that “these differences leave a wide margin for the actual division of roles in most activities between women and men” (1984, pp. 177). He claimed that a masculine orientated society is trying to reach a maximum differentiation between the jobs that have to be done by women or by men. In contrast, feminine driven cultures are those that permit more overlapping of social roles for the sexes.

4.1.3. Limitations of Hofstede’s Model

Even though Hofstede’s model is one of the most used frameworks to compare cultural distances, it is not without limitations. The first obstacle is that the data are old and were collected before the big political changes (end of communist regime and Cold War) and differences in business environment (putting accent on cooperation and knowledge- sharing). Additionally, Hofstede made his research on just one organization. Although the study covered 66 countries, he only used 40 of them in describing the national culture. McSweeney (2002, pp. 94) stated that high number of respondents does not assure representativeness, because “a closer examination of the number of questionnaires used by Hofstede reveals that the average number per country was small, and that for some countries it was minuscule”. Thus, according to McSweeney, one of the biggest weaknesses of Hofstede’s model is “the narrowness of the surveyed population”.
It is also worth mentioning that the dimension uncertainty avoidance did not find its place in later study done by Hofstede. More precisely, Chinese social scientists made their own survey collecting data from 23 countries, including 20 countries from Hofstede’s original study (Hofstede, Bond, 1988). Instead of uncertainty avoidance, that was irrelevant to Chinese population, they indentified different fourth dimension that was representing Chinese values related to Confucianism. It was called Confucian Dynamism and it was dealing “with a choice from Confucius’ ideas and that its positive pole reflects a dynamic, future- oriented mentality, whereas its negative pole reflects a more static, tradition- oriented mentality” (Hofstede, Bond, 1988, pp. 16). Nevertheless, this dimension was later named as long term/short term orientation and added as a fifth dimension rather than replacing uncertainty avoidance. Therefore, the dimension of uncertainty is conceptually significant but its applicability is limited.

Economists started to use Hofstede’s cultural distances in order to explain different phenomena in international business, such as entry choice, international diversification, launch of foreign investment etc. However, this approach was also intensively criticized. Shenker (2001) underscored that Hofstede defined cultural distance as symmetric. Yet, this statement is difficult to be defended in the context of FDI. In other words, he gave an example where a Dutch firm that invests in China will face different cultural distances than a Chinese firm that invests in Holland. Additionally, cultural distances are assumed to be constant. However, they change over time. Moreover, the concept of cultural distance takes for granted homogeneity inside every nation. Shenker (2001) refers to the problem of linearity. He considered that the higher the distance between cultures, the higher the probability that investments will happen in a later stage of the internationalization process, a less controlling mode of entry will be chosen and the foreign branch will have worse performance.

4.1.4. Other Cultural Frameworks

Apart from Hofstede’s work, there are a few other frameworks worth mentioning. Trompenaars (1993), another Dutch researcher, defined seven dimensions of culture and published the model for the first time in his book “Riding the waves of culture”. This model was developed after 10 years of research and the data were collected from
more than 46,000 managers in 40 countries. His results showed that people from different cultures are not randomly different, but their diversities lie in very specific, even predictable way. This is because each culture has its own characteristics. Five of seven dimensions focus on relationship between people, while the other two describe time management and a culture’s relationship with nature. The model is mainly used by international managers who have to build their ability, awareness and cultural sensitivity that are needed in order to establish and maintain management effectiveness across cultural borders.

Schwartz (2008), an Israeli psychologist, claimed that the ways one society solves 3 basic issues are: the nature of the relation between the individual and the group, how to guarantee responsible behaviour and how to regulate the relation of people to the natural and social world. Those ways can be used to define dimensions that differ from one society to another. For this theory, he used data from school teachers and university students in 63 countries. He labelled 7 cultural value orientations: conservation, hierarchy, intellectual autonomy, affective autonomy, competency, harmony and egalitarian compromise that form 3 cultural value dimensions: conservatism versus intellectual and affective autonomy, hierarchy versus egalitarianism and mastery versus harmony. These 3 dimensions represent solutions for the above stated problems.

An international team of researchers led by Robert House (2004) did one of the most challenging studies to define culture and cultural differences in leadership (Ghemawat, 2011). They are the authors of a ten year project named GLOBE- Global Leadership and Organizational Behavior Effectiveness Research Program. Their results are based on the answers of 17000 managers from 951 organizations located in 62 societies (House et al., 2004). According to them, in a world where globalization of corporations is expanding, cultural differences do not vanish. In contrast, “as economic borders come down, cultural barriers could go up” (2004, pp. 5).

House and his team indentified 9 cultural dimensions, namely: uncertainty avoidance, power distance, institutional collectivism, in-group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation and human orientation. The first six dimensions arrived from the dimensions of culture identified
by Hofstede. More precisely, uncertainty avoidance and power distance have the same form as Hofstede’s dimensions. Institutional collectivism and in-group collectivism have their origins in Hofstede’s dimension labelled individualism/collectivism, while from his masculinity dimension, House has developed gender egalitarianism and assertiveness. Future orientation and human orientation have their roots in a work of Kluckhohn and Strodtbeck (1961), and in the same time performance orientation is derived from McClelland’s work (2004). Thus, here below is the brief description of these GLOBE dimensions.

Uncertainty avoidance shows to what extent member of an organization or society rely on their established norms and rituals when they are facing some uncertainty.

Power distance displays the expectations of members of an organization for the power to be concentrated at the higher levels of an organization.

Institutional collectivism demonstrates the level to which one organization or society supports and encourages collective distribution of resources and collective actions, while in-group collectivism is “the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families” (2004, pp. 12).

Gender egalitarianism shows the level to which an organization or society diminish the differences between sexes.

Assertiveness illustrates the degree to which a member of an organization or society is “assertive, confrontational and aggressive in social relationships” (GLOBE, 2004, pp. 12).

Future orientation demonstrates the willingness of an individual in organization or society to participate in future-oriented behaviors.

Performance orientation shows the level to which one organization or society inspire and compensate their members for performance improvement.
Human orientation is defined as “the degree to which individuals in organizations or society encourage and reward individuals for being fair, altruistic, friendly, generous, caring and kind to others” (GLOBE, 2004, pp. 13).

Hofstede, House, Trompenaars and Schwartz did their models by examining thousand of employers and managers all over the world. They managed to develop their own dimensions in order to define cultures of organizations and nations. Even though they share a number of similar dimensions, there are a lot of differences between their theories which create difficulties in comparing the results. Still, every model shows the importance of understanding the impact of cultural differences.

4.1.5. Effects of National Cultural Differences

Scholars are trying to explain how trust varies between countries in systematic ways, which are related to their different cultural heritage. One well known index of effects of cultural differences comes from Eurobarometer surveys. It measures trust among people of different countries, mainly the member states of the European Union. For example, amongst EU citizens the most trusted are Germans, Swedes, Danes and Dutch. The level of trust in one’s fellow citizens is highest in Denmark (61% trusting each other “a lot”) and Sweden (56%), elsewhere people are more equivocal and in some countries almost one third “do not know” if they can trust each other (Eurobarometer Survey, 2013). Guiso (2009) asserted that trust between any two countries falls as the populations of those countries grow more different in terms of languages, genes, geographic distance, religion, income, etc.

To provide a more systematic review of the effects of cultural differences, in this part of study the impact of four types of international flows, i.e. information, people, products and capital will be analysed.

According to Ghemawat (2011), language differences can be used as a perfect substitute for cultural differences. Therefore, the impact of cultural differences on information flows are evidenced by intensity of international phone calls on a population-weighted basis. Conforming to his findings, “the intensity of domestic phone calls is about 10 000 times greater than international calls” (2011, pp. 321) and
international calling, between countries where at least 20% of population speak the same language, is 10 times greater than between other countries (Ghemawat, Reiche 2011). Moreover, in a study conducted in Europe, Maurseth and Verspagen (2002, pp. 541) found that “having the same language increases the amount of knowledge flows between two regions by up to 28%”.

The impact of cultural differences on people flows are evidenced by migration patterns (Ghemawat, 2011). According to Human Development Report (2009) published by United Nations, 60% of migrants move to country with the same religion, and 40% go to a country with the same major language.

Ghemawat (2007) stated that a common language increases the bilateral merchandise trade between two countries by 42%, while Kimura and Lee (2004) claimed that a common language increases service trade by 50%. It seems logical that language has a bigger influence on trading services rather than products. Even though there are a lot of ways of translations that someone can use in order to do trade, Melitz (2006) highlighted that for boosting trade, direct communication is three times more efficient than indirect communication. In addition, religion also has an influence on trade. In one of his studies, Linders (2005) observed that trade increases by 22% between countries that share common religion.

A lot of economists were examining the effects of Hofstede’s model on foreign direct investments, especially putting an accent on foreign market entry. In an article written by Kirkman, Lowe and Gibson (2006, pp. 301) it is reported that “firms from countries with large power distance prefer subsidiary and equity JV (joint venture) entry modes whereas firms from countries high in uncertainty avoidance prefer contract agreements and export entry modes”. The same authors are also claiming that “findings demonstrated that as the cultural distance between countries increased, the tendency to choose a joint venture over an acquisition increased” (pp. 299). One more group of researchers, Aggarwal, Kearney and Lucey (2009, pp. 16-18) discussed that “cultural distance is a significant deterrent to Foreign Portfolio Investment (FPI), with a coefficient one third the size of geographic distance….and Hofstede’s power distance in the originating country is negatively related to cross-border debt and equity holdings…uncertainty avoidance is positively related to cross-border debt
holdings...[and] both masculinity and individuality are positively related to cross-border debt and equity FPI”.

4.1.6. Variables for Cultural Distance

Cultural distance (CD) and its proxies were used in a lot of business areas, in both fields domestic and international. However, FDI is the most popular sphere for the application of the CD theory. Gaining an understanding of how culture may affect FDI flows is of considerable importance. According to Shenkar (2001), the first use of CD in FDI literature meant to explain the investment location in foreign markets. Theory suggests that there will be a low likelihood MNCs to invest in culturally distant markets. Thus, researchers (e.g., Porter et al. 2000) discussed that the formal rules in Japan are the biggest discourage for the foreign investors. On the other side, Yoshino (1976) and Ozawa (1979) argued that Japan’s CD are the important limitation of country’s FDI towards the West. On the other hand, Dunning (1988) stated that MNCs see CD as a tool of reduction of transactional and market failures.

The second use of CD in FDI literature meant to predict the mode of entry into foreign markets. A lot of studies have examined the influence of CD to FDI entry modes: wholly owned subsidiary (WOS) and partly controlled international joint venture (IJV), as well as on the establishment mode: greenfield, acquisition and JV. However, the empirical results of the studies are ambiguous. Thus, examining 228 foreign ventures in the US market, Kogut and Singh (1988) made 2 hypotheses. The first one was that greater the CD between the home base of the investing firm and the United States, the greater the likelihood it would choose a joint or wholly owned greenfield investment over a majority or full acquisition. Using Hofstede model (1980) as the indicator of the differences between the markets, they accepted the first hypothesis. The second one was that the greater the level of uncertainty avoidance in the investor's home country is, there is a higher probability that investor would choose a joint venture or a wholly owned greenfield over an acquisition. Again, this hypothesis was accepted. Hence, when CD between home and host country is considerable, MNCs will prefer “entry modes that involve relatively low resource commitments” (Kim and Hwang, 1992, pp. 36). Moreover, Erramilli (1996) argued that high uncertainty avoidance and power distance should lead to a greater propensity
for full control, which means that MNCs use fully- or majority- owned subsidiaries to enter culturally distant markets. The only limitations of Erramilli study is that he based his research on the sample on European subsidiaries of U.S. and European advertising firms, which are of approximately similar cultural environments (Hennard, Larimo, 1998). This relationship has been supported by other researchers, such as Anderson and Coughlan (1987), Davidson (1980), Green and Cunningham (1975), Johanson and Vahlne (1977), Kobrin (1983), Stopford and Wells (1972).

On the other side, there are some studies that combined both cultural and economic and strategic variable in order to show that cultural characteristics and cultural distance affect subsidiary ownership policies and their results are contradictory to the previous one. Kim and Daniels (1991) made a research about the determinants of the choice made by foreign investors made in the US and they found out that their mode of entry was not significantly affected by their home country nationalities. Further, Larimo (1993) examined the ownership structure of Finnish subsidiaries in OECD countries. Contrary to his expectations, he concluded that CD did not affect the choice of Finish investors for joint ventures over wholly owned subsidiaries, even though he was calculating the CD using the same methodology as Kogut and Singh. Additionally, other studies found that cultural characteristics of the home country had no impact on strategy, such as researcher of Padmanabhan and Cho (1996), Chen and Hu (2002), Erramilli, Agarwal and Kim (1997).

Finally, the third use of CD in FDI literature meant to explain the performance of the MNCs in international markets. Yet, for this application of CD, empirical results have been mixed as well. Li and Guisinger (1991) claimed that US affiliates, whose foreign partners came from countries with high CD differences between them, were more likely to fail. However, Johnson, Cullen and Sakano (1991) observed that CD between JV partners had no effect on the Japanese partner's perceptions of success, while Park and Ungson (1997) stated that a larger CD was actually associated with lower rate of JV separation.

Perhaps the best known study that measures the CD among countries is Hofstede’s (1980) survey of more than 100,000 employees of the multinational IBM in more than 60 countries. Using the survey, Hofstede has developed four dimensions of national
culture: power distance, that shows until what level individuals are comfortable with inequality in relationships; individualism/collectivism, that demonstrates how much individuals focus on their own problems and needs; uncertainty avoidance, that explains to which extent people in a group feel threatened by uncertain or unknown situations and masculinity/femininity, that presents the role of sex in society. In 1991, Hofstede added one more dimension of national culture: “Confucian Dynamism”, also known as long term orientation (Hofstede, 1991). Even though Hofstede’s model is one of the most used for comparing national cultures, it has been heavily criticized (e.g. McSweeney, 2002; Schwartz, 1994; Shenkar, 2001; Steenkamp, 2001). Consequently, some alternative models have been developed for quantifying cultural identities, e.g. Trompenaars (1993), Schwartz (2008) and GLOBE (House et al., 2004), and their detailed description is given in chapter 5.

Most studies have measured the cultural distance between the home market of MNCs and the target country of the expansion by using Kogut and Singh’s (1998) index, which is based on Hofstede (1980) dimensions of national culture. Though a lot of scholars have become critical of this index and of Hofstede’s model (e.g., Schwartz, 1994, Shenkar, 2001, Steenkamp, 2001), studies have continued to rely on them, since little progress has been made in developing reliable alternatives (Drogendijk, Slagengen, 2006). Thus, this measure was used to calculate assess team performance (Gibson, 1999), effectiveness of training (Tung, 1982), the efficiency of the global value chain (Govindarajan & Gupta, 2001), institutional strength (La Porta et al., 1998), the impact of cultural differences on market entry (Brannen, 2004) and on subsidiary relations (Gupta, 1987), as well as in finance (Chui et al., 2002, Kwok & Tadesse, 2006) and accounting (Salter & Niswander, 1995).

Kogut and Singh (1988) developed a CD-index that is based on Hofstede’s (1980) 4 dimensional (Power Distance, Uncertainty Avoidance, Masculinity/Femininity, and Individualism) framework:

$$CD_j = \frac{\sum \left\{ \left( I_{ij} - I_{iu} \right)^2 / V_i \right\}}{4}$$
Where $I_{ij}$ stands for the index for the $i$th cultural dimension and $j$th country, $V_i$ is the variance of the index of the $i$th dimension, $u$ indicates the MNC home country, and $CD_j$ is cultural difference of the $j$th country from the MNC home country.

