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## FDI and institutions: Do multinational companies have positive effects on institutions in the host country?

A time series, cross-country analysis in the period 1990-2015.

Master's thesis in Political Science  
Supervisor: Indra de Soysa  
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## Sammendrag

Utenlandske direkteinvesteringer (FDI) har økt radikalt de siste tiårene samtidig som globalisering har gjort store endringer over hele verden. Litteraturen på feltet har vært mer interessert i hvordan land tiltrekker seg FDI, og i stedet for å finne ut hva slags effekter disse investeringene har på vertslandet.

Ved å analysere data for perioden 1990-2015 for et stort utvalg av land, undersøkes det om disse investeringene fra multinasjonale selskaper styrker vertslandets institusjoner. Denne oppgaven bruker både et objektivt og et subjektivt mål for å teste institusjoner. «Contract-intensive money» (CIM) er et objektivt mål for eiendomsrett og kontraktssikkerhet og et subjektivt mål fra ICRG brukes for å teste kvaliteten til byråkratiet.

Resultatene viser at multinasjonale selskaper, gjennom FDI, styrker de valgte institusjonelle faktorene. Det er spesielt gode funn på at utenlandske direkteinvesteringer styrker vertslandets byråkrati.

## Abstract

Foreign direct investments (FDI) have increased radically in the last decades simultaneous as globalization has had enormous changes worldwide. The literature on the field has been more interested in researching how countries attract FDI, instead of finding out the effects these investments have on the host country.

By analyzing data for the period 1990-2015 with a large selection of countries, this paper investigates if these investments from multinational companies strengthen institutions of the host country. This paper uses both an objective and subjective measure to test institutions. Contract-intensive money (CIM) are used as an objective measure for property rights and contract enforcement security, while a subjective measure from ICRG are used to test for bureaucratic quality.

The result from the analysis show that multinational companies through FDI strengthen the institutions of the host country. It is especially robust findings on the positive relationship between FDI and bureaucratic quality.



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## 1. Introduction

The process of globalization has in the latest decades had an enormous effect worldwide and been a driving force in changing the world. Out of this world-changing process, a debate on the effects of globalization has arisen. A large debate that argues about the effects globalization has on countries, which can for simplicity reasons be split up into two camps, one that is positive and one that is negative toward globalization. Globalization is made up of several different economic trends. All these different economic processes that make globalization what it is have also smaller debates surrounding them and the different aspects around its existence. One of the key features of globalization and an aspect that has its own research debate sprung out from itself is foreign direct investments (FDI) and its growing importance in the world (Daude & Stein, 2007). It is one of the processes that has increased substantially after the whole globalization process started to boom. Following from the increase in FDI worldwide, a literature on the subject have expanded, more specific studies that looks at what factors attract FDI to a host country. A smaller part of the literature has also studied the effects FDI has on the host country.

After the Second World War ended, foreign direct investments have had a radical increase (Sumner, 2005). Because of this radical increase the researchers have opened their eyes for FDI, and it has been researched more in the latest decades. In 1980 inflows of FDI was measured at 59 billion US dollars. Two decades later FDI inflows have risen dramatically to 651 billion US dollars. Naturally, because of the growth in flow over these years, stock has also increased radically. FDI stock have in the same period increased from 800 billion US to 7000 billion dollars. Another interesting fact that makes this increase in FDI spectacular, is that in the same decades trade flows have only doubled (Daude & Stein, 2007). Developed countries are the main host of FDI, but its share has reduced from 75%, in 2000, to less than two-thirds, in 2014 (Narula & Pineli, 2017). Since FDI has had a significant increase, and is now up into these high sums of investments, which makes it relevant to research what consequences these investments have on the countries that get these investments. What effects result from multinational companies (MNC) operating and investing in foreign countries all over the world? This study is focusing on how FDI affects institutions in host countries, since affecting institutions can have significant consequences, both positively and negatively.

Institutions play a significant role in the development of a country, and it makes it relevant to research what effects FDI has as a factor on the institutional environment. It exists some studies in the literature that have looked at some institutional factors, but it is still a part of the literature that is not widely researched. This paper test if the radical increase in FDI have been positive for the host countries – have foreign direct investments positive effects on the institutions in host countries?

This paper studies how FDI stock affects institutional quality in the host country, the country that receives the foreign investments. It uses OLS-regression with Newey-West to test the relationship. Stock is used instead of flow because it measures MNCs, which is the biggest actor when it comes to FDI, activity long-term. Stock is better than flow to find the long-term effects that FDI has. Both FDI as an independent variable and stock as a measure are less explored in the literature opposed to FDI as a dependent variable and flow as the measurement for FDI. To measure institutions, this study uses both subjective and objective indicators, which is also something that differs from the existing literature. The subjective institutional variable is from ICRG which measures institutional quality in countries based on expert ratings. From ICRG it is the variable for bureaucratic quality that is used as the subjective variable. The objective indicator is the contract-intensive money variable that was developed by Clague, Keefer, Knack and Olson (Clague, Keefer, Knack, & Olson, 1999). They developed a proxy for institutional quality, more specific for the institutional factors property rights and contract enforcement security. The variable is based on the rate of money that is placed in financial institutions.

The key findings from this analysis are that FDI have positive effects on both institutional variables, CIM and bureaucratic quality. FDI have positive effects on the bureaucracy, property rights and contract enforcement security, which are crucial factors for the institutional environment. Contract-intensive money, the proxy for property rights and contract enforcement, is not robust when the special country characteristics are accounted for. Results on bureaucratic quality are robust in all the models included. The significant results show that FDI strengthens institutions in host countries, which is compatible with arguments from those that support globalization.

The rest of the paper starts with two chapters that review the two main camps in the globalization debate. Pro-globalization and dependency theory are arguing against each other about the effects the globalization process has on countries, with especially focusing on economic development and the relationship between developed and developing countries. After this the paper moves over to the theoretical framework and literature on FDI. This part starts with defining and introducing key concepts in the world of FDI, and additionally gives the reader a lesson in the history and context of FDI. Next chapter is about the literature that has studied the effects FDI has on different aspects of the host country. This chapter is included to familiarize the reader with the part of FDI literature that this paper is placing itself in.

After presenting the literature that looks at the effects FDI has on host countries, the literature on the determinants of FDI are introduced. This is included to understand the characteristics of FDI, and to help the reader understand the nature of FDI and what attracts it. The next two chapters after the literature review are about the theories on FDI and MNC that are relevant for this study. First theoretical chapter is on MNCs and its relationship with the state. Another chapter on MNCs comes after, which is theorizing the behavior of multinational companies. Near the end of the theoretical part of the paper, a part on institutional theory is included. It is relevant for the paper that literature on institutions is presented, because it is the dependent variable in the analysis. In this chapter theories and earlier studies on the effects institutional qualities have on a country is presented here. To finish off this part of the paper, the hypotheses are created.

Following a thorough presentation on the theoretical arguments and the literature on the relevant subjects for this paper, the method part of the paper is next. Here will the method for statistics with all the variables be presented, with a thorough review of main, control and instrumental variables that is used in the analysis. After that, it is the chapter where the results are presented and here are all the noteworthy results from the models. The robustness tests are also described here. Last part of the paper is an analysis on the results in the models. Here, the results are discussed with the hypotheses and theoretical arguments among other things presented earlier in the paper. Policy implications and further research possibilities in the literature are also discussed in this section of the paper. A short conclusion of the findings ends the paper.



## 2. Globalization debate

Globalization is a worldwide process that have had enormous effects worldwide and FDI is a part of the globalization process that has had a rapid development in the last couple of decades. This part of the paper are presenting the globalization debate, a large debate that foreign direct investment are only one of the aspects. The debate has two leading theories about globalization, one that says it is good for the whole world and the other that is viewing globalization as a negative phenomenon for the poor states. It is relevant to present the globalization debate, which FDI is a part of, to give context to the process that has contributed to the radical growth that FDI has had. When globalization and its effects is discussed, FDI is also part of this discussion. Later in the paper it is narrowed down to present the literature on foreign direct investment that exists. The two camps are presented with a chapter each, with dependency theory, which are representing the anti-globalization camp, are presented before the pro-globalization theory.

Jenkins (2004) defines globalization as:

*“a process of greater integration within the world economy through movements of goods and services, capital, technology and (to a lesser extent) labor, which lead increasingly to economic decisions being influenced by global conditions.” (Jenkins, 2004, p. 1)*

### 2.1. Dependency theory: The rich uses the poor

Globalization and multinational companies is by some viewed as having negative effects on certain groups (Lipsey, 2004). Many actors connected with the globalization process have received protests for its actions by people that is strongly negative to globalization and its effects. Organizations that are symbols for globalization, for example International Monetary Fund, International Trade Organization, and the World Bank, have received protests and critique by people that is against the globalization process. Multinational companies are also an actor that is protested and accused for several negative actions. Since the globalization has had a rapid development in a couple of decades, and investments from foreign companies

have followed the same trend, theorists have been arguing over what consequences this has on countries, especially poorer ones. The view on globalization and its effects can be split into two camps, the ones that see the trend as negative and those that see this development as positive for the world. For those that have a negative view on globalization dependency theory is a leading theory. Dependency theory argues that trade and foreign investment harm least developed countries (LDCs) (Barbieri & Reuveny, 2005). This theory claims that the structure in the global economic system is made of two parts, a core of a few developed countries and a periphery with all the underdeveloped countries. It is this structure that determines which countries succeed in developing and which ones that fail (De Soysa & O'Neal, 1999).