Hofstede’s initial four dimensions have enormous numbers of replications, citations and discussions (Smith 1996; Sondergaard 1994; Triandis 1982); they have also been heavily criticized (Lowe 2001; McSweeney 2002a; McSweeney 2002b; Roberts and Boyacigiller 1984; Tayeb 1988, 1994, 2000, 2001; Yeh and Lawrence 1995) and, in some cases, further refinements (Schwartz 1992). However, the fifth dimension, long and short term orientation, that according to Hofstede (1991) deals with time orientation, does not seem to have been received enthusiastically by the cross-cultural research community. For example, in Triandis's (1993) review of Hofstede's book “Cultures and Organizations”, the fifth dimension is not mentioned at all. Also, other researchers have problem involving the fifth dimension into their studies. Redpath and Nielsen (1997, pp. 329) commented [that] “this dimension is probably the least relevant to our analysis. It was the most difficult to apply, because distinctions between the two ends of the spectrum are unclear and often seem contradictory”. Moreover, Newman and Nollen (1996, pp. 776) have written the following: “long-term orientation is the most difficult [orientation] because it is the newest of the dimensions and the least familiar to Western researchers”. For these reasons, the regression will also not include the fifth dimension.

4.1.7. Hypothesis about the Relationship between Cultural Distance and FDI

Multinational enterprises (MNEs) operating in different countries face the burden of adapting to local culture manifested by the nation’s political economy, people’s customs, language, education, and religion (Tihanyi, Griffith & Russell, 2005). The difference between MNEs’ home culture and that of their host countries of operation is cultural distance, and has been addressed extensively by current literature (Drogendijk & Slangen, 2006; Fiberg & Loven, 2007; McSweeney, 2002; Rozkwitalska, 2013; Tihanyi et al., 2005). The underlying concept of cultural distance is the effect on business relationships and management of MNEs by the behavior of people from different cultures. Cultural distance has been used as an explanatory variable in the entry mode choices made by MNEs in a foreign country (Fiberg &
According to Dunning’s eclectic paradigm, a firm’s ownership and internalization advantages, in addition to locational advantages, are important determinants of foreign direct investment (FDI) choice of entry mode (Dunning 2001). Existing literature on the role of location specific factors impacting FDI entry strategies included host country political and security risks, market size, human capital, technological gab, cultural distance, state and economic institutions, corruption, natural resources, openness of economy, and banking system (Alvarez & Marin 2009; Kim & Hwang, 1992; Poelhekke & van der Ploeg, 2010; Teixeira & Grande, 2012; Zvirgzde, Schiller & Diez, 2013). In order to maximize FDI, MNEs attempt to exploit their competitive positions abroad by transferring their ownership advantages to host countries with natural resources, cheap labor, or sufficient size markets (Hu, Ma, & Zehn 2012). Large cultural distance limits a firm’s ability to exploit its ownership advantages in foreign markets. Competing against local companies would be difficult as is the case in managing local employees, customers, suppliers and relationships with government officials. Acquiring local business will allow the foreign firm to understand the host country’s environment as well as establish the necessary local business networks (Hu et al., 2012).

In general, increasing cultural distance between countries increases the adaptation cost of foreign operations in the host country. The results of available empirical studies confirm that a large cultural distance will generally reduce FDI flows from home to host country (Tihanyi, Griffith and Russell, 2005). Based on this argumentation, we posit the following hypothesis:

**Hypothesis 1a.** Considering Hofstede’s cultural index, it is expected that the greater the cultural distance between home and host country, the lower the inward FDI flows to the host country.

### 4.2. Framework Analysis of Institutional Distance

FDI choices of MNEs are influenced by the criteria of utilizing firm’s competitive strengths in the foreign markets, as well as economic, locational, resource components and learning motivations. However, there is also the external environment that influences the economic decisions and choices of firms (Gulati 1998, Henisz 2000,
Knowing that MNEs invest in different geographical markets where legal environment, market structure and local culture are different than in their home countries, their FDI choices are going to be influenced by those external factors that are named “institutions” in economic literature (North 1990, Scott 1995).

According to research studies (North 1990, Peng 2003), institutions are extremely important for the companies that are doing cross border business, because political, legal and administrative systems are mostly fixed factors and from their costs define the attraction of an international location. North (1990, pp. 3) defined institutions as “the rules of the game in a society, or more formally, humanly devised constraints that structure human interaction”. They are made up from formal constraints (rules, laws, constitutions), informal constraints (norms of behaviour, conventions and self-imposed codes of conduct) and their enforcement characteristics. This definition shows the importance of country level institutions as determinant in cross-border transactions. Scott (2008, pp. 33) explained institutions as “cultural-cognitive, normative and regulative structures and activities that provide stability and meaning to social behaviour”.

Hoffman (1999) described the institutions as “rules, norms, and beliefs that describe reality for the organization, explaining what is and what is not, what can be acted upon and what cannot. Institutional theory, in short, asks questions about how social choices are shaped, mediated, and channelled by the institutional environment”. According to Peng (Peng et al. 2008, pp. 922), institutions can be classified as “formal and informal ones” and may include elements of politics (e.g. corruption, transparency), law (e.g. regulatory regime), and society (e.g. ethical norms). Scott (1995) stated that institutions have three pillars. The first one is regulative pillar that focuses on formal rule systems and enforcement mechanisms sanctioned by the state. The second one is normative pillar that defines legitimate means to pursue valued end. Thirdly, the cognitive pillar refers to taken-for-granted beliefs and values that are imposed on, or internalized by, social actors. Later on, Scott (2001, 2008) highlighted that there is no clear line between normative and cognitive institutions. Therefore, he renamed the cognitive pillar as cultural-cognitive.
The approaches on how to study institutions have been influenced by the different fields of social science, mainly sociology (Meyer and Rowan 1977, Di Maggio and Powell 1983) and economics (North 1981, 1990, 2005). Thus, different institutional perspectives have been used in economic researches and more precisely, in the international business (IB) literature. These institutional perspectives are roughly grouped into new institutional economics and institutional theory. While institutional theory has its basis primarily in sociology and organization studies, new institutional economics (NIE) is rooted in economic thinking and particularly in economic history. Therefore, NIE have been used to study the impact of country level institutions on firm’s strategies. North (1990, pp. 5) stated that “institutions affect the performance of the country” and named them endogenous in nature. Hence, differences in country level institutions have impact on FDI choices of MNEs.

Institutionalism in economics was mentioned for the first time in the works of Thorstein Veblen and John Commons almost one century ago (Rutherford, 1994). The institutional economists are divided into two groups: old and new institutionalists (as they were also called). While old institutional economists supported the principle that all institutional features of society are interdependent and the analysis of economic problems cannot occur without taking into account the dynamics of the entire social system (Myrdal 1978, Rutherford 1994), new institutional economists presented institutions as adaptable constraints, rather than as conditioning individual choice (North, 1981). However, both old and new institutional economists agree that institutions matter (Miller, 1978). Additionally, new institutional economists view gives possibility for more detailed analysis of both institutions and their effectiveness for individuals as well as organizations in a particular society (Miller 1978, Mayhew 1989).

NIE, they focused on different tasks. Williamson’s work was mostly referred to Transaction Cost Economics that has been declared as one of the most influential schools of thought in IB research. In addition, he studied the vulnerability of contracts and property rights, and the predominant role of private ordering versus legal systems in enforcing property rights in different societies (Williamson, 1975).

North’s work was how property rights and their enforcement (via institutions) affect the ways in which societies develop and differ. He is focusing mainly on the role of the state in formulating the structure of property rights in society. Moreover, one part of his work was informal aspects of institutions of society and their role in economy of a country. According to North (1990, pp. 6), “the major role of institutions of society is to reduce uncertainty by establishing a stable (but not necessarily efficient) structure to human interaction”. In his view, institutions consist of formal rules like constitutions, laws and property rights and also informal elements such as “sanction, taboos, customs, traditions and codes of conduct” (North 1991, pp. 97). He argued the importance of institutions saying that “Third World countries are poor because the institutional constraints define a set of payoffs to political/ economic activity that do not encourage productive activity” (North 1990, pp. 110). Apart from formal, North was giving an important role to informal institutions. In order formal rules to work, North was emphasising that informal constraints (conventions, norms or behaviour) must be efficient.

This approach has been used in the IB studies in order to analyze the influence of institutions on FDI decisions and entry mode choice of MNEs (e.g. Globerman and Shapiro 2003, Meyer and Peng 2005, Delios and Henisz 2003, Trevino and Mixon 2004, Chung and Beamish 2005, Dikova and Van Witteloostuijn 2007, Estrin et al. 2009). Those studies found out that countries which had stable and less restrictive institutions attracted more investments. Further on, some studies reported that the entry mode choices of MNEs are influenced differently by formal and informal aspects of host country institutions (e.g. Peng 2003). Moreover, some of the studies found out that the motivation of MNEs to make more FDI to host country is small institutional distance between home and host countries (e.g. Estrin et al. 2009).
Finally, there are some studies about NIE and influence of formal and informal institutions on MNEs’ strategies in emerging and transition economies (Khanna and Palepu 2000, Meyer 2001, Peng 2003, Mathews 2006, Dikova and Van Witteloostuijn 2007, Peng et al. 2008). Their results show that acquisitions are the preferred choice when the host economy has developed institutional environment (e.g. Dikova and Van Witteloostuijn 2007). Also, for those economies, the transition process to the market economy for formal institutions is usually faster compared to informal ones (e.g. Meyer 2004, Zweynert and Goldschmidt 2006).

The second group, institutional theory, became the groundwork for organizational analysis in sociological and management researches. It is also used to analyse organizations and institutional environment and how they respond in this environment (Palmer and Biggati 2002, Bowring 2000, Greenwood et al. 2008). Nowadays, neo institutional theory (which is the new name of institutional theory in the literature now) studies the impact of internal and external institutions on the firm’s strategies. While internal institutions are the institutionalized practices and norms inside the organization, external institutions refer to regulatory structures, agencies, laws, courts, professions, interest groups and public opinion (Oliver 1991, Weick 2001).

A lot of scholars referred to the importance of institutional knowledge as a powerful factor for the success of an internationalizing company (e.g. Kogut and Singh 1988, Davidson 1980, Johanson and Vahlne 1977). Therefore, along with many other topics, institutional theory has enormous part in IB studies. More precisely, since last decade, institutional theory has been used in IB studies by an increasing number of scholars because it provides useful theoretical arguments and basis to examine a wide range of critical issues faced by MNEs (Kostova et al. 2008, Djelic and Quack 2003).

Moreover, institutional theory is being examined as a determinant of market entry strategies of MNEs (e.g. Davis et al. 2000, Xu and Shenkar 2002, Yiu & Makino 2002, Xu et al 2004, Eden and Miller 2004, Gaur and Lu 2007). Studies show that MNEs are facing pressure from both external and internal institutions, due to their impact on company’s entry mode choice. Furthermore, they found that differences in national and firm’s internal institutional environment impact the transfer of
knowledge and organizational capabilities through countries (e.g. Kostova 1999, Kostova and Ruth 2002, Gaur et al. 2007, Guler et al. 2002).

Kostova (1999) and Kostova and Zaheer (1999) developed a key concept, institutional distance, in order to explain differences between the home and host countries of the MNEs in terms of Scott’s (1995) three pillars. Their hypotheses are that the larger the institutional distance, the more difficult for the MNEs to establish legitimacy in the host country (Kostova and Zaheer, 1999) and to transfer strategic organizational practices from the parent firm to the foreign subsidiary (Kostova, 1999). Further studies also reveal that institutional distance has impact of entry mode choice of firms (e.g. Xu 2001, Gaur and Lu 2007, Xu et al. 2004).

4.2.1. Variables for Institutional Distance

Institutional distance is a measure of differences in the institutional environment between the home and host country of MNEs. During the last decades institutional distance has received a lot of attention from international business (IB) researchers and it has been conceptualized and operationalized in many different ways. Scientists have used and applied institutional distance as one of factors that companies are examining before entering to new international markets (Kostova 1997, Kostova and Zaheer 1999, Kostova and Ruth 2002, Xu and Shenkar 2002, Arslan and Larimo 2010).

Past studies have used Scott’s (1995) institutional framework in order to categorise institutional distance in three pillars: regulatory, normative and cognitive (termed as cultural cognitive in some studies) (Xu et al. 2004, Gaur and Lu 2007, Xu and Shenker 2002) and define institutions differently in each institutional pillar. Some researchers applied North’s (1990) classification of formal and informal institutions to analyse the impact of institutional distance on strategies of MNEs (e.g. Peng 2003, Estrin et al. 2009, Dikova and Witteloostuijn 2007). However, Scott’s (1995) institutional pillars are predominant classifications used in IB studies.

The impact of institutional distance on FDI location and entry mode choices of MNEs can be found in the studies of Xu and Shenkar (2002), Yiu and Makino (2002), Xu et
al. (2004), Gaur and Lu (2007), Estrin et al. (2009), Treviono and Mixon (2004), Arslan and Larimo (2010), and others. Yet, in some of the studies researchers have examined the differences in just one aspect of institutional environment (e.g. Brouthers 2002, Xu et al. 2004, Gaur and Lu 2007, Gaur et al. 2007, Arslan and Larimo 2010, Chao and Kuman 2010). For example, Trevino and Mixon (2004) concentrated on differences in legal reforms across countries in order to understand strategic FDI decisions.

In current studies, scholars describe the relationship between different elements of institutional distance and both Scott’s (1995) institutional pillars and North’s (1990) institutional framework. Xu and Shenkar (2002) highlighted that regulative pillar of institutional distance reflects the existing laws and rules in particular environment which promote certain types of behaviors and restrict others. According to the same authors, the cognitive pillar of institutional distance is related to differences in thinking patterns in societies. For example, it refers to expected sets of ways that individuals in a society use to notice and interpret the stimuli from the environment. Thus, cognitive pillar can be connected with cognitive structures of social environment (e.g. Berger and Luckmann 1967, Meyer and Rowan 1977). In addition, Scott (1995) stated that the boundaries between normative and cognitive institutions are not always clear. Therefore, there is some overlapping between those two pillars and they share many attributes.

On the other side, informal institutions in North’s (1990) classification of institutions includes both normative and cognitive dimensions of Scott’s (1995) framework, while North’s (1990) formal institutional distance is equal to Scott’s (1995) regulative distance. Using this classification of institutions, scholars can avoid overlapping and confusion. Estrin et al. (2009) was the first who used this classification to study the impact of institutional distance on the different aspects of entry mode strategies of MNEs.

FDIs are seen as important determinant of economic growth of developing countries and are considered to be a vehicle for technological progress. Not surprisingly, the FDI promoting effect of good institutions might be an important channel of their overall effect on growth and development. Therefore, there are a few reasons why the
quality of institutions should be taken into account for attracting FDI. For the beginning, good governance infrastructures may attract foreign investors. Furthermore, poor institutions can bring additional costs to FDI. Finally, FDIs are vulnerable to any kind of uncertainty, such as uncertainty stemming from poor government efficiency, policy reversals, graft or weak enforcement of property rights and legal system, etc.

Kaufman et al. (1999) stated five out of six government indicators that seem to influence foreign investors: political instability and violence, government effectiveness, regulatory burden, rule of law and graft. The sixth one, the voice and accountability indicator, was not significant determinant of FDI. La Porta et al. (1998) used International Country Risk Guide as independent variable and found out that risk of repudiation of contracts by government, risk of expropriation and shareholder rights were significant.

Using Kaufman et al. (1999) six government indicators, Globerman and Shapiro (2002) found out that the good governance affect positively both FDI inflows and outflows. The only limitation of this study is that the institutional quality of the home and the host country of FDI cannot be included in the regression, because the authors did not use the bilateral flows. However, Levchenko run the study of the effect of institutional distance between home and host country of FDI by using bilateral data and suggested that institutional differences may be a source of comparative advantages. More precisely, some sectors could be more “sensitive” than others and that could be a source of greater trade flows. Busse and Hefeker (2007) emphasised that government stability, law and order, bureaucratic quality, democratic structure and lower levels of corruption are positively associated with FDI. Similarly, Daude and Stein (2007) found that a credible and efficient government and market friendly regulations have a positive relationship with FDI. Mengistu and Adhikary (2011) found that political stability, good public and political service, an improved legal system and low levels of corruption promote FDI, while Buchanan et al. (2012) discovered a positive relationship between good governance and foreign investments.

Most studies tried to examine the link between democracy and FDI. Harms and Ursprung (2002) and Jensen (2003) discovered that MNEs are more likely to be
attracted to host countries that have democratic structure, while non- or less
democratic countries are connected with the greater risk of policy reversals and
therefore attract less FDI. Kolstad and Villanger (2008) got the same results for
developing countries only.

Political stability was also examined in several studies. Tuman and Emmert (1999)
found a negative relationship between political instability in countries of Latin
America and FDI from Japan. Quazi (2007) confirmed this finding, stating a positive
relationship between political stability and foreign investments for Asian countries.

The study of the linkage between corruption and FDI has received a lot of attention.
From a theoretical perspective, corruption can have both postitive and negative impact
on foreign investments. Corruption increases uncertainty, therefore it causes
additional cost of doing business, which can be a major discouragement for foreign
investors (Rose- Ackermann 1975, Shleifer and Vichny 1993). On the other side,
some scholars (Leff 1964, Huntington 1968) argued that when a host country has
excessive regulation and an inefficient legal system, the interaction between corrupt
autocrats and foreign investors can be helpful for MNE to enter a market. Some
studies found out that corruption has a significant, negative impact on FDI (e.g. Wei
while some others do not confirm such a negative relation (e.g. Wheeler and Mody

The measure of institutional distance is constructed as follow: by using the World
Bank governance indicators which aggregate the views of a large number of
enterprise, citizens and expert survey respondents in industrial and developing
countries. The individual data sources underlying the aggregate indicators are drawn
from a diverse variety of survey institutes, think tanks, non-governmental
organizations, and international organizations (World Bank, 2005).
Table 4.1.
World Bank Governance Data to measure ID

<table>
<thead>
<tr>
<th>Name of the WGI</th>
<th>Definition</th>
<th>Component of ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government Effectiveness</td>
<td>The quality of public services, the capacity of the civil service and its independence from political pressures; and the quality of policy formulation.</td>
<td>Regulative</td>
</tr>
<tr>
<td>2. Regulatory Quality</td>
<td>The ability of the government to provide sound policies and regulations that enable and promote private sector development.</td>
<td>Regulative</td>
</tr>
<tr>
<td>3. Rule of Law</td>
<td>The extent to which agents have confidence in and abide by the rules of society, including the quality of contract enforcement and property rights, the police, and the courts, as well as the likelihood of crime and violence.</td>
<td>Regulative</td>
</tr>
<tr>
<td>4. Voice and Accountability</td>
<td>The extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.</td>
<td>Normative</td>
</tr>
<tr>
<td>5. Quality Political Stability and Absence of Violence</td>
<td>The likelihood that the government will be destabilized by unconstitutional or violent means, including terrorism.</td>
<td>Normative</td>
</tr>
<tr>
<td>6. Control of Corruption</td>
<td>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.</td>
<td>Normative</td>
</tr>
</tbody>
</table>

Source: Kaufmann et al, 1999

In this thesis, “government effectiveness”, “regulatory quality” and “rule of law” are used to define the regulative pillar of institutional distance, while “voice and accountability”, “quality political stability” and “absence of violence and control of corruption” are employed to describe the normative pillar of the institutional distance. In wide international business researches, cultural distance is used as a substitute for cognitive pillar of institutional distance, because it has the similar effects, as “mental programming” (Hofstede, 1980) is closely related to cognitive systems. (Xu, 2001).

4.2.2. Hypothesis about the Relationship between Institutional Distance and FDI

When entering a foreign market, MNEs interact with a complex local context that also includes regulatory and cognitive institutions (Scott, 1995, 2001). MNEs have to adjust to the multifaceted institutional environment of each country where they operate (Meyer, 2001; Henisz, 2003; Peng, 2003), and this adjustment is more challenging, the more the foreign environment differs from the MNE’s home territory. An important characteristic of emerging economies is that market-supporting institutions are less developed, and thus constrain firms’ strategic choices (Khanna
Local firms are adapted to local institutions, and their organizational structures and cultures have to be consistent with the isomorphic pressures in their local environment. Foreign affiliates have to accommodate these same pressures and earn legitimacy in order to ensure their survival and success in the new context (Dowling and Pfeffer, 1975; Hannan and Freeman, 1977; Meyer and Rowan, 1977). The need to gain legitimacy with both the local environment and with the worldwide organization of the MNE exposes subsidiaries of multinational firms to ‘institutional dualism’ (Kostova and Roth 2002). MNE’s ease of adjustment depends on their familiarity with a country’s institutional profile (Xu and Shenkar, 2002; Xu, Pan and Beamish, 2004).

The obstacles faced by MNEs operating abroad can be grouped in two types. Firstly, the interaction of the foreign parent company and the local affiliate is inhibited by their level of adaptation in different national contexts. Institutional distance may thus inhibit internal coordination and integration, notably the transfer of knowledge and practices. Secondly, the MNE affiliate is subject to institutional pressures from both its parent company and from the local environment (Kostova and Roth, 2002). MNEs’ ways of doing business may thus differ from that of local organizations, which may inhibit the interaction between the foreign affiliate and local organizations and individuals. Thus, MNE affiliates may be constrained in developing the external relations that could allow them to gain legitimacy in the local environment.

The more different the MNEs origins are from the context that they enter, the greater will become the obstacles in attaining local legitimacy and practice transfer. International business research has analyzed the adaptation of business to foreign institutions with reference to “psychic distance”. This concept captures “the sum of factors preventing the flow of information from and to the market” and, among other aspects, encompasses “differences in language, education, business practices, culture and industrial development” (Johanson and Vahlne, 1977, p. 24). According to Kogut and Singh (1988), previous studies have been primarily based on Hofstede’s (1980) work on national culture, which measures culture on four scales: masculinity-
femininity, individualism-collectivism, uncertainty avoidance, and power-distance. As argued above, organizations act in an even more complex environment formed by regulatory, cognitive and normative pillars of the institutional framework (Scott 1995, 2001). The three dimensions – regulatory, normative and cognitive – may have varying effects on investor strategies, and interact in different ways with the specific characteristics of the MNE concerned. Therefore, it is hypothesized that:

Hypothesis 2b. MNCs coming from countries that have different institutional systems than the host country will invest less than companies coming from countries which share the same institutional system with the host country.

4.3. Framework Analysis of Geographic Distance

Even though geographic distance is the most straightforward and noticeable one, it does not cover just the distance between two countries measured in kilometres or miles. Until 1956, economists were using the terms geographical distance and psychic distance as synonyms until, for the first time, Beckerman (1956) separated those terms and defined geographic distance as a factor that is able to affect physic distance. Some economists were supporting this idea (Johanson and Wiedersheim-Paul 1975, Dow and Karunaratna 2006, Child, Ng, and Wong 2002), while there were some others who were seeing those terms as two different concepts (Clark and Pugh 2001, Luostarinen 1979). Ghemawat (2001) sees geographic distance as an inimitable dimension and defines it as not only “a matter of how far away the country is in miles or kilometres, but also other attributes must be considered to include the physical size of the country, average within-country distances to borders, access to waterways and the ocean, and topography. Man-made geographic attributes also must be taken into account—most notably, a country’s transportation and communication infrastructures” (pp. 145).

A lot of scholars have recognized the important role of geographic distance. As reported by Berry et al. (2010) geographic distance has an impact on trade, FDI, and some of the economic activities that are happening between countries. For example, Australia is a country where geographic disadvantages are significant. Battersby and Ewing (2005) claimed: “Accounting for the factors [of distance and size] in the
gravity trade equation suggests that Australia’s comparative trade performance is actually quite strong. These factors, which are ordinarily outside the control of policy, plainly have a role in determining many economic outcomes in a country. In Australia’s case, geographic remoteness increases the costs of trading, which in turn lowers the extent of international trade and provides varying degrees of natural protection for Australian industries” (pp. 17). Blainey (2003) introduced the phrase “tyranny of distance” that shows the effect of geographical remoteness on shaping the country’s identity.

Leamer and Levinsohn (1995) claimed that the inverse relationship between geographical distance and bilateral trade is “one of the most robust empirical findings in economics” (pp. 1). Undoubtedly, geographic distance has influence on the cost of transportation. Huang (2007) defined transportation cost as “a function of geographic distances between two nodes, regardless of which parties are at the two ends of the trade routes” (pp. 3). Moreover, the case where countries are not close to each other and people do not have (enough) available information, can also create barriers in international trade. As suggested by Camerer and Weber (1992) “people prefer to bet on events they know more about” (pp. 325). In addition, Portes et al. (2001), emphasized that “countries which are near each other tend to know much more about each other, either because of direct interaction between their citizens for tourism or business, or because of better media coverage, or because they tend to learn each other’s language” (pp. 784). For that reason, Huang (2007) highlighted that due to uncertainty-aversion, countries are afraid to trade with more distant partners.

Scholars have used different methods in order to analyse geographic distance between two countries. For his calculation of geographic distance, Chen (2004) was using the latitude and longitude of the main city in each region or country, and his results showed that geographic distance decreased international trade between countries. On the other side, Krishna (2003) used the direct line distance to measure geographic distance. Berry et al. (2010) calculated geographic distance using the great circle method. Still, there is no common ground between academics on what is the best way to measure the distance between two countries.
There are a few articles that examine the effect of geographic distance as an independent factor on entry mode of FDI, as well as the determinants of direct investments. A research of Grosse and Trevino (1996) is the first paper that studied how source country characteristics may affect the amount of FDI inflows to the host country. They were observing FDI inflow of 23 source countries to the USA for the period 1980-1991. Their results show that geographic and cultural distance are significantly negatively related to the FDI inflow undertaken by foreign investors.

Bevan, Estrin and Meyer (2004) have a valuable study on the role of institutions in effecting the location of inbound FDI in Central and Eastern Europe. They are using geographic distance in two ways. First, it operates as a dummy variable where 1 means that two countries share common border and 0 otherwise. Second, it is used as an independent variable calculated as the distance between home and host country. The results demonstrate that both variables could explain, to a great extent, FDI inflows in the countries that were covered in the study.

4.3.1. Variables for Geographic Distance

Geographic distance (GD) is known as one of the most important obstacles to trade, FDI and other cross-border economic activities (Berry et al. 2010). Ghemawat (2001) sees GD not just as the actual distance (in kilometres or miles) between two countries, but as distance in terms of physical size of the country, average within-country distances to borders, access to waterways and the ocean, and topography.

Economists were using the GD in several business areas, such as financial economics (Coval and Moskowitz 1999, Garmaise and Moskowitz 2004, Pirinsky and Wang 2006), entrepreneurship (Jaffe, Trajtenberg and Henderson 1993, Lerner 1995), entry mode choice (Chakrabarti and Mitchell 2006, Grote and Umber 2006, Grote and Rucker 2007), researches on FDI (Kinoshita and Campos 2003, Pusterla and Resmini 2007). Looking at the determinants of US foreign affiliate sales, Carr et al. (2001) and Markusen and Maskus (2002) got the result that a one percent increase in distance is associated with a decline in foreign affiliate sales by 1.5 percent. Studying cross-sectional inference on OECD (Organisation for Economic Co-Operation and
Development) outward FDI, Blonigen et al. (2003) pointed to an elasticity of FDI with respect to distance of in between -0.2 and -0.3.

In economic geography literature, GD is consider to be an important cause of the choice of location of the production activity, since market accessibility is one of the basic motivations for MNCs to invest abroad. Thus, geographic distance is negatively related to FDI inflows to the host country. Solocha and Soskin (1994) emphasised that geographic proximity reduces informational and managerial uncertainty, lowers monitoring cost and allows firms to become less exposed to risk. In addition, they stated that some raw material and intermediate products are often supplied from home country sources and that is what makes geographic proximity an important determinant.

Ragozzino (2009) examined cross border mergers and acquisitions exercised by US companies in order to find out if geographic distance directly affects these firms’ governance decisions. His results showed that GD is an important factor of the governance choice of MNCs pursuing international growth by mergers and acquisitions. Additionally, when target firm is located at more distant market, an investor company will prefer shared-ownership solutions.

Different methods have been used for calculating geographic distance. Chen (2004) used the latitude and longitude of the main city in each region or country, and his results also showed that geographic distance decreased international trade between countries. On the other hand, Krishna (2003) used the direct line distance to measure geographic distance. Berry et al. (2010) calculated geographic distance using the great circle method. Still, there is no common ground between researchers of what is the best way to measure the distance between two countries.

A lot of scholars have used this dataset for their empirical researches, not just in economic field for describing bilateral patterns of trade flows and flows of foreign direct investments, for explaining migration patterns, international flows of tourists, of telephone traffic, but also in political science.

It consists of 2 dataset. The first one is geo_cepii that contains country specific geographical variables for 225 countries in the world, while the second one dist_cepii includes variables valid for pairs of countries (Mayer and Zignago, 2011). More specifically, it offers the following information: dummy variables including whether the two countries are contiguous, share a common language or a colonial links and two different distance measures: simple distances and weighted distances. Simple distances are calculated following the great circle formula, which uses latitudes and longitudes of the most important cities/agglomerations (in terms of population) for the dist variable and the geographic coordinates of the capital cities for the distcap variable. These two variables incorporate internal distances based on areas and also provided in the geo_cepii.xls file.