It is when developed countries trade with low-developed countries that the negative effects on LDCs are taking place (Ahiakpor, 1985). Resources that originate from developed countries, for example technology, management skills, financial and real capital, are hurting the low-developed countries because technology that is imported does not take the countries' relative factor abundance into account. Advanced technology that is imported into poor countries are usually combined with societies with high capital-labor ratios and high skill, which poor countries in the periphery are often low on. Because of this combination, the technology has negative consequences for the developing countries. The developed technology makes the poor countries alienated in the production process, and it also loses much value that is added from the production process.

In this world system that dependency theory, the core is capital intensive, while the periphery contains a dual economy (Barbieri & Reuveny, 2005). One part of the periphery is a small and relative developed sector that is controlled by a local elite and foreign interests. These actors export labor-intensive goods to the core, while the rest of the periphery is underdeveloped. The core exports capital-intensive products to the periphery. These terms for the trade relationship between the core and the periphery damage the latter and it remains poor. It is a combination between the elites in the core and periphery that keeps this system functioning, which makes it difficult to have economic growth. Barrett and Whyte present six reasons for why the trade relationship harms the periphery and strengthens the core, resulting in slower economic growth in the periphery (Barrett & Whyte, 1982). One of the reasons that this relationship is bad for the periphery is that foreign firms in the core repatriate profits

overseas instead of reinvesting them back to the periphery. Another reason is that foreign suppliers often use old and outdated technology and equipment when giving resources to countries in the periphery, which harms the growth of these countries. The third reason is that a state in the periphery is dependent on foreign interests and foreign economic penetration, which makes it weak and unavailable to protect domestic industry and creating economic growth. Dependency also leads to susceptibility to price manipulations in both domestic and global markets. Consequently, this makes a state vulnerable to trade deficits, because domestic markets can be flooded with foreign products, but exports that are going to pay for it struggles with the instability of the global demand and pricing. Trade deficits further hurts the state because of the growing indebtedness and lesser capital to invest in creating economic growth. A fifth reason is that dependency is spreading the wealth to just some small enclaves, consisting of native bourgeoisie that are more focused on the foreign economic interests than the domestic interests. The last reason, that Barret and Whyte had for why dependency is bad for the periphery, is that dependency on aid credit reduces capital formation which results in a lower economic growth rate. All these reasons are used by dependency theory to explain why foreign penetration and globalization harm poor countries in the periphery.

Barrett and Whyte also link the dependency theory to not only slower growth, but also more inequality (Barrett & Whyte, 1982). They are giving several reasons for why dependency hurts periphery countries with more inequality, in addition to harming the growth. One of the reason to this is that dependency fosters dualism, unbalanced development, and privileged enclaves, which will result in worsening the income distribution. Secondly, the elites in the host country is opposed to measures that will help redistribution of income, and it will use its power with the foreign interest to stall these types of measures. Additionally, dependency have labor placed in a weak position relative to employers that also brings in its own skilled personnel, which is also a factor that creates inequality. Dependency theory views the globalization processes, which FDI is a part of, as negative for the poorer, underdeveloped countries. It is not satisfied with the radical development globalization has had, and that included also the enormous increase FDI has had.

## 2.2. Pro-Globalization theory: Everyone benefits from open markets

It exists also a more positive view on globalization that consider it as a promoter of economic and institutional development (Barbieri & Reuveny, 2005). Neoclassical economics argue that free markets promote economic development, and that globalization is a promotion of these open markets. Therefore, globalization is helping underdeveloped countries to grow and develop. Globalization is a fruitful relationship between both developed countries and underdeveloped countries that both parts are earning from. Furthermore, it is not a bad relationship for the periphery as dependency theorists argue. Openness to trade, FDI and Foreign Portfolio Investment (FPI) allows allocation of production factors to its most efficient use. This promotes development and strengthens the government, because of increased revenue and bigger tax base. Pro-globalists argue that countries then get richer, which consequently increases the investments in important things as for example police, infrastructure, and administration. These types of investments make the government more stable and the institutional quality better.