Weighted distances is calculated as distance between two countries based on bilateral distances between the biggest cities of those two countries, those inter-city distances being weighted by the share of the city in the overall country’s population. Head and Mayer (2002) developed the general formula for calculating distances between country i and j:

\[ D_{ij} = \left( \sum \frac{\text{pop}_k}{\text{pop}_i} \right) \left( \sum \frac{\text{pop}_l}{\text{pop}_j} \right)^{d_{kl}^\theta} \]

Where \( \text{pop}_k \) designates the population of agglomeration k belonging to country i. The parameter \( \theta \) measures the sensitivity of trade flows to bilateral distance \( d_{ij} \). For the distw calculation, \( \theta \) is set equal to 1. The distwces calculation sets \( \theta \) equal to -1, which corresponds to the usual coefficient estimated from gravity models of bilateral trade flows.
4.3.2. Hypothesis about the Relationship between Geographic Distance and FDI

In the recent literature on economic geography, proximity to market or geographic distance is considered to be an important determinant of the choice of location of the production activity, since market accessibility is one of the principle motivations for firms to invest abroad. In other words, geographic distance is negatively related to FDI inflows in the host country. Davidson (1982) and Solocha and Soskin (1990) argued that geographic closeness reduce informational and managerial uncertainty, lowers monitoring costs and allows the firm to become less exposed to risk. Solocha and Soskin (1994) also added that the important of geographic proximity is due to the fact that some raw materials and intermediate products are often supplied from home countries’ sources. In terms of transportation costs, firm should prefer to invest in nearby countries. Nevertheless, given the trend towards a more global business environment and the technological progress in communication and transport sector, this effect is expected to diminish over time. However, for now one can assume that geographic distance is likely to reduce the willingness of companies to enter into geographically distant markets. Hence, we hypothesize as followed:

*Hypothesis 3c. The greater the geographic distance between home and host country, the less FDI is undertaken between the countries.*

4.4. Framework Analysis of Economic Distance

Another important variable that describes the distance between home and host country is the level of economic development of the host country relative to that of the home country, or as Ghemawat (2001) named it “economic distance”. Berry et al. (2010) focused on three specific indicators of this distance across countries. Namely, the level of income (measured in GDP per capita), prevailing inflation rates and intensity of trade with the rest of the world (exports plus imports as proportion of GDP). Those indicators are in interaction with consumer purchasing power and preferences, macroeconomic stability, and the openness of the economy to external influences (Berry et al., 2010). Thus, they have been used by a lot of scholars in order to choose the foreign market and entry mode of FDI (Caves, 1996; Zaheer and Zeheer, 1997, Iyer, 1997, Yeung, 1997).
According to Ghemawat (2001), income of consumers is “the most important economic attribute that creates distance between countries, and it has a market effect on the levels of trade and the types of partners a country trades with” (pp. 8). Therefore, rich countries are going to make more cross-border economic activities with countries that are similar to their economic size than with poorer countries. Additionally, poor countries are going to trade more with rich countries rather than with poor ones. Furthermore, the income level will affect consumer purchasing power and preferences. As reported by Iyer (1997), the lifestyle of consumers is connected with wealth. In addition, a host country with a high level of economic development will be oriented towards intense competition and sophisticated consumer demand. In contrast, a smaller market size and higher inflation rates that reduce purchasing power of the consumer are the characteristics of a host country with a lower level of economic development (Pattnaik, Lee, 2013).

The prevailing inflation rates and the openness of the economy to external influences represent the macroeconomic stability and hospitality of the host country to the rest of the world and that is why they are very important factors of countries’ economic profiles (Berry et al., 2010). A host country with developed economic environment will attract more MNEs and foreign direct investments. Furthermore, those factors are important even after initial entry, because they are going to impact the decisions of MNCs for the future investments (Tsang, Yup, 2007).

4.4.1. Variables for Economic Distance

“Economic distance” (Ghemawat, 2001) implies differences of the level of economic development between the home and host country. As stated by Tsang and Yip (2007), economic distance (ED) between two countries demonstrates differences in factor costs (e.g. wages) and in technological capability; both factors influence FDI decision and performance. Same authors also argued that behind every FDI and its location there are exploration and exploitation motives. More specifically, in the resource exploration perspective, the role of FDI is to gain strategic assets (e.g. technology, management, and marketing expertise) available in the host country, whereas in the resource exploitation perspective, the idea of FDI is to relocate an MNC’s resources
over borders. Thus, they emphasized that “economic distance is an important factor affecting not only the motive for FDI i.e. resource exploitation vs. resource exploration, but also the FDI’s survival” (Tsang and Yip, 2007, pp. 1157).

A lot of other studies have examined the impact of economic distance on the choice of both the host foreign market and the mode of entry (Iyer 1997, Yeung 1997, Zaheer and Zaheer 1997). Ghemawat (2001, pp. 145) emphasised that “the wealth or income of consumers is the most important economic attribute that creates distance between countries”. Thus, it may affect the levels of trade and the trading partner countries. According to this author, rich countries will do more cross border economic activities with countries of comparable economic size. However, the case will not be the same between poor countries. They will trade more with rich countries rather than with poor ones. Furthermore, MNCs that in their investments abroad rely on economies of experience, scale, and standardization should choose the countries that have the same or similar economic profiles.

The rich-poor interaction often involves arbitrage, which is “the way of exploiting differences” that does not derive from cultural, administrative and geographic distances (Ghemawat, 2007, pp. 169). The well-known category of economic arbitrage is the exploitation of cheap labor, which is frequent for countries that are labor-abundant or they are in lower development phases than home countries. Apart from cheap labor, differences may be in capital, as well as in variations in more industry-specific inputs (e.g. knowledge) or in the availability of complementary products. As a consequence of economic arbitrage, companies that operate in industries where primary cost ingredients differ widely across countries or labor costs are important, it is highly probably to target countries with different economic profiles.

Furthermore, Cuervo-Cazurra and Genz (2012) made a research on developing-country MNCs and advanced-economy MNCs, by checking how distances between countries can bring advantages or disadvantages to MNCs. Firstly, they made a classification of country’s environment into three dimensions: obligating, pressuring and supporting. Additionally, they stated that this classification has impact on decision of MNCs for choosing the host country and for the analysis of competition
between the companies that are from different countries but operating at the same market. Finally, they concluded that their categorization of distance provides deep analysis of how companies are selecting countries to enter. Also, it can modify the attractiveness of the countries, but also the way in which a MNC can calculate such attractiveness. Lastly, their classification of distance shows that companies coming from certain countries will always be in advantage over companies that are coming from other home countries.

Moreover, Berry et al. (2010) said that, considering economic distance, countries vary in terms of their income, inflation and trade balance (as a percentage of GDP). They added that those factors are important, because they are in direct correlation with consumer purchasing power and preferences, macroeconomic stability, and the openness of the economy to external influences. Thus, in international business literature those indicators have been found to influence both the choice of foreign market and foreign market entry mode.

Finally, there are a lot of papers dealing with the host country level of development and entry mode choice (e.g. Dunning 1995, Itaki 1991, Eramilli, Agarwal, Kim, 1997). In a country where economic growth is low, its market is mostly saturated. Since greenfield investments require long process of establishment, in that kind of market it can expect cross-border M&A because it’s likely for the acquiring firms to obtain the strategic assets at low prices, and secure the market share of the acquired firms (Larimo, 2003). Even though the impact of economic distance and economic growth in general on FDI entry mode choice has been supported by lot of scholars, there is still some debate (Caves and Mehra, 1986). For example, Hennart & Park (1993) showed a significant positive relationship of R&D to Greenfield investment, but Kogut and Singh (1988) found a similar relationship to joint ventures.

4.4.2. Hypothesis about the Relationship between Economic Distance and FDI

The level of economic development in a globalized world does not only mean macroeconomic characteristics of both host and home countries, but also tends to include other corporate and institutional characteristics. Therefore, economic distance reflects differences in technological capability (research and development
expenditure, firm size and other asset classifications), in competitiveness, in institutional environment (Bilateral Investment Treaties), and, finally, in growth levels, all of which significantly affect FDI decisions and performance. Thus, economic distance is a valuable measure that can potentially improve the understanding of FDI (Tsang and Yip 2007).

One of the key issues in international business research is how multinational enterprises exploit their existing resources and explore new resources in host countries through FDI (Makino, Lau, & Yeh, 2002). Adopting the resource-exploitation versus exploration theoretical framework, when MNCs invest in host countries that are less developed than their home countries, they have the opportunity of exploiting their resources in these countries; in contrast, when they invest in host countries that are more developed than their home countries, they face the prospect of resource exploration. Exploitation and exploration represent two distinct yet complementary perspectives of FDI. In the resource-exploitation perspective, FDI is viewed as the transfer of an MNC’s proprietary resources across borders; in the resource-exploitation perspective, FDI is regarded as a means to acquire strategic assets, such as technology, management and marketing expertise, available in a host country.

Dunning (1993) stated that when the host country’s technological capability is at a low level, inbound foreign firms can more competitively exploit their own technological advantages. Hence, host countries that are less developed than MNCs’ home countries are more likely to offer them the opportunity to exploit their firm-specific advantages. Relative to the home countries, these countries often have lower factor costs, such as wage rate and rent. Moreover, local firms are generally backward in terms of technological, managerial, and marketing expertise. In the case of transition economies, local firms may not even be proficient at competing in market-based economic systems (i.e. Child & Markoczy, 1993). Therefore, MNCs tend to maintain a competitive edge over local firms and operate profitably. In other words, host countries that are less developed economically provide an environment favourable for FDI survival.
Considering the above, economic distance may operate both ways, either to increase FDI inflows in cases of exploiting country differences or to reduce such flows in cases of exploiting similarities.

**Hypothesis 4d (a).** The bigger the economic distance between home and host country, the lower the level of FDI inflows is expected to be.

**Hypothesis 4d (b).** The bigger the economic distance between home and host country, the greater the level of FDI inflows is expected to be.

4.5. Hypotheses about the relationship between Distances and FDI at industry level

FDI occurs when it is more beneficial for the foreign firm to exploit its ownership advantages in conjunction with the host country location advantages internally, i.e. by establishing a subsidiary in the foreign market, rather through alternative modes of entry, e.g. licensing. That means, given the host country's location advantages the foreign firm evaluates alternative ways of exploiting its ownership advantages or given its ownership advantages seeks the most efficient way of exploiting the foreign country's location advantages (Dunning 2000). In any case, the critical point is the coexistence of ownership, internalisation, and location advantages the configuration of which differs among countries and industries (Dunning 2001). Certain cultural characteristics and institutional settings which may be seen as part of a country’s location advantages lower investment costs and facilitate FDIs. This facilitating role is dependent on the nature of the cultural characteristic and/or institutional arrangement is expected to be more potent in industrial sectors of certain characteristics. For instance, if a country has a strong system of intellectual protection that deters imitation of technologies and/or know how which facilitate investments in sectors of technological intensity, especially if the technologies used are of intangible nature, i.e. information intensive (see Javorcik, 2004). At the same time, FDIs in such sectors are motivated by strategic resource acquisition. Therefore, cultures and institutional settings that promote the development of such assets in specific countries promote FDIs in sectors of high technology intensity in the same countries. FDIs in similar industries require complementary inputs of equal quality, hence produced with
advanced technology. Therefore, institutional settings that promote industrial development, e.g. business law and enforcement, governance, regulation, policy design and implementation quality, etc. along work ethics and social norms and values conducive to economic development facilitate FDIs in industries of technology intensity. It is expected then that countries of cultural and institution settings similar of these of the industrially developed countries are better placed to receive FDIs in sectors of technology intensity. In general, agglomeration economies are more important determinants in such industries than in low technology ones, hence countries of ample agglomeration economies which are developed ones and with similar institutions and cultures are expected to be host countries of FDIs in high technology industries.

_Hypothesis 5e (a). Overall, it is expected both the statistical significance and the sign of the distance dimensions to vary along different industrial sectors in the same host country._
Chapter V

*Model, Methodology and Data*
CHAPTER V. Model, Methodology and Data

5.1. Construction of Approximations

As already mentioned, the aim of this thesis is, by using Serbia as an individual country case, to demonstrate the implementation of a model based on Ghemawat’s distance framework for testing the key distance related determinants of the FDI inflows to Serbia. In order hypothesis testing to be more effective, the composite indexes for each independent variable are going to be used. The basic advantage of this methodology is that the interpretability of findings will be greatly improved by using a variety of proxy variables embedded in one composite index.

Therefore, the first step in the empirical analysis is to construct a single index (through factor analysis) for each distance/variable, and the second step is to apply an econometric model capable of strongly explaining the characteristics of the variables.

5.1.1. Exploratory Factor Analysis versus Principal Components Analysis

According to the literature, two methods are appropriate to reduce reliance on single-item measures of complex constructs: exploratory factor analysis (EFA) and principal components analysis (PCA). Both analyses are called under one name as factor analysis (FA). Kim and Mueller (1978, pp. 9) define FA as “a variety of statistical techniques whose common objective is to represent a set of variables in terms of a smaller number of hypothetical variables”. More precisely, Tabachnick and Fidell (2007, pp. 607) stated that FA “…[are] statistical techniques applied to a single set of variables when the researcher is interested in discovering which variables in the set form coherent subsets that are relatively independent of one another. Variables that are correlated with one another but largely independent of other subsets of variables are combined into factors”.

Even though PCA and EFA are both variable reduction techniques, there are distinct differences between them. The differences are given in the table below.
<table>
<thead>
<tr>
<th>Principal Component Analysis</th>
<th>Exploratory Factor Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal Components retained account for a maximal amount of variance of observed variables</td>
<td>Factors account for common variance in the data</td>
</tr>
<tr>
<td>Analysis decomposes correlation matrix</td>
<td>Analysis decomposes adjusted correlation matrix</td>
</tr>
<tr>
<td>Ones on the diagonals of the correlation matrix</td>
<td>Diagonals of correlation matrix adjusted with unique factors</td>
</tr>
<tr>
<td>Minimizes sum of squared perpendicular distance to the component axis</td>
<td>Estimates factors which influence responses on observed variables</td>
</tr>
<tr>
<td>Component scores are a linear combination of the observed variables weighted by eigenvectors</td>
<td>Observed variables are linear combinations of the underlying and unique factors</td>
</tr>
</tbody>
</table>

Source: Suhr, 1999, pp.3

The main difference between PCA and EFA is based on the way that two variables analyze the variation in the measured variables (Park et al. 2002). PCA analyzes variance and does not distinguish between common and unique variances, because it focuses only on the total variation among the variables. On the other hand, EFA analyzes covariance (Tabachnick and Fidell 2007, pp. 635) and separates common variance from unique variance. Thus Tabachnick and Fidelli are adding that when researchers want to analyze only the variance that is accounted for in an analysis (as in situations where they have a theory drawn from previous research about the relationships among the variables), they should probably use EFA to exclude unique and error variances, in order to see what is going on in the covariance, or common variance. When researchers are just exploring without a theory to see what patterns emerge in their data, it makes more sense to perform PCA (and thereby include unique and error variances), just to see what patterns emerge in all of the variance.

For the above stated reasons, EFA is going to be used instead of PCA, because in EFA employs a structured model and is based on specific assumptions. In this respect, EFA is a statistical technique while PCA is often described as a purely mathematical transformation. Furthermore, EFA has traditionally been used to explore the possible underlying factor structure of a set of measured variables without imposing any preconceived structure on the outcome (Child 1990).
Cultural Distance Index

The thesis proposes the cultural distance variable to be approximated by two indexes constructed as follows.

For the first index, factor analysis is applied on four Hofstede’s dimensions. Using STATA 9.1 and EFA, the following results were found.

<table>
<thead>
<tr>
<th>TABLE 5.2. Factor Analysis/ Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method: Principal factors</td>
</tr>
<tr>
<td>Rotation: Unrotated</td>
</tr>
<tr>
<td>Number of observations: 42</td>
</tr>
<tr>
<td>Retained factors: 2</td>
</tr>
<tr>
<td>Number of parameters: 6</td>
</tr>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>Factor 1</td>
</tr>
<tr>
<td>Factor 2</td>
</tr>
<tr>
<td>Factor 3</td>
</tr>
<tr>
<td>Factor 4</td>
</tr>
<tr>
<td>LP test: independent vs. saturated: chi2 (6)= 43.04 Prob&gt;chi2= 0.0000</td>
</tr>
<tr>
<td>Source: Stata 9.1., Results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 5.3. Factor loadings (pattern matrix) and unique variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Power Distance</td>
</tr>
<tr>
<td>Individualism/Collectivism</td>
</tr>
<tr>
<td>Masculinity/Femininity</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
</tr>
<tr>
<td>Source: Stata 9.1., Results</td>
</tr>
</tbody>
</table>
### TABLE 5.4.
Factor Analysis/Correlations

**Method:** Principal factors

**Rotation:** orthogonal varimax (Horse off)

**Number of observations:** 42

**Retained factors:** 2

**Number of parameters:** 6

<table>
<thead>
<tr>
<th>Factor</th>
<th>Variance</th>
<th>Difference</th>
<th>Proportion</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>1.58800</td>
<td>1.42649</td>
<td>1.0896</td>
<td>1.0896</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.16450</td>
<td></td>
<td>0.1129</td>
<td>1.2024</td>
</tr>
</tbody>
</table>

LP test: independent vs. saturated: chi2(6)= 43.04 Prob>chi2= 0.0000

Source: Stata 9.1, Results

### TABLE 5.5.
Rotated factor loadings (pattern matrix) and unique variances

<table>
<thead>
<tr>
<th>Variable</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Uniqueness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Distance</td>
<td>0.8153</td>
<td>0.0881</td>
<td>0.3275</td>
</tr>
<tr>
<td>Individualism/Collectivism</td>
<td>-0.7844</td>
<td>0.1447</td>
<td>0.3638</td>
</tr>
<tr>
<td>Masculinity/Femininity</td>
<td>-0.0143</td>
<td>0.3564</td>
<td>0.8728</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td>0.5548</td>
<td>-0.0937</td>
<td>0.6834</td>
</tr>
</tbody>
</table>

Source: Stata 9.1, Results

### TABLE 5.6.
Factor rotation matrix

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1</td>
<td>0.9976</td>
<td>-0.0688</td>
</tr>
<tr>
<td>Factor 2</td>
<td>-0.0688</td>
<td>0.9976</td>
</tr>
</tbody>
</table>

Source: Stata 9.1, Results
To begin with, a factor analysis (principal components factors analysis) with varimax rotation is performed. This analysis yields one distinct factor, the eigenvalue of which is greater than 1 (see Table 5.2.). Therefore, we are going to use factor 1. Table 5.7. shows extraction of Squared Sums of Loadings % of variance for Factor 1 and indicates that the first factor power_distance accounts for 46.979% of the variance, the second individualism-collectivism 37.967% and the fourth uncertainty avoidance 15.797%.

In accordance to the above, the formula below has been used for calculating the final index.

\[
\text{Hofstede Type Cultural Index} = [\text{power_distance} \text{ (difference between home and host country)} \times 0.46979 - \text{individualism-collectivism} \text{ (difference between home and host country)} \times 0.37967 + \text{uncertainty avoidance} \text{ (difference between home and host country)} \times 0.15797]^2
\]

The second index that is going to be used in this thesis is the one calculated by using Kogut and Singh formula. Drawing on Kogut and Singh (1988, pp. 422), the aggregate cultural distance index (CDj) is calculated based on each dimension deviation of each home country from the Serbian index, as shown in the equation below. Data for Serbia and each home country scores have been derived from Harzing's database (www.harzing.com/download/hgindices.xls). Algebraically, the index looks like this:

\[
\text{CDs} = \sum \left[ \frac{(I_{ij} - I_{is})^2}{V_i} \right] / 4,
\]
where $I_{ij}$ stands for the index for the $i$th cultural dimension and $j$th country, $V_i$ is the variance of the index of the $i$th dimension, $s$ indicates Serbia and $CDs$ is cultural difference of the $j$th country from Serbia.

**Institutional distance**

Due to the fact that cultural distance is treated as separately independent variable, institutional distance is explained by using the normative and regulative pillars.

Furthermore, an index for institutional distance is derived using Kogut and Singh (1988) approach to cultural distance. However, the formula is modified to take Serbia (instead of USA) as the host country, and accommodates two institutional dimensions, regulative and normative, instead of four cultural dimensions. The final formula is:

$$\frac{RD}{ND} = \frac{\sum (I_k - I_s)^2 / V_i}{n}$$

Where $I_k$ refers to the institutional indicator ($I$) for a home country $k$, $I_s$ refers to the institutional indicator ($I$) for Serbia ($s$), and $V_i$ is the variance of indicator $I$. $RD$ and $ND$ are regulative and normative distances of home country $k$ to Serbia. The symbol $n$ refers to the number of indicators for a particular measure. $RD$ includes first three indicators, whereas $ND$ includes the rest.

**Economic distance**

The variable economic distance is approximated in this thesis by the differences of GDP PPP per capita between the home and host countries. Data for this variable is in current US dollars and it is taken from the World Bank’s official website ([http://data.worldbank.org/indicator/NY.GDP.PCAP.CD](http://data.worldbank.org/indicator/NY.GDP.PCAP.CD)). GDP per capita is based on purchasing power parity (PPP). GDP PPP is gross domestic product converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GDP as the U.S. dollar has in the United States. GDP at purchaser's prices 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. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current international dollars based on the 2011 ICP round.

The following formula has been used for generating the index approximating the economic distance variable.

\[ ED = \text{GDP PPP per capita of home country} - \text{GDP per capita of host country (Serbia)} \]

5.2. Econometric Modeling

Most researches aim at quantifying relationships among variables that either measure the end result of some process or are likely to affect the process. The quantification of the process may be as simple as determining the degree of association between two variables or as complicated as estimating the many parameters of a very detailed nonlinear mathematical model of the system. Regardless of the degree of sophistication of the model, the most commonly used statistical method for estimating the parameters of interest is the method of least squares. The criterion applied in least squares estimation is simple and has great intuitive appeal. The researchers choose the model that is believed to be most appropriate for the project at hand.

In this thesis, linear regression analysis is used. It is a statistical method to investigate relationships between more than one independent variables and only one dependent variable. The purposes of regression analysis are identified by following: (1) figuring out independent variable influencing on dependent variable, (2) providing relationship between independent variable and dependent variable (in other words, when one unit of independent variables change, a researcher can know the amount of changes in dependent variable), (3) estimating the dependent variables according to the changes of a set of independent variables. In sum, when the goal is to understand (including predicting and explaining) the causal influence on a population outcome, regression analysis can be a powerful tool.

Multiple regression analysis is used for two different aims of research: prediction and explanation. Explanation is inconceivable without theory because it is in order to
understand the process leading to criterion. Also, in prediction, theory is the best
guide for selecting criteria and predictors as well as for developing measures of such
variables. Predictors should be selected as a result of theoretical consideration
(Pedhazur, 1997). It is not possible to decide whether and how to control for a
variable without formulating a causal model about the process by which the
independent variable affect the dependent variable.

Linear least squares regression has earned its place as the primary tool for process
modeling because of its effectiveness and completeness. Though there are types of
data that are better described by functions that are nonlinear in the parameters, many
processes in science are well-described by linear models. This is because either the
processes are inherently linear or because, over short ranges, any process can be well-
approximated by a linear model. The estimates of the unknown parameters obtained
from linear least squares regression are the optimal estimates from a broad class of
possible parameter estimates under the usual assumptions used for process modeling.
Practically speaking, linear least squares regression makes very efficient use of the
data. Good results can be obtained with relatively small data sets. Finally, the theory
associated with linear regression is well-understood and allows for construction of
different types of easily-interpretable statistical intervals for predictions, calibrations,
and optimizations. These statistical intervals can then be used to give clear answers to
scientific questions.

The main disadvantages of linear least squares are limitations in the shapes that linear
models can assume over long ranges, possibly poor extrapolation properties, and
sensitivity to outliers. Linear models with nonlinear terms in the predictor variables
curve relatively slowly, so for inherently nonlinear processes it becomes increasingly
difficult to find a linear model that fits the data well as the range of the data increases.
As the explanatory variables become extreme, the output of the linear model will also
always more extreme. This means that linear models may not be effective for
extrapolating the results of a process for which data cannot be collected in the region
of interest. Of course extrapolation is potentially dangerous regardless of the model
type. Finally, while the method of least squares often gives optimal estimates of the
unknown parameters, it is very sensitive to the presence of unusual data points in the
data used to fit a model. One or two outliers can sometimes seriously skew the results
of a least squares analysis. This makes model validation, especially with respect to outliers, critical to obtaining sound answers to the questions motivating the construction of the model.

In the regression analysis, we can see the report of analysis of variance, showing the approximate percentage of regressor’s account for criterion (dependent variable). In every regression run in this thesis, two different $R^2$ are presented. The uncentered $R^2$ explains the explanatory power of all regressors (including the constant regressor). The centered $R^2$ explains the explanatory power of nonconstant regressors.

A Durbin-Watson statistic is used to estimate the presence of autocorrelation in the errors of a regression model. If the errors are correlated, then least-squares regression can underestimate the standard error of the coefficients, which can make independent variables seem to be significant when they are not. The Durbin-Watson statistic is always between 0 and 4. A value of 2 means that there is no autocorrelation in the sample. Values approaching 0 indicate positive autocorrelation and values close to 4 indicate negative correlation.

The model has been estimated by applying the logarithm transformation of the algebraic function shown below:

\[
F_{DI} = f ( CD, ID, GD, ED) \\
- - - - /+
\]

where the signs below the independent variables designate the expected relationship between each one of them and the dependent variable.

5.3. Data Sampling

To test the hypotheses stated in the previous chapter ($H1a$, $H2b$, $H3c$, $H4d$ and $H4e$), a sample of 42 countries and one town, Hong Kong, is selected. From those countries, 25 are members of European Union (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Netherlands, Poland, Portugal, Romania,
Slovakia, Slovenia, Spain and Sweden), 9 are European countries (Albania, Bosnia and Herzegovina, FYROM, Montenegro, Norway, Switzerland, Turkey, Ukraine and United Kingdom), while the rest 7 are from other continents (Australia, Canada, China, Israel, Russia, United Arab Emirates and United States). The data comes from the Vienna Institute for International Economic Studies, WIIW, http://data.wiiw.ac.at/.

WIIW is one of the principle centres for research on Central, East and Southeast Europe with more than 40 years of experience. Their analyses are based on primary sources and data obtained directly from the countries they cover. In addition, the databases are updated in a timely manner and cross-checked with international databases.

Data on FDI to Serbia by industry for the same countries is selected by the dataset FDI Markets, https://www.fdimarkets.com. FDI Markets is part of the FDI Intelligence portfolio of investment products and services. A division of the Financial Times, FDI Intelligence, specialises in all areas relating to foreign direct investment and investment promotion. It was launched in 2003 and it is considered to be a central bank of information on the globalisation of business.

FDI to Serbia is divided into two groups: FDI to manufacturing and FDI to services sectors. More precisely, FDI to manufacturing sector is further subdivided into the following industrial sector groups: low, medium-low, medium-high and high technology FDI. Additionally, FDI to services sector is also broken down to high technology intensive service FDI and low technology intensive service FDI. For the need of both analyses, Eurostat classification of manufacturing sector according to technological intensity and based on NACE Rev.2 2-digit level, has been used. NACE is the acronym used to designate the various statistical classifications of economic activities developed since 1970 in the European Union. NACE provides the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment, national accounts) and in other statistical domains.
Table 5.8.
Aggregation of the manufacturing industry according to technological intensity and based on NACE Rev.2.

<table>
<thead>
<tr>
<th>High-technology:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Manufacture of basic pharmaceutical products and pharmaceutical preparations</td>
</tr>
<tr>
<td>• Manufacture of computer, electronic and optical products</td>
</tr>
<tr>
<td>• Manufacture of air and spacecraft and related machinery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medium-high-technology:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Manufacture of chemicals and chemical products</td>
</tr>
<tr>
<td>• Manufacture of weapons and ammunition</td>
</tr>
<tr>
<td>• Manufacture of electrical equipment</td>
</tr>
<tr>
<td>• Manufacture of machinery and equipment n.e.c.</td>
</tr>
<tr>
<td>• Manufacture of motor vehicles, trailers and semi-trailers</td>
</tr>
<tr>
<td>• Manufacture of other transport equipment excluding Building of ships and boats and excluding Manufacture of air and spacecraft and related machinery</td>
</tr>
<tr>
<td>• Manufacture of medical and dental instruments and supplies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medium-low-technology:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Reproduction of recorded media</td>
</tr>
<tr>
<td>• Manufacture of coke and refined petroleum products</td>
</tr>
<tr>
<td>• Manufacture of rubber and plastic products</td>
</tr>
<tr>
<td>• Manufacture of other non-metallic mineral products</td>
</tr>
<tr>
<td>• Manufacture of basic metals</td>
</tr>
<tr>
<td>• Manufacture of fabricated metal products, except machinery and equipment excluding Manufacture of weapons and ammunition</td>
</tr>
<tr>
<td>• Building of ships and boats</td>
</tr>
<tr>
<td>• Repair and installation of machinery and equipment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low-technology:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Manufacture of food products</td>
</tr>
<tr>
<td>• Manufacture of beverages</td>
</tr>
<tr>
<td>• Manufacture of tobacco products</td>
</tr>
<tr>
<td>• Manufacture of textiles</td>
</tr>
<tr>
<td>• Manufacture of wearing apparel</td>
</tr>
<tr>
<td>• Manufacture of leather and related products</td>
</tr>
<tr>
<td>• Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials</td>
</tr>
<tr>
<td>• Manufacture of paper and paper products</td>
</tr>
<tr>
<td>• Printing and reproduction of recorded media excluding Reproduction of recorded media</td>
</tr>
<tr>
<td>• Manufacture of furniture</td>
</tr>
<tr>
<td>• Other manufacturing excluding Manufacture of medical and dental instruments and supplies</td>
</tr>
</tbody>
</table>

### Table 5.9.
High-tech knowledge-intensive services

- Motion picture, video and television programme production, sound recording and music publishing activities
- Programming and broadcasting activities
- Telecommunications
- Computer programming, consultancy and related activities
- Information service activities
- Scientific research and development

Chapter VI

Empirical Results
CHAPTER VI. Empirical Results

6.1. Country Level

Model 1

Table 6.1. Linear regression at country level with Hofstede Type Cultural Index
Dependent variable: FDI, Independent variable: CD, ID, GD, ED

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>0.000090019</td>
<td>0.000056023</td>
<td>1.60682</td>
<td>0.10878332</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.333467199</td>
<td>0.136883655</td>
<td>-2.43614</td>
<td>0.01522529</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.045511912</td>
<td>0.020568125</td>
<td>-2.21274</td>
<td>0.02740803</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.460121250</td>
<td>0.076862899</td>
<td>5.98626</td>
<td>0.00000000</td>
</tr>
</tbody>
</table>

Usable Observations: 462, Degrees of Freedom: 458
Centered R^2: 0.0731366
Uncentered R^2: 0.3503027
Durbin-Watson Statistic: 1.9668

As it is shown on Table 6.1., the coefficient of cultural distance that is calculated as index by using factor analysis, is not statistically significant. Institutional distance has negative, significant impact on FDI inflows to Serbia. Therefore, Hypothesis 2b is strongly supported. Geographic distance exerts a negative and significant impact on the dependent variable. This implies that geographic distance affects MNEs' decision to choose host country for their investment. So, Hypothesis 3c is strongly supported. The last independent variable, economic distance, is strongly statistically significant and its coefficient is positive, indicating that FDI increases as economic differences increase too.
Table 6.2. shows the results of regression analysis, but using Kogut and Singh formula for the cultural distance. In this case, cultural distance is not statistically significant, because its level of significance is 0.720. Institutional distance is also not statistically significant. Geographic distance has a negative and significant impact on the dependent variable. Therefore, Hypothesis 3c is confirmed. Economic distance is statistically significant and has a positive effect on dependent variable; the same resulted in the first model too.