Theorist that is pro globalization argue that it has two positive effects, faster growth and the poor parts benefit from it (Jenkins, 2004). The first effect, the link between globalization and faster growth, is explained as more trade openness and foreign investment lead to faster innovations in poorer countries which will increase the growth (Dollar, 2001; Jenkins, 2004). It is endogenous growth theory that has been important when explaining the link between more openness and growth, and from there several models was developed showing that openness helped a country increase its growth. It is also possible to make endogenous growth models that show protection of markets lead to faster growth, and therefore is this question seen as an empirical one. Globalization is not only affecting countries with faster growth, but also helps the poor parts benefitting from the positive effects that globalization bring with it (Jenkins, 2004). This happens since faster growth leads to increased income for the poor part because of a trickle-down effect. The trickle-down effect makes sure that the growth effects is benefitted by all parts and not only the rich groups. It is possible in this case as well to create theoretical models that show the opposite result, that the poor are not benefitted by the growth and even marginalized. Therefore, the second positive effect is also an empirical question.

The engines of development theory is a theory that fits with the views of those that are pro globalization (Meyer, 1996). This theory is pro multinational companies, which is an



important actor in the globalization process. It views multinational companies as important engines for development in third world countries. Multinational companies that are operating in the third world are in this theory viewed as directly promoting both economic and social rights, and indirectly promoting civil and political rights. If it is a positive relationship between economic development and human rights, then MNCs must promote human rights to the same extent it promote development (Meyer, 1996; Pritchard, 1989). A couple of the socioeconomic rights that is likely to be promoted by development are rights to unemployment protection and social security (Pritchard, 1989). With MNCs bringing new capital, new technology and jobs, it would be promoting development which would also lead to promoting economic and human rights. The explanations that the theory has on how MNCs affects civil and political rights in a positive way is much less direct than the relationships presented between MNCs and economic and human rights (Meyer, 1996). Arguments from the theory are that more investments from foreign business would promote the expansion of the political stable, urban middle class. Consequently, this expansion would enhance political tolerance and stability in the larger society. This would help to modernize third world countries, and civil and political rights would be strengthened.



### 3. Theoretical framework and literature review

In this next part of the paper the focus is shifted more closely to the FDI literature and theoretical framework that is used. Firstly, a clear definition of FDI is given, before the context that FDI have operated under in the last decades are presented. This part of the paper includes also chapters on two different perspectives of the FDI literature, one that studies what effects FDI have on the host country and another that studies the factors that affects where FDI is invested. The last four chapters are laying the theoretical framework and establishing the hypotheses for the statistical analysis.

#### 3.1. Definition and technical aspects of FDI

This chapter are defining FDI, using a definition found in the existing literature that is compatible with the definitions that UNCTAD uses when collecting data on FDI, and presenting the technical aspects that FDI have to give a clear understanding of what FDI is.

Biglaiser and DeRouen define FDI as “*private capital flows that provide a parent firm with some control over an enterprise outside the home country*» (Biglaiser & DeRouen, 2006, p. 54). Jensen defines FDI in the same way, but includes some characteristics that differ FDI from portfolio investments (N. M. Jensen, 2003). An investment is FDI, and not portfolio investment, if it is a large enough amount to give the MNC some control over the enterprise in the host country. The amount is usually defined as more than ten percent of the firm. Another difference between FDI and FPI is the motivation to invest (Stopford, 1998). Usually, FPI has a main motive to give the highest possible return to the investor. FDI has often more complex objectives than to only make as much money as possible to the investors, since it can have multiple motivations that affect the choices. One example for another motivation is to be resource seeking, to gain access to either natural resources. This could be to gain access over an oil field or a copper mine, or other types of resources that could either be skilled labor or technologies within a cluster. Other motivations that multinational companies could have are market-seeking, where the investors are interested in establishing a position in a local market that is emerging, and efficiency-seeking, where investors think several investments across borders could lower the total system costs compared to investments done in one local market. These motivations can take time to achieve fully and often cannot be done with a short-term

perspective. FDI is often more long-term thinking than FPI because of its differences in mobility, with FDI being less mobile, which is something that is explained more thoroughly when the relationship between MNC and state are examined.

It is not one theory that is dominating in the field of FDI, but it is one argument that everyone debating FDI have agreed upon. This argument is that FDI would not exist in a world with perfect competition, since then the only market to participate in would be the international market (Denisia, 2010; Kindleberger, 1969). No trade barriers and effective market would make the international market the only place to perform international trade. For FDI to exist the markets must have some hindrance that makes local markets the place to perform trade or investments for multinational companies. The existence of the trade barriers, which makes it impossible for an international market to exist as a market place, forces multinational companies to take its foreign investments to local markets. Another reason for the existence of foreign direct investments is that multinational companies must have some specific advantages that makes these foreign investments attractive for the MNCs, since local firms will always be better informed than foreign firms about the local markets. An example of an advantage could be that MNCs often have more capital-intensive technology compared to the domestic firms (Narula & Pineli, 2017).