6.2. Industry Level

The econometric methodology applied at industry level is panel OLS. The model is estimated for two sectors, i.e. manufacturing and services. In addition, the regression analyses were done for 6 countries, i.e. Austria, Germany, France, Italy, Slovenia and USA. These 6 countries together are the source of 50% of a total direct investments inflows to Serbia. The remaining countries were excluded because values of FDI annual inflows do not exist for several years of the investment period.
### Table 6.3.
Linear regression for manufacturing sector with Hofstede Type Cultural Index

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T-Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.000052999</td>
<td>0.000213037</td>
<td>-0.24787</td>
<td>0.80422116</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-1.669919779</td>
<td>0.665178735</td>
<td>-2.51048</td>
<td>0.01424108</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.078636868</td>
<td>0.246614173</td>
<td>-0.31887</td>
<td>0.75072646</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.891309910</td>
<td>0.649257484</td>
<td>1.37281</td>
<td>0.17395623</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

### Table 6.4.
Linear regression for manufacturing sector with Kogut-Singh Type Formula

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T-Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.106629369</td>
<td>0.529852150</td>
<td>-0.20124</td>
<td>0.84106022</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-1.689516552</td>
<td>0.653073794</td>
<td>-2.58702</td>
<td>0.01164392</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.080268798</td>
<td>0.248049442</td>
<td>-0.32360</td>
<td>0.74715366</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.878620565</td>
<td>0.643528045</td>
<td>1.36532</td>
<td>0.17628933</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Tables 6.3 and 6.4 demonstrate the results for FDI flows to manufacturing sector of Serbia. Three of four independent variables, i.e. cultural, geographic and economic distances are statistically insignificant. Only institutional distance is playing a significant role in attracting FDI inflows to manufacturing sector. It is statistically significant at 5% level of significance and its coefficient is negative, meaning that institutional system constitutes the major factor for investment attractiveness.

Table 6.5.
Linear regression for services sector with Hofstede Type Cultural Index

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>0.000124935</td>
<td>0.000149602</td>
<td>0.83511</td>
<td>0.40634211</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.426728146</td>
<td>0.467113032</td>
<td>-0.91354</td>
<td>0.36392361</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.239245787</td>
<td>0.1737181565</td>
<td>-1.38147</td>
<td>0.171290.7</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>1.184292199</td>
<td>0.455932542</td>
<td>2.59752</td>
<td>0.01132341</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Table 6.6.  
Linear regression for services sector with Kogut-Singh Type Formula

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.023912910</td>
<td>0.373766618</td>
<td>-0.06398</td>
<td>0.94916011</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.323022636</td>
<td>0.460689238</td>
<td>-0.70117</td>
<td>0.48539451</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.252681590</td>
<td>0.174978248</td>
<td>-1.44407</td>
<td>0.15293875</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>1.278195022</td>
<td>0.453955506</td>
<td>2.81568</td>
<td>0.00623470</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

The results presented in tables 6.5 and 6.6 show that in the case of FDI inflows to the services sector of Serbia, only economic distance is statistically significant with a plus sign, meaning that different economic environments between home countries and Serbia are attractive for investing in this sector.

Furthermore, the model using the same home countries, i.e. Austria, France, Germany, Italy, Slovenia and USA, was estimated for each of the two industrial subsector groups, i.e. low and medium-high technology and two services sector groups, i.e. low and high knowledge intensive sectors. The regression analysis for high and medium-low technology subsectors was not done, because there are not sufficient observations to these subsectors in order to run a regression.
Table 6.7.  
Linear regression for medium-high technology industrial subsector with Hofstede Type Cultural Index

<table>
<thead>
<tr>
<th>Dependent variable: FDI to medium-high technology industrial subsector,</th>
<th>Independent variable: CD, ID, GD, ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable Observations: 36, Degrees of Freedom: 32</td>
<td></td>
</tr>
<tr>
<td>Centered R^2: 0.0496469</td>
<td></td>
</tr>
<tr>
<td>Uncentered R^2: 0.3446167</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson Statistic: 1.9084</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.411896333</td>
<td>0.721714859</td>
<td>-0.57072</td>
<td>0.57217651</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-1.022646132</td>
<td>0.902667185</td>
<td>-1.13292</td>
<td>0.26566690</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>0.005312309</td>
<td>0.354154393</td>
<td>0.01500</td>
<td>0.98812533</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.940120226</td>
<td>1.295019424</td>
<td>0.72595</td>
<td>0.47314554</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

Table 6.8.  
Linear regression for medium-high technology industrial subsector with Kogut-Singh Type Formula

<table>
<thead>
<tr>
<th>Dependent variable: FDI to medium-high technology industrial subsector,</th>
<th>Independent variable: CD, ID, GD, ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable Observations: 36, Degrees of Freedom: 32</td>
<td></td>
</tr>
<tr>
<td>Centered R^2: 0.0594811</td>
<td></td>
</tr>
<tr>
<td>Uncentered R^2: 0.3513985</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson Statistic: 1.9003</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.610231965</td>
<td>0.749035251</td>
<td>-0.81469</td>
<td>0.42127141</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.953758097</td>
<td>0.905828908</td>
<td>-1.05291</td>
<td>0.30026733</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>0.012927744</td>
<td>0.347422665</td>
<td>0.03721</td>
<td>0.97054840</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.533164964</td>
<td>0.901869117</td>
<td>0.59118</td>
<td>0.55855448</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Tables 6.7 and 6.8 report results for FDI inflows from home countries to the medium-high technology industrial subsector of Serbia. All independent variables are statistically insignificant. That kind of results indicates that none of the variables proposed in this thesis have any explanatory power.

Table 6.9.  
Linear regression for low technology industrial subsector with Hofstede Type Cultural Index  

<table>
<thead>
<tr>
<th>Dependent variable: FDI to low technology industrial subsector, Independent variable: CD, ID, GD, ED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable Observations: 30, Degrees of Freedom: 25</td>
</tr>
<tr>
<td>Centered R^2: 0.3560463</td>
</tr>
<tr>
<td>Uncentered R^2: 0.4538967</td>
</tr>
<tr>
<td>Durbin-Watson Statistic: 2.1015</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T-Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>0.011787302</td>
<td>0.705078738</td>
<td>0.01672</td>
<td>0.98679452</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-1.703743110</td>
<td>0.832348423</td>
<td>-2.04691</td>
<td>0.05132561</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-1.1544137557</td>
<td>0.526664505</td>
<td>-2.93192</td>
<td>0.00710686</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>4.153086896</td>
<td>1.715391765</td>
<td>2.42107</td>
<td>0.02306619</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Table 6.10.  
Linear regression for low technology industrial subsector with Kogut-Singh Type Formula  
<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T-Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.146026636</td>
<td>0.954285368</td>
<td>-0.15302</td>
<td>0.87960935</td>
</tr>
<tr>
<td>Institutional</td>
<td>-1.689184102</td>
<td>0.835726262</td>
<td>-2.02122</td>
<td>0.05408777</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-1.605628440</td>
<td>0.614476240</td>
<td>-2.61300</td>
<td>0.01497403</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>4.323209665</td>
<td>1.529019705</td>
<td>2.84744</td>
<td>0.00910332</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

Table 6.9 and 6.10 report results for FDI inflows from home countries to the low technology industrial subsector of Serbia. Institutional, geographic and economic distances are statistically significant at 5%, 1% and 5% level of significance, respectively using Index as CD, while the same distances are statistically significant at 8%, 5% and 1% level of significance respectively using Kogut-Singh formula as CD. The coefficients for both the institutional and geographic distance are negative, while the coefficient of economic distance has a positive sign meaning that as economic distance increases, FDI inflows to the host country low technology industrial subsector increases, too.
Table 6.11.  
Linear regression for low knowledge intensive service sector with Hofstede Type Cultural Index  
Dependent variable: FDI to low knowledge intensive service sector, Independent variable: CD, ID, GD, ED  
Usable Observations: 36, Degrees of Freedom: 32  
Centered R^2: 0.3450689  
Uncentered R^2: 0.6723224  
Durbin-Watson Statistic: 2.0178  

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-0.933737793</td>
<td>0.536654700</td>
<td>-1.73992</td>
<td>0.09148367</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>0.323895246</td>
<td>0.671207722</td>
<td>0.48256</td>
<td>0.63269584</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-1.109867842</td>
<td>0.263343088</td>
<td>-4.21453</td>
<td>0.00019098</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>4.175441582</td>
<td>0.962954069</td>
<td>4.33608</td>
<td>0.00013507</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

Table 6.12.  
Linear regression for low knowledge intensive service sector with Kogut-Singh Type Formula  
Dependent variable: FDI to low knowledge intensive service sector, Independent variable: CD, ID, GD, ED  
Usable Observations: 36, Degrees of Freedom: 32  
Centered R^2: 0.3674705  
Uncentered R^2: 0.6835305  
Durbin-Watson Statistic: 2.0590  

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-1.136678863</td>
<td>0.550215536</td>
<td>-2.06588</td>
<td>0.04701583</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>0.426712199</td>
<td>0.665390764</td>
<td>0.64130</td>
<td>0.52589753</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-1.079118391</td>
<td>0.255204742</td>
<td>-4.22844</td>
<td>0.00018358</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>3.200948041</td>
<td>0.662482038</td>
<td>4.83175</td>
<td>0.00003239</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Furthermore, Tables 6.11 and 6.12 refer to FDI in the low knowledge intensive service sector of Serbia. Three independent variables i.e. cultural, geographic and economic distance are statistical significant at the 10%, 1% and 1% level of significance respectively, using Hofstede Type Cultural Index, and 5%, 1% and 1% level of significance respectively, using Kogut- Singh formula. The coefficient of both cultural and geographic variables is negative; while for economic is positive. For cultural and geographic distances that means that as cultural differences and kilometers between countries increase, FDI inflows decrease. The findings for economic distance suggest that same economic arbitrage takes place since higher economic distance increases FDI inflows to the selected sector of the host country.

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>0.132478858</td>
<td>0.315860392</td>
<td>0.41942</td>
<td>0.67848986</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.795059858</td>
<td>0.423109970</td>
<td>-1.87909</td>
<td>0.07193986</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>0.031109913</td>
<td>0.233381950</td>
<td>0.13330</td>
<td>0.89502301</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.560803696</td>
<td>0.719287081</td>
<td>0.77967</td>
<td>0.44290647</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0
Table 6.14.
Linear regression for high knowledge intensive service sector with Kogut-Singh Type Formula

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T- Stat</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>0.261650560</td>
<td>0.345182186</td>
<td>0.75801</td>
<td>0.45553325</td>
</tr>
<tr>
<td>Institutional Distance</td>
<td>-0.798970771</td>
<td>0.419712535</td>
<td>-1.90361</td>
<td>0.06853374</td>
</tr>
<tr>
<td>Geographic Distance</td>
<td>-0.003598359</td>
<td>0.233726296</td>
<td>-0.01540</td>
<td>0.98783877</td>
</tr>
<tr>
<td>Economic Distance</td>
<td>0.761062113</td>
<td>0.601637209</td>
<td>1.26499</td>
<td>0.21754141</td>
</tr>
</tbody>
</table>

Source: Linear Regression, Rats 8.0

Tables 6.13 and 6.14 report results for FDI inflows from home countries to the high knowledge intensive service subsector of Serbia. All independent variables are statistically insignificant, except institutional distance. It is statistically significant at 8% level of significance. Its coefficient is negative, which means that as institutional differences increase between the home countries and Serbia, FDI flows to this sector will decrease, too.
Chapter VII

Conclusions
CHAPTER VII. Conclusions

The aim of this thesis is to define the meaning and the role of distance in determining cross border investment transactions. Specifically, it aims, using a transition country i.e. Serbia as a case study, at demonstrating the implementation of a model based on Ghemawat's culture, administrative, geographic, and economic distance framework modified by substituting administrative by institutional distance for testing the relevance of distance in determining Foreign Direct Investment (FDI) inflows to a country. In addition, this thesis also illustrates how each of the above distance dimensions, i.e cultural, institutional, geographic and economic, correlates with FDI at different industries categorised by technological level in manufacturing, i.e. high technology, medium high technology, medium low technology, low technology subsectors, and in services sectors, i.e. low knowledge intensive and high knowledge intensive service sectors. With the exception of institutional distance the remaining distance dimensions, i.e. cultural, geographic and economic follow Ghemawat (2001) propositions. Therefore, the “CAGE distance framework” in this thesis is being transformed into “CIGE distance framework”.

This study represents the first attempt to compile, illustrate and discuss in detail the data on FDI inflows to Serbia at country level. This will be achieved by analysing and comparing how each form of distance affects FDI inflows. This aim is based on the premises that Ghemawat’s (2001) conceptual framework is a comprehensive framework which employs a variety of distance determinants.

In addition, another novelty of this thesis is that it applies the CIGE model at industry level, something which has not been thoroughly investigated in the literature so far. The impact of the differences between countries is conditioned by industry characteristics, which must be taken into account for most applications of company strategy.

Another contribution of this thesis is that it conducts a clear distinction between cultural and institutional concept. Scott’s (1995) institutional framework is used in order to categorise institutional distance in three pillars: regulatory, normative and cognitive. However, there are some significant overlapping between cognitive aspects
and cultural distance. After observing different empirical studies (e.g. Gaur and Lu 2007, Xu et al. 2004, Estrin et al. 2007, Chao and Kumar 2006, etc.) for the purpose of this thesis, institutional distance is defined using only two of the three aspects of Scott’s theoretical framework: regulative (social aspects) and normative (business aspects), while the cognitive pillar is used separately into the cultural framework.

The overall contribution of this thesis relies upon the multidimensional way that the CIGE framework is applied to Serbia and, by offsetting the lack of empirical research on the topic regarding the specific less-developed economy, to provide data that until now has been absent from this field.

The term globalization appears for a first time in 1961. However, its roots have a long pedigree. While speaking about globalization, scientists are facing two problems: how old the term is and how to define it? There are three views about the history of globalization. The first one connects this term with two events, i.e. when Colombus discovered America and when Vasco da Gama made an end run around Africa.

The second view emphasizes that globalization has its roots even earlier in the human history. More precisely, according to this view, globalization started with an international trade economy between North-Western Europe and China in 13th century. Finally, the third view states that globalization is a modern phenomenon that began in the early XIX century.

Regarding the definition of globalization, there is a huge challenge in describing this term. It exists at different times and it means different things to different people of different nations. Therefore, there are a lot of divergent explanations as well as contrasting arguments on how globalized we are today.

One of the first papers that attracted attention was the article “The Globalization of Markets” by professor Levitt in 1983. He indicated that the world is becoming more homogenous and sooner or later it will become borderless. Twenty years later, his idea was further developed by Thomas Friedman who claimed that the world is flat, thus the world economy is becoming a “level playing field” where each player, i.e. country, company or individual, has the same chance of succeeding.
Pankaj Ghemawat, one of the most prominent authors on globalization in business circles today, argues that borders still matter for evaluating cross-border moves and the world is in a stage of semiglobalization and will remain as such in decades to come. Ghemawat underpinned that differences between countries still have large effect on trade and he grouped those differences in four broad categories, i.e. cultural, administrative, geographic and economic, formulating the CAGE model framework at country and industry level.

There is a plethora of definitions of FDI. FDI literature focuses on the interpretation of FDI through market imperfections and the theory of industrial organization, the Product Cycle Model, the eclectic theory (paradigm) and the Market Transaction Cost Approach (TCA).

Both TCA and the eclectic paradigm provide the foundation for the state of the art theory of MNEs (Verbeke, 2009), since these two theories contribute the intellectual foundation for the rigorous theoretical and empirical analysis which characterizes research on MNEs at what has become known as the “Reading School” of international business (Rugman, 2009).

Ownership, location, and Internalization (OLI) determinants set up the main framework to explain FDI decisions. However, the underlying interpretation of location in the eclectic paradigm is much broader than in TCA. TCA approach sets up the framework which explains how international expansions occur. Thus, once motivated to expand internationally, companies confront challenges and risks which they need to mitigate and overcome. The most well- known risk is the liability of foreignness, which is defined as additional cost for firms when they do business abroad. Uncertainty is another important risk undertaken by companies when they expand abroad. One social aspect of this challenge is suggested by the concept of “physic distance”, which concerns the cultural, linguistic, institutional level and other differences between home and host countries. In terms of institutional aspects, scholars have found that high regulatory control affects firms negatively in the host countries, thus influencing the incoming company strategy. Although firms need to deal with the local requirements and cope with these regulations, the unexpected
additional costs may offset the benefits of internationalization. Therefore, since TCA connects firm specific characteristic mechanisms with environmental factors, it has a limited and more illiberal focus on the intangible knowledge advantages of MNEs, and subsequently, is able to demonstrate the heterogeneity of firm-level behaviour within any industry.

While Serbia was united with the six other republics, as the Socialist Federal republic of Yugoslavia, it received DM 90 million of FDIs in a form of joint ventures through 367 agreements (Ristic, 2004). It was the only socialist country that allowed the entry of foreign capital and foreign investments. The breakdown of Yugoslavia resulted in the catastrophic decrease of FDI inflows, the collapse of GDP per capita and the annihilation of the real value of salaries and other personal income in Serbia. As a result of internal problems and wars, FDI has been limited during the 1991-2000 period.

The situation changed in 2001, which is considered to be the starting year of transition to market in Serbia. The scenario of inflows of direct investments was the same as for the other countries in transition. First, investments were coming through privatisation of the state enterprises. Until 2006, FDIs in Serbia were increasing, but not significantly. Amid all internal political problems, investments were suffering the most. Furthermore, the assassination of the prime minister interrupted the process of reforms until the last half of 2003. During that period, privatization and selling of companies and banks were the main sources of FDI in Serbia. Then, as the political and economic stability were increasing, foreign partners were investing in a couple of sectors, mainly food and tobacco. Finally, FDIs expanded into trade, automotive industry, electronics, telecommunications and financial services (Filipovic, Hadzic, Pavic 2006). In 2011, Serbia was the best performer in attracting FDIs in Southeaster Europe according to UNCTAD. This growing trend remains up to date.

Regarding FDI regulation in Serbia, FDI was regulated by the Law of Foreign Investments (LFI) passed in 2002, when still the Federal Republic of Yugoslavia existed. That is why the Serbian government is preparing a new LFI. Until then, this Law is in force. The aim of the new Law will be to create a business-friendly legal, economic and political environment (Doing Business and Investing in Serbia Report,
The long term goal is to create a Law that will follow the European Union legislation in prospect of future integration.

The most important foreign partners of Serbia are the EU, Russia, China, USA and UAE. From the EU countries, Italy keeps the first place, together with Germany and Austria, followed by Slovenia. It is also important to mention that a significant flow of FDI is also coming from the USA. However, because American companies implement their projects through European subsidiaries, the exact amount of FDI originated in the USA cannot be estimated.

The concept of distance has important implications for strategic firm decisions, such as the location choice (e.g. Johnson and Vahlne 1973, Dunning 1979), transfer of organizational practices (Kostova and Ruth 2002), and the entry mode strategy (Kogut and Singh 1988). Among different approaches of distance (Beckerman 1956, Hymer 1960, Johnson and Vahlne 1977, Nordstrom and Vahlne 1994, Hennart and Larimo 1998, Dunning 1979), the most prominent is mostly attributed to Ghemawat (2001).

Ghemawat (2001) supports that companies erroneously utilize an inadequate and incorrect modality when deciding on foreign expansion: the country portfolio analysis (CPA). The CPA focuses on national GDP, levels of consumer wealth, and people’s propensity to consume, but ignores “the costs and risks of doing business in the market”. These costs are grouped into a category classified as distance which itself is sub-divided into four dimensions: cultural, administrative, geographic and economic distance.

“Culture as used here refers to the attributes of a society that are sustained mainly by interaction among people, rather than by the state” (Ghemawat, 2007, page 40). One of the most common cultural differences is language. Furthermore, differences in ethnic, religions or values, norms and dispositions tend to reduce the interaction.

Cultural distance (CD) and its proxies were used in a lot of business areas, in both fields domestic and international. However, FDI is the most popular sphere for the application of the CD theory. According to Shenkar (2001), the first use of CD in FDI literature meant to explain the foreign market investor location. Theory claimed that
there will be a less chance for MNCs to invest in culturally distant markets (e.g., Porter et al. 2000, Yoshino 1976, Ozawa 1979, Dunning 1988). The second use of CD in FDI literature meant to predict the mode of entry into foreign markets. A lot of studies have examined the influence of CD to FDI entry modes: wholly owned subsidiary (WOS) and partly controlled international joint venture (IJV), as well as on the establishment mode: greenfield, acquisition and JV. However, the empirical results of the studies are ambiguous (e.g., Kogut and Singh 1988, Kim and Hwang 1992, Erramilli 1996, Hennard and Larimo 1998). Finally, the third use of CD in FDI literature meant to explain the performance of the MNCs in international markets. Yet, for this application of CD, empirical results have been mixed as well (e.g., Li and Guisinger 1991, Johnson et al. 1991, Park and Ungson 1997).

Perhaps the best known study that measures the CD among countries is Hofstede’s (1980) survey of more than 100,000 employees of the multinational IBM in more than 60 countries. Using the survey, Hofstede has developed four dimensions of national culture: power distance, that shows until what level individuals are comfortable with inequality in relationships; individualism/collectivism, that demonstrates how much individuals focus on their own problems and needs; uncertainty avoidance, that explains to which extent people in a group feel threatened by uncertain or unknown situations and masculinity/femininity, that presents the role of sex in society. In 1991, Hofstede added one more dimension of national culture: “Confucian Dynamism”, also known as long term orientation (Hofstede, 1991). Even though Hofstede’s model is one of the most used frameworks to compare cultural distances, it was heavily criticized (e.g. McSweeney, 2002; Schwartz, 1994; Shenkar, 2001; Steenkamp, 2001). Thus, several other cultural frameworks appear, along with Trompenaars (1993), Schwartz (2008) and GLOBE (House et al., 2004).

Most studies have measured the cultural distance between the home market of MNCs and the target country of the expansion by using Kogut and Singh’s (1998) index, which is based on Hofstede (1980) dimensions of national culture. Though a lot of scholars have become critical of this index and of Hofstede’s model, studies have continued to rely on them, since little progress has been made in developing reliable alternatives (Drogendijk, Slagengen, 2006).
The impact of cultural distance on cross-border transactions and FDI is currently the subject of considerable debate (Brouthers and Brouthers, 2001; Shenkar, 2001). In general, increasing cultural distance between countries increases the adaptation cost of foreign operations in the host country. The results of available empirical studies confirm that a large cultural distance will generally reduce FDI flows from home to host country (Tihanyi, Griffith and Russell, 2005). Based on this argumentation, we posit the following hypothesis:

Hypothesis 1a. Considering Hofstede’s cultural index, it is expected that the greater the cultural distance between home and host country, the lower the inward FDI flows to the host country.

Institutional distance is a measure of differences in the institutional environment between the home and host country of MNEs. During the last decades it is receiving a lot of attention from international business (IB) researchers and has also been conceptualized and operationalized in many different ways in IB studies. Scientists have used and applied institutional distance as one of factors that companies are examining before entering to new international markets (Kostova 1997, Kostova and Zaheer 1999, Kostova and Ruth 2002, Xu and Shenkar 2002, Arslan and Larimo 2010).

In the past studies, scientists were using Scott’s (1995) institutional framework in order to refer that institutional distance can be different for each institutional pillars: regulatory, normative and cognitive (termed as cultural cognitive in some studies) (Xu et al. 2004, Gaur and Lu 2007, Xu and Shenker 2002). Some researchers applied North’s (1990) classification of formal and informal institutions to analyse the impact of institutional distance on strategies of MNEs (e.g. Peng 2003, Estrin et al. 2009, Dikova and Witteloostuijn 2007). Even though institutional distance has been conceptualized and operationalized differently in the past, Scott’s (1995) institutional pillars are predominant classification used in IB studies.

The impact of institutional distance on FDI location and entry mode choices of MNEs can be found in the studies of Xu and Shenkar (2002), Yiu and Makino (2002), Xu et al. (2004), Gaur and Lu (2007), Estrin et al. (2009), Treviono and Mixon (2004),
Arslan and Larimo (2010), and others. Yet, in some of the studies researchers were examining the differences in just one aspect of institutional environment (e.g. Brouthers 2002, Xu et al. 2004, Gaur and Lu 2007, Gaur et al. 2007, Arslan and Larimo 2010, Chao and Kuman 2010). For example, Trevino and Mixon (2004) were concentrated on differences in legal reforms across countries in order to understand strategic FDI decisions.

FDIs are seen as important determinant of economic growth of developing countries and are considered to be a vehicle for technological progress. Not surprisingly, the FDI promoting effect of good institutions might be an important channel of their overall effect on growth and development. Therefore, there are a few reasons why the quality of institutions should be taken into account for attracting FDI. For the beginning, good governance infrastructures may attract foreign investors. Furthermore, poor institutions can bring additional costs to FDI. Finally, FDIs are vulnerable to any kind of uncertainty, such as uncertainty stemming from poor government efficiency, policy reversals, graft or weak enforcement of property rights and legal system, etc.

Kaufman et al. (1999) stated five out of six government indicators that seem to have influence on foreign investors: political instability and violence, government effectiveness, regulatory burden, rule of law and graft. The sixth one, the voice and accountability indicator, was not significant determinant of FDI. La Porta et al. (1998) used International Country Risk Guide as independent variable and found out that risk of repudiation of contracts by government, risk of expropriation and shareholder rights were significant.

Using Kaufman et al. (1999) six government indicators, Globerman and Shapiro (2002) got found out that the good governance impact positively both FDI inflows and outflows. The only limitation of this study is that the institutional quality of the home and the host country of FDI cannot be included in the regression, because the authors did not use the bilateral flows. However, Levchenko run the study of the effect of institutional distance between home and host country of FDI by using bilateral data and suggested that institutional differences may be a source of comparative advantages. More precisely, some sectors could be more “sensitive” than others and
that could be a source of more trade flows. Busse and Hefeker (2007) emphasised that government stability, law and order, bureaucratic quality, democratic structure and lower levels of corruption are positively associated with FDI. Similarly, Daude and Stein (2007) found that a credible and efficient government and market friendly regulations have a positive relationship with FDI. Mengistu and Adhikary (2011) found that political stability, good public and political service, an improved legal system and low levels of corruption promote FDI, while Buchanan et al. (2012) discovered a positive relationship between good governance and foreign investments.

Most studies tried to examine the link between democracy and FDI. Harms and Ursprung (2002) and Jensen (2003) discovered that MNEs are more likely to be attracted to host countries that have democratic structure, while non- or less democratic countries are connected with the greater risk of policy reversals and therefore attract less FDI. Kolstad and Villanger (2008) got the same results for developing countries only.

Political stability was also examined in several studies. Tuman and Emmert (1999) found a negative relationship between political instability in countries of Latin America and FDI from Japan. Quazi (2007) confirmed this finding, stating the positive relationship between political stability and foreign investments for Asian countries.

The study of the linkage between corruption and FDI has received a lot of intention. From a theoretical perspective, corruption can have both positive and negative impact on foreign investments. Corruption increases uncertainty, therefore it causes additional cost of doing business, which can be a major discouragement for foreign investors (Rose- Ackermann 1975, Shleifer and Vichny 1993). On the other side, some scholars (Leff 1964, Huntington 1968) argued that when a host country has an excessive regulation and inefficient legal system, the interaction between corrupt autocrats and foreign investors can be helpful for MNE to enter a market. Some studies found out that corruption has a significant, negative impact on FDI (e.g. Wei 1997, 2000, Habib and Zurawicki 2002, Mauro 1995, Voyer and Beamish 2004), while some others do not confirm such a negative relation (e.g. Wheeler and Mody 1992, Egger and Winner 2005).
Hypothesis 2b. **MNCs coming from countries that have different institutional systems than the host country will invest less than companies coming from countries which share the same institutional system with the host country.**

Geographic distance (GD) is known as one of the most important obstacles for trade, FDI and other cross-border economic activities (Berry et al. 2010). Ghemawat (2001) sees GD not just as the actual distance (in kilometres or miles) between two countries, but as distance in terms of the physical size of the country, average within-country distances to borders, access to waterways and the ocean, and topography.

In economic geography literature, GD is consider to be an important cause of the choice of location of the production activity, since market accessibility is one of the basic motivations for MNCs to invest abroad. Thus, geographic distance is negatively related to FDI inflows to the host country. Solocha and Soskin (1994) emphasised that geographic proximity reduces informational and managerial uncertainty, lowers monitoring costs and allows firms to become less exposed to risk. In addition, they stated that some raw material and intermediate products are often supplied from home country sources and that is what makes geographic proximity an important determinant.

Moreover, geographic distance makes the transfer of knowledge more difficult between different entities because personal contacts and interaction of teams will be less frequent (Hansen and Lovas, 2004; Shenkar, 2001). Therefore, one can assume that geographic distance is likely to reduce the willingness of companies to enter into geographically distance markets. Hence, we hypothesize as follows:

**Hypothesis 3c. The greater the geographic distance between home and host country, the less FDI is undertaken between the countries.**

“Economic distance” (Ghemawat, 2001) implies differences of the level of economic development between the home and host country. As stated by Tsang and Yip (2007), economic distance (ED) between two countries demonstrates differences in factor costs (e.g. wages) and in technological capability; both factors influence FDI decision.
and performance. These two authors also argued that behind every FDI and its location are exploration and exploitation motives. More specifically, in the resource exploration perspective, the role of FDI is to gain strategic assets (e.g. technology, management, and marketing expertise) available in the host country, whereas in the resource exploitation perspective, the idea of FDI is to relocate MNC’s resources over borders. Thus, they emphasized that “economic distance is an important factor affecting not only whether the motive for FDI is resource exploitation or resource exploration, but also FDI survival” (Tsang and Yip, 2007, p. 1157).

A lot of other studies have examined the impact of economic distance on the choice of both the host foreign market and the mode of entry (Iyer, 1997; Yeung, 1997; Zaheer and Zaheer, 1997). Ghemawat (2001, p. 145) emphasised that “the wealth or income of consumers is the most important economic attribute that creates distance between countries”. Thus, it can affect the levels of trade and the trading partner countries. According to this author, rich countries will undertake more cross border economic activities with countries of comparable economic size. However, the case will not be the same between poor countries. They will trade more with rich countries rather than with poor ones. Furthermore, MNCs that by investing abroad rely on economies of experience, scale, and standardization should choose countries that have the same or similar economic profiles.

The rich- poor interaction often involves arbitrage, which is “the way of exploiting differences” that does not derive from cultural, administrative and geographic distances (Ghemawat, 2007, p. 169). The well- known category of economic arbitrage is the exploitation of cheap labor, which is frequent for countries that are labor- abundant or they are in lower development phases than home countries. Apart from cheap labor, differences may be in capital, as well as in variations in more industry- specific inputs (e.g. knowledge) or in the availability of complementary products. As a consequence of economic arbitrage, companies that operate in industries where primary cost ingredients differ widely across countries or labor costs are important, it is highly probable to target countries with different economic profiles.