FDI should not be seen as the same as a normal investment, or “real investment” (Devereux & Griffith, 2002). “Real investments” that can be exemplified as purchasing a shop or a machine is different from FDI, which is financial flow, in two types of ways. First way is how it is financed, it can be done in a couple of different ways. The company can set up a subsidiary in the new country that it are establishing in, with financing it with equity from the parent company, either through loans or injections. If the foreign subsidiary chooses to get capital from for example a bank in the country it are setting up through loan, then it would not be an increase in FDI, since there is no FDI flow from one country to another. A third possibility is for the subsidiary to get a loan from a bank in the country that the parent company are residing in or issuing shares in the stock market of that country. Then it would be financed from another country, but it would not be regarded as FDI, but instead foreign portfolio capital, because a nonresident company does not own it. This is some of the ways to finance when MNCs invest in a host country and set up its own company there.

The second reason that differ FDI and “real” investment is that FDI can fund other activities, for example merge with or acquire a domestic firm (Devereux & Griffith, 2002; Narula & Pineli, 2017). In the latter case, that type of foreign investment is not an investment in the national accounts sense, it does not contribute to the host country’s aggregate capital stock. It only changes ownership from domestic to foreign.

It exists two different measures for FDI, these two are flow and stock. FDI flow is the investments that is coming in to a country over a year. Stock is all the investments that are in in the country at that point it is measured. Stock is therefore more constant than flow, which can change much more dramatically from one year to another. Big takeovers can change the yearly flow of a country radically, especially for smaller countries (Bénassy-Quéré, Coupet, & Mayer, 2007). Flow measures always new FDI that has been invested in a country in that year that is measured, while stock captures investments that has been operating in the host country over many years and investments that are new. The fact that FDI stock is less volatile than flow is one quality that makes stock better to study when it comes to foreign direct investment (Neumayer & De Soysa, 2005). Another reason that makes stock the preferred choice, is that investors decide on the worldwide allocation of output which is capital stocks (Bénassy-Quéré et al., 2007). A third reason for why stocks is better measure than flow, is because stocks account for FDI being financed through local capital markets and that makes it a better measure for capital ownership (Devereux & Griffith, 2002).

Before moving on to the history of FDI and the different context it has been operating in the last decades, it is necessary to also define the most notable actor of FDI, the multinational company. MNC is the actor that invest the FDI, which makes it relevant to define as well. Multinational companies can be defined as a company that operates in at least two nations, often with one of the countries being the home country (Caves, 1996). Caves argues in is definition why he uses enterprise (MNE) instead of company, and it is because he wants to address the definition to the top of the business hierarchy, since a company that also is multinational can be controlled by another firm. This paper use MNCs instead of MNEs, because foreign investments can come from multinational companies that is controlled by a bigger multinational company. FDI is the same if it comes from a MNC or a MNE, it does not differ on this. Multinational companies go beyond its organic operations when investing in a

country outside its home country, since it is establishing the company in another market outside native borders (Krause, 1972).

Foreign MNCs differ often in several aspects when compared with domestic firms (Narula & Pineli, 2017). Size is one aspect that is different between these two types of a company. MNCs is often bigger and it operate in more than one country. These companies that operate in several countries are often better to take advantage of cross-border efficiencies, especially in sectors where scale economies have importance. The technology that multinational companies have is also more capital-intensive, especially those from developed countries when it is compared to companies from the host countries. Additionally, MNCs are also more inclined to import and export compared to the domestic firms. These different characteristics that multinational companies have makes the presence of these companies affecting the host country in different ways than domestic companies.

### 3.2. Historical context of foreign direct investment

Now that a clear presentation of what FDI is has been given, it is time to paint the picture of the development FDI has had and the different contexts it has been operating in since it was popularized as an investment strategy.

FDI has a long history and can be dated back several hundred years, but it is only since the 1950s that these investments have had a radical increase (Biglaiser & DeRouen, 2006). At the same time, many developing states was unsure on how MNCs and it investments would affect the society. This insecurity from the host countries gave many MNCs problems. Exemplified, states in Latin-America that had nationalist sentiments was against these investments. Consequently, most of the states expropriated multinational companies, many of them from the United States, and turned them into state-owned enterprises (SOEs). In the later decades a more positive view towards MNCs and its investments has developed in countries (Narula & Pineli, 2017). Trade barriers started to be removed and countries tried to attract foreign investment with lucrative incentives as lower tax rates, land donations and subsidized credits. These changes in policies happened partly because the import-substitution policies did not manage to promote industrialization. Changes in how FDI was perceived by the host states changed from negative to positive. A view that was pushed actively by international agencies,

was that FDI should be perceived as an important component in development policy. FDI has been seen as a solution to create employment and development in countries, which made it attractive to receive foreign direct investment. It is this perception that has contributed to the policy changes towards FDI that have taken place in the last couple of decades.

The United Nations Conference on Trade and Development (UNCTAD) reported that in the period between 1991 and 2002 it were changes in over 1500 regulations that was characterized as favorable for FDI (Lipsey & Sjöholm, 2005). In the same period fewer than 100 regulations made less favorable for foreign investment, which illustrate the change in view that host countries have had toward FDI since the 1990s. In this period the states want to attract more FDI, which is the opposite view countries had towards foreign direct investments before 1990.

Even though the risk of expropriation, that was common in the 1960s and 70s, is lower now, other types of risk still hit multinational companies and its investment in several host countries. (N. Jensen, 2008). Countries are now promoting FDI instead of treating these types of investments with hostility, but that does not mean that policies affecting foreign direct investments negatively have completely vanished. Policies could for example affect the profitability of a foreign direct investment negative, because states have other motivations than only promoting FDI friendly policies. Even though the environments that MNCs operate in across the world have been significant better these last decades, it still meet political risk when it invests in a foreign country. This is because MNCs can never exclude the possibility that the host country will enforce a policy that could harm the conditions that the it operates under. Policies that affect the environment of the multinational company do not only indicate expropriation, which is not as common as it was in the 1960s and 70s, but can also be for example changes in the market conditions.

### 3.3. FDI and the effects on host countries

Now the focus in the paper shifts over to the literature that exists on FDI. This chapter is presenting the existing literature that is studying the effects of the foreign direct investments from multinational companies. It is included to give the reader knowledge about the previous literature that have been done on the subject, a literature that this paper is placing itself in. It

exists a couple of studies that have researched the relationship between FDI and institutional factors, but no one has used the same institutional factors that this paper are applying to test the relationship.

The literature on FDI have had more focus on what factors that affect FDI and not the reverse relationship. Even though the focus in the literature has been mostly on the determinants that FDI has, it still exists literature that have studied the effects FDI have on different aspects of a host country. One of the aspects that have been studied are how FDI is affecting corruption in the host country. Larrain and Tavares studied the effects FDI have on corruption at country level (Larraín & Tavares, 2004). They found that FDI is negatively associated with corruption with more FDI inflows reducing corruption. Zhu looked also at how FDI affects corruption, but this study looked at China as a case and focused on the provinces in the country (Zhu, 2017). The case-study gave another result than what Larrain and Tavares concluded with, finding that more activity from MNCs in a province was positively associated with corruption. These findings were argued as a result of the effects MNCs have on rent creation, arguing that activities from multinational companies was a reason to higher rents in host country. A third study on corruption had also findings that indicated that countries with higher FDI have lower harmful effects of culture on corruption (Kwok & Tadesse, 2006). The result from this study is consistent with the study from Larrain and Tavares. The study from Larrain and Tavares uses inflow as measure for stock and the two other are using inflow as a percentage of GDP.

Another study looked at the relationship between FDI and economic institutions in Vietnam, and the results showed that FDI had a positive effect on economic institutions (Dang, 2013). Dang found also that provinces in Vietnam which received most FDI had an increase in institutional quality. Ahlquist and Prakash focused on the relationship between FDI and how it affects the contracting system in the host country (Ahlquist & Prakash, 2010). In the study, they found out that FDI flow was associated with lower cost on contract enforcement. A third study from looked at 19 countries in Latin America and Caribbean when studying the relationship between FDI and institutions (Fukumi & Nishijima, 2010). The analysis found results that indicated an interesting cycle between FDI and institutions. An increase in FDI inflow following less restrictive capital controls that can be important when it comes to



improving institutional quality. Improved institutional quality makes a host country more attractive to FDI flow, and therefore it is a positive cycle between FDI and institutions. China is a case that have received attention in the literature and another study researched how FDI affected host institutions in 287 Chinese cities from 1999 to 2005 (Wang, Gu, David, & Yim, 2013). The study found out that FDI had both positive and negative effects on the host cities in China. Examples on the positive side of FDI was that it bettered the economic growth and labor productivity. Negative effects was also found and these effects was pollution and employment reduction in the Chinese cities. The study used the percentage of foreign input of industrial output that each city had.

The link between FDI and economic growth is another aspect of the country that the literature have studied. Results on how FDI affect economic growth showed no clear sign on how FDI affects economic growth (Alfaro, Chanda, Kalemli-Ozcan, & Sayek, 2004). Countries with financial markets of good quality gained however significantly from FDI. Li and Liu studied also the link between FDI and economic growth (Li & Liu, 2005). The analysis was based on a panel of data from 84 countries between 1970 and 1999, and the results from it showed that FDI promotes economic growth both directly and indirectly. FDI affects growth indirectly through a positive effect with human capital and negative interaction effect with technology gap. The literature has also found that income inequality increases when the FDI stock percentage of GDP increases (Choi, 2006).

Other examples of studies that have looked at the effects that FDI have on different aspects of the host country are Meyer that tested FDI's effect on human rights and Neumayer and De Soysa study on the effects FDI have on child labor (Meyer, 1996; Neumayer & De Soysa, 2005). Results from the former study show that activity from MNCs are positively associated with both civil liberties and political rights in the third world. In the latter research De Soysa and Neumayer found that countries that have higher stock of FDI or are more open to trade have also a lower incidence of child labor. Both studies have findings that suggest that activity from MNCs in host countries are positive for these countries in different aspects.

When studying FDI using flow as the measurement, it only records the MNCs investments over a short area of time, more precisely the year the investment took place. On the other hand, stock measures the investments the whole time it is invested in the host country. This means that all the previous studies that have measured effects FDI flow have on a host country, is only over a short time. It does not measure the effects these investments have over a longer period. It is important to find out both the effects MNCs have in a short time perspective, but it is equally important to see the effects in the longer perspective, which fewer of the studies have done. This paper is using stock as the measurement for FDI in the analysis, something that could be used more in the literature.

### 3.4. The literary focus on the determinants of FDI

The positive view toward MNCs and its investments in the later decades has also affected the literature on FDI. As a result, political scientists and economists have been more interested to study FDI and which factors it is attracted to. The literature on FDI have not had the same focus on studying the effects these foreign investments have on the host countries, but as presented in the last chapter it exists some literature on that as well. Previous literature on FDI wanted to gain more information about how to attract new FDI flow from multinational companies, since then the countries could create more suitable policies to attract these types of investments. Because of this long-lived trend in the literature, it exists a large amount of research on the determinants that FDI has and what characteristics it would want a possible host country to have.

Theoretically, it is several reasons for why institutional factors matters for FDI (Bénassy-Quéré et al., 2007). Two of the reasons are that good governance infrastructures may increase productivity opportunities and poor institutions created by for example corruption can increase costs for FDI actors. The third reason is connected to high sunk cost, which is an investment that is not easy to move when it has taken place. If an investment has high sunk cost, which FDI often has, then any type of uncertainty connected to governments' policies or its institutions can affect the investment negative. An example for this is if property rights or contract rights for foreign companies is weakened, which could as a worst case end up in expropriation from the government. These three reasons are very important for FDI and are used as explanations for where FDI goes and why institutions are important for FDI. One of

the institutional factors that has an important effect on FDI is legal protection, because poor legal protection has a negative effect (Blonigen, 2005). The effect is caused since poor legal protection makes expropriation of an investment that a multinational company has more likely, and this makes the investment more unlikely to happen. Multinational companies are more passive to invest in a country that has a high risk of expropriation, especially investments with high sunk costs, because then it risks losing all the investments in that host country. If institutions that is necessary for the market to function are of poor quality, then the costs for doing business in the market will increase. This is something that affects FDI negatively, and is connected to the reasons that was mentioned above.

These theoretical reasons explained above have found empirical support, with findings indicating that institutional components as bureaucracy, banking sector, corruption, and legal sector are important determinants for FDI (Bénassy-Quéré et al., 2007). In this referenced study they used bilateral FDI stock as the operational indicator for FDI. Another result from the analysis was that higher institutional distance reduces bilateral FDI. This means that the higher the difference between two countries is when it comes to institutional quality, then the bilateral FDI for these countries reduces. Daude and Stein studied also institutions as determinant for FDI bilateral stock (Daude & Stein, 2007). The results from their study showed that institutions have an overall positive and economically effect on FDI. They also found that a couple of the institutional aspects had a more significant effect on foreign direct investment than others. Some of the institutional variables that were found to be especially important determinants for FDI was uncertainty when it comes to policies, laws and regulations, government instability, excessive regulatory burden, and lack of commitment. Overall, this study found that institutions have a significant and positively effect on FDI.

Another example is the study from Busse and Hefeker, which also found that several institutional factors affected which countries FDI was invested into (Busse & Hefeker, 2007). A couple of those factors that affected FDI flow was government stability, conflicts, corruption, law and order, ethnic tension, quality of bureaucracy and democratic accountability of government. Busse and Hefeker focused on variables that cover different aspects of political risk and wanted to find the political risk components that had significant effect on FDI and multinational companies. They relate political risk to the risk that a host

government will change “the rules of the game”, for example changes in policy or institutions in markets that MNCs operate in. These types of changes could affect the investments that the companies have made negatively. Political risk is something MNCs want to avoid as much as possible when finding a host country to invest in, because it can harm the investments. The risks that follows possible changes in institutions is especially problematic for the MNCs because the investments have high sunk costs as mentioned above. If the conditions for a multinational company changes radically, then it is not easy for the company to take its investments and flee. Institutional factors are therefore very important for FDI.

Globerman and Shapiro focused also on institutions when researching, and how these affected both inward and outward FDI (Globerman & Shapiro, 2002). In their study, they look at political, institutional, and legal environment, which is referred to as the governance infrastructure of a country. Governance infrastructure is comprised by the public institutions and the policies that governments make to create a framework for both economic and social relations. In the research it is included elements from governance infrastructure that could have effects on the decisions MNCs take when it comes to how it invests FDI, most importantly a good legal system, stable public institutions, and government policies that favor markets. These is important factors for the companies that are thinking about investing in the country, since foreign direct investment has often high sunk cost and these factors affect the uncertainty and the risk of expropriation. Therefore, these institutions are important factors for FDI, a notion that is compatible with the third reason that Bénassy-Quéré mentioned earlier in the chapter (Bénassy-Quéré et al., 2007). The analysis showed that governance infrastructure is important for both inward and outward FDI (Globerman & Shapiro, 2002). Good governance infrastructure helps a country attract FDI. Additionally, good governance infrastructure creates fruitful conditions for multinational companies to develop and emerge in the home country which affect them to begin investing abroad.

It exists also a study on US multinational companies that invested in China (Du, Lu, & Tao, 2008). Results showed that MNCs from the US, when investing in regions in China, preferred to invest in regions that had better protection of intellectual property rights, fewer government interventions in businesses, lower corruption by government and higher degree of contract enforcement. These are all important institutional factors, and MNCs from United States want

to go where these factors makes the institutions in the Chinese regions better. Several other studies have been done where one institutional factor have been chosen to research the effects it has on FDI. One of these is from Lee and Mansfield, which researched on the relationship between intellectual property protection and FDI (Lee & Mansfield, 1996). In the study they looked at 14 chosen countries to see if it is a significant relationship between how 100 U.S firm percept intellectual property protection of these and the composition and volume of the U.S foreign investment in these countries. The results of this analysis fitted with the notion that intellectual property protection affects both composition and volume of FDI. If it is an increase in firms that percept intellectual property protection of good quality in a country, then will the investments that the host country receive also increase.

Asiedu looked specifically at Africa when searching for which factors that affect FDI and where it goes (Asiedu, 2006). Results showed that several variables promote FDI in the region, and this group had a couple of institutional factors that was associated positively with FDI. In the analysis the institutional variables corruption and rule of law was used. Results show that more corruption deterred FDI, while a good legal system was positively associated with FDI. Another study looked at how institutional factors affect the political risk that the multinational companies is facing when investing in foreign countries (N. Jensen, 2008). Jensen used price data from political risk agencies to check if the premiums that the multination companies pay for getting insured against expropriation or contract disputes by the host country are affected by political institutions. The analysis found that democracy in the host country reduces the risks that MNCs get when investing in foreign countries, one main reason is that the democracy put more constraints on the executives.

Previous research in the literature show that institutions have an important role when it comes to determining where the foreign investments go. The previous research that has been done is showing that many different aspects of institutions, play an important role to attract FDI from multinational companies. Most of the literature regard institutions of good quality as important for states if it want to attract FDI. Foreign Direct Investment react much on uncertainty and political risk because the investments have high sunk costs compared to other types of investments. When it is difficult to move resources out of a country, the investments become much more vulnerable to uncertainty and changes in policies in the host country.

These types of institutional factors are something that are also factors for multinational companies when it settled in a host country with its investments. Multinational companies are interested to avoid as much uncertainty and these motivations are reinforced when it has established its investments in the host country. The theory and empirical findings from the literature on the determinants of FDI, can also be relevant when researching the opposite relationship. Next chapter will go through the relationship MNCs have with the state both before and after the foreign direct investments have been established in the host country. It is here the mechanisms that makes FDI attracted to institutions of good quality will be covered in more detail than this chapter, which have already given some insight to the subject.

### 3.5. Relationship between the MNC and the state

After covering what the literature have found on FDI's determinant in the previous chapter, this chapter is continuing with introducing the mechanisms that the relationship between MNCs and state have when FDI are taking place. This is explained