Moreover, Berry et al. (2010) said that, considering economic distance, countries vary in terms of their income, inflation and trade balance (as a percentage of GDP). They
added that those factors are important, because they are in direct correlation with consumer purchasing power and preferences, macroeconomic stability, and the openness of the economy to external influences. Thus, in international business literature those indicators have been found to influence the choice of foreign market and foreign market entry mode.

Considering the above, economic distance may operate both ways, either to increase FDI inflows in cases of exploiting country differences or to reduce such flows in cases of exploiting similarities.

*Hypothesis 4d (a). The bigger the economic distance between home and host country, the lower the level of FDI inflows is expected to be.*

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FDI occurs when it is more beneficial for the foreign firm to exploit its ownership advantages in conjunction with the host country location advantages internally, i.e. by establishing a subsidiary in the foreign market, rather through alternative modes of entry, e.g. licensing. That means, given the host country's location advantages the foreign firm evaluates alternative ways of exploiting its ownership advantages or given its ownership advantages seeks the most efficient way of exploiting the foreign country's location advantages (Dunning 2000). In any case, the critical point is the coexistence of ownership, internalisation, and location advantages the configuration of which differs among countries and industries (Dunning 2001). Certain cultural characteristics and institutional settings which may be seen as part of a country’s location advantages lower investment costs and facilitate FDIs. This facilitating role is dependent on the nature of the cultural characteristic and/or institutional arrangement is expected to be more potent in industrial sectors of certain characteristics. For instance, if a country has a strong system of intellectual protection that deters imitation of technologies and/or know how which facilitate investments in sectors of technological intensity, especially if the technologies used are of intangible nature, i.e. information intensive (see Javorcik, 2004). At the same time, FDIs in such sectors are motivated by strategic resource acquisition. Therefore, cultures and
institutional settings that promote the development of such assets in specific countries promote FDIs in sectors of high technology intensity in the same countries. FDIs in similar industries require complementary inputs of equal quality, hence produced with advanced technology. Therefore, institutional settings that promote industrial development, e.g. business law and enforcement, governance, regulation, policy design and implementation quality, etc. along work ethics and social norms and values conducive to economic development facilitate FDIs in industries of technology intensity. It is expected then that countries of cultural and institution settings similar of these of the industrially developed countries are better placed to receive FDIs in sectors of technology intensity. In general, agglomeration economies are more important determinants in such industries than in low technology ones, hence countries of ample agglomeration economies which are developed ones and with similar institutions and cultures are expected to be host countries of FDIs in high technology industries.

*Hypothesis 4: Overall, it is expected both the statistical significance and the sign of the distance dimensions to vary along different industrial sectors in the same host country.*

For cultural distance, Hofstede’s model is used, because it is the only model that has a complete dataset for Serbia as host country in comparison with 42 countries that are homes of FDI to Serbia. However, just 4 dimensions are used, i.e. power distance, individualism/collectivism, uncertainty avoidance and masculinity/femininity. The fifth one, long and short term orientation, that according to Hofstede (1991) deals with time orientation, has been excluded since it is the one which has received the heavier and most persuasive criticism of all Hofstede’s dimensions.

Scott’s (1995) institutional framework is used in order to categorise institutional distance in three pillars: regulatory, normative and cognitive. However, there are some significant overlapping between cognitive aspects and cultural distance. After observing different empirical studies (e.g. Gaur and Lu 2007, Xu et al. 2004, Estrin et al. 2007, Chao and Kumar 2006, etc.) for the purpose of this thesis, institutional distance is defined using only two of the three aspects of Scott’s theoretical
framework: regulative (social aspects) and normative (business aspects), while the cognitive pillar is used separately into the cultural framework.

In this thesis, data for geographic distance are explained by using GeoDist dataset. Mayer and Zignago (2005) formulated the exhaustive set of gravity variables that GeoDist made available in order to analyse market access difficulties in global and regional trade flows. A lot of scholars have used this dataset for their empirical researches, not only in the economic field for describing bilateral patterns of trade flows and flows of foreign direct investments, explaining migration patterns, international flows of tourists, or telephone traffic, but also in political science.

Finally, economic distance is approached as the difference in economic development. According to Ghemawat (2001), rich countries will do more cross border economic activities with countries of comparable economic size, while poor countries will try to trade more with the rich rather than with poor ones. In addition, the same author gives a definition of “economic arbitrage”, which is the exploitation of cheap labor, which is frequent for countries that are labor- abundant or they are in lower development phases than home countries. Apart from cheap labor, differences may be in capital, as well as in variations in more industry- specific inputs (e.g. knowledge) or in the availability of complementary products. As a consequence of economic arbitrage, companies which operate in industries where primary cost ingredients differ widely across countries or labor costs are important, are more likely to target countries with different economic profiles.

To recap:

1. Cultural distance is measured by Hofstede’s four distances,
3. Geographic distance equals to kilometre distance measured in km between the capitals, and
4. Economic distance is measured as differences in GDP per capita between home and host country.

The model has been estimated by applying the logarithm transformation of the algebraic function shown below:

$$\text{FDI} = f(CD, ID, GD, ED)$$

where the signs below the independent variables designate the expected relationship between each one of them and the dependent variable.

Considering the construction of indexes, this thesis constructs three indexes, two for cultural distance and one for institutional distance, in order hypothesis testing to be even more effective. According to relevant literature, Exploratory Factor Analysis is used as the appropriate method to establish the first index for cultural distance. For the second index for the same distance and for institutional distance, Kogut and Singh formula is used.

The chosen econometric method is a multi linear regression analysis. Multiple regression analysis is used for two different aims of research: prediction and explanation. Explanation is inconceivable without theory because it helps to understand the process leading to criterion. Also, in prediction, theory is the best guide for selecting criteria and predictors as well as for developing measures of such variables. Predictors should be selected as a result of theoretical consideration (Pedhazur, 1997). It is not possible to decide whether and how to control a variable without formulating a causal model about the process by which the independent variable affect the dependent variable.

As far as dataset is concern, a sample of 42 countries and one town is selected for dependent variable. From those countries, 25 are members of the European Union (Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg,
Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden), 9 are European countries (Albania, Bosnia and Herzegovina, FYROM, Montenegro, Norway, Switzerland, Turkey, Ukraine and United Kingdom), while the rest 7 are from other continents (Australia, Canada, China, Israel, Russia, United Arab Emirates and United States). The data comes from the Vienna Institute for International Economic Studies.

Data on FDI to Serbia by industry and cluster for the same countries is selected by the dataset FDI Markets. In order to divide FDI inflows to manufacturing and services sectors, and further on to four industrial subsectors, i.e. low, medium-low, medium-high and high technology subsectors, and two services subsectors, i.e. to high technology intensive services and low technology intensive service subsectors, Eurostat classification of manufacturing sector according to technological intensity and based on NACE Rev.2 2-digit level has been used.

Moreover, to estimate the presence of autocorrelation, a Durbin-Watson statistic is used in this thesis. Specifically, two different $R^2$ are presented, i.e. the uncentered $R^2$ and the centered $R^2$.

At country level, two regression analyses are run. The first one is with Hofstede Type Cultural Index as cultural distance, and the second one is with a Kogut-Singh type formula as cultural distance. The results of the first regression show that cultural distance is not statistically significant. The reason for that may be that Hofstede model is old and the research was done back in the 1980s. Most importantly, it refers to former Yugoslavia, a country that no longer exists. While, there is data on Hofstede’s website for Serbia, this data is based on work of other researchers and it is not a part of Hofstede’s initial methodology. Institutional distance is statistically significant at the 5% level of significance. The coefficient has a negative sign, meaning that MNCs that come from countries that have different institutional systems than Serbia will invest less which companies that are coming from countries which share the same institutional system with the host country. Therefore, the second hypothesis is confirmed. Geographic distance is also statistically significant at the 5% level of significance. The coefficient has a negative sign, which means that the third hypothesis is confirmed. More precisely, the greater the geographic distance between
home country of FDI and Serbia, the less FDI is undertaken between the countries. Finally, economic distance is strongly statistically significant and the sign of coefficient is positive. Here, we are facing economic arbitrage, which means that the main reason why MNEs invest in Serbia is to exploit differences in the costs of labor and capital, as well as variations in more industry-specific inputs (such as knowledge) or in the availability of complementary products.

In the case of including Kogut-Singh type formula as the cultural distance, approximation regression results indicate that both cultural and institutional distances are not statistically significant. Their p-values are 0.72 and 0.14, respectively. Geographic distance is statistically significant at the 8% level of significance and its coefficient has a negative sign. Economic distance is strongly statistically significant and the sign of the coefficient shows that economic arbitrage is present.

For testing the CAGE framework at industry level, panel OLS is used. Additionally, analysis is done for 6 countries, i.e. Austria, Germany, France, Italy, Slovenia and USA. These 6 countries together are the source of 50% of a total direct investments that inflow to Serbia and they are investing in Serbia every year since 2003. Firstly, the model is estimated for two sectors, i.e. manufacturing and services. Also, for every sector two separate OLS are done, one with Hofstede Type Cultural Index, and the second one with a Kogut-Singh type formula. However, in both cases, the results are the same.

Therefore, for the manufacturing sector, institutional distance is statistically significant at the 5% level of significance. The sign of its coefficient is negative, which means that MNCs which come from countries that have different institutional systems than Serbia will invest less in manufacturing sector than companies coming from countries which share the same institutional system with the host country. That means that government effectiveness, regulatory quality, rule of law, voice and accountability, political stability and absence of violence and control of corruption are playing an important role in decision making. This result shows that Serbia, as a country in transition, is now developing its institutions and this pose greater challenges for MNEs from distant institutions. However, over the last years, Serbian market has shown significant development in institutions that minimize bureaucracy
for foreign direct investment, increase transparency in business-government communication, protect intellectual property, and minimize corruption in business transactions. This progress is also confirmed by the growing number of FDI inflows in the manufacturing sector. Nevertheless, it seems that Serbia has to work more on developing its institutions, because it is still a main obstacle for MNEs. The other distances, i.e. cultural, geographic and economic are not statistically significant. Therefore, they do not play a significant role for the home countries to invest in this sector.

Regarding the services sector, economic distance is the only statistically significant distance. The sign of coefficient is positive, which is an indication of economic arbitrage. This kind of result should be expected, because exploiting differences in services sector—through outsourcing and offshoring—is probably the most common form of economic arbitrage. It is also important to mention that the services sector has been one of the fastest growing sectors during the last years in Serbia. It has a direct contribution in employment creation and wealth and it is important in promoting the competitiveness and prospects of other sectors. Hence, it contributes indirectly to job and wealth creation across a broad range of economic activities. Therefore, cheap labor force in Serbia is a magnet for MNEs to invest in this sector. The other distances (cultural, institutional and geographic) are not statistically significant.

Additionally, this thesis also illustrates how each of the distances, i.e. cultural, institutional, geographical and economic, correlates with FDI at different industrial sectors categorized by technology level, i.e. high technology, medium high technology, medium low technology, and low technology levels and different services sector, i.e. low and high knowledge intensive subsectors. While there are not enough FDI inflows to high technology and medium- low technology subsectors, the regression analysis is not run for these subsectors. Moreover, the same group of countries, i.e. Austria, France, Germany, Italy, Slovenia and the USA, which is used for total manufacturing and services sectors, is also used for this analysis.

The results for medium-high technology subsectors show that FDI inflows are not influenced by any of the distances. Even though $R^2$ is 34.46% and Durbin-Watson statistics shows no presence of autocorrelation, p-values show that independent
variables are not statistically significant. The reason for this kind of results may be explained by the lack of data. More precisely, for some years from the observed period (2004-2015) there is data missing. However, if independent variables were statistically significant, their coefficient would have the signs that are predicted by the hypotheses.

Results for low-technology subsector demonstrate that three distances, i.e. institutional, geographic and economic are statistically significant at the 8%, 1% and 1% level of significance respectively, while cultural distance measured in both ways is not statistically significant. Low-technology subsector is less capital-intensive and more labor and/or resource intensive. Therefore, foreign investors are looking for a safe institutional environment with low labor and raw-material costs. In addition, to decrease their total costs, MNEs are searching for the closest country in terms of location.

Results for FDI inflows to low knowledge intensive services subsector show that geographic and economic distance are strongly statistically significant, while cultural distance is statistically significant at the 10% level of significant by using Hofstede Type Cultural Index, or at the 5% level of significant by using the Kogut-Singh type formula. In both regressions, institutional distance is not statistically significant. The coefficient of cultural distance is negative, which means that the less the cultural distance, the more investments in this sector between Serbia and home countries will happen. Geographic distance has a negative sign, meaning that country close to Serbia will invest more in low knowledge intensive subsector, because knowledge flows more easily locally than over long distances. Economic distance has a positive coefficient, meaning that here, as well, MNEs are searching for economic arbitrage.

The results of regression analyses for knowledge intensive services subsector show that the only statistically significant distance is institutional. The other three, i.e. cultural, geographic and economic are not statistically significant. High knowledge services subsector is innovative as high technology manufacturing subsector, therefore it shares many of its characteristics. For this reason, institutional settings of the host country should not deviate significantly from home. More precisely, Serbian institutional background, i.e. government effectiveness, regulatory quality, rule of
law, voice and accountability, political stability and absence of violence and control of corruption are playing an important role in decision making of MNEs to invest in this subsector.

With respect to similar studies, the present one is the first to apply the CAGE model approach to Serbia and it shows that this framework can be successfully used in describing FDI inflows to the country and its industry and services subsectors. More precisely, it is concluded that cultural, institutional, geographic and economic distances may have a crucial influence on explaining the behavior of MNEs who invest in Serbia. However, when interpreting the results, one should keep in mind some limitations regarding the research.

The first concern regarding the econometric analysis has to do with the data that was utilized. The key variable in the analysis is FDI inflows to Serbia by the country of origin at country and industry level. Even though the data from 42 home countries was observed, there were not enough flows to high and medium-low technology subsectors. Due to the lack of the data set, regression analysis could not be done for those two subsectors. Additionally apart from the above key variable, other variables were difficult to find. Thus, the data was compiled from various sources which might be a concern.

Furthermore, the short period of investigated time might be another concern. After territorial changes and political events that took place at the end of XX and beginning of XXI century, the sample period of FDI flows to Serbia is limited to just 16 years. Although one could claim that this problem might be overcome by utilizing monthly instead of annual data or extending the sample of period to include years prior to 2000, such utilization is very difficult given the data availability already discussed above.

Moreover, another research limitation is the data regarding cultural distance. Hofstede made his model back in the 1980s. Since then, a lot of things changed. Most importantly, his research concerns Yugoslavia, a country that no longer exists. Serbia is different and has transformed in many aspects. Even though there is data for Serbia
on Hofstede’s official website, it is based on work of other researchers and not as part of his initial methodology.

What is more, there is also a problem of non-variability. Cultural and geographic distance do not change over time. Additionally, numerical values of institutional distance are different through years, but those changes are so small, that we could also consider this distance as a distance with low variations.

Despite the research limitations described above, this thesis did fill a gap in the existing bibliography on FDI inflows to transition country. The objective of the thesis was to set the determinants of FDI and the influence of four distances, i.e. cultural, institutional, geographic and economic on FDI inflows to emerging market at country and industry level. Through the model that was developed and examined cautiously, the objective of the thesis has been met providing a scientifically consistent empirical background for future research.
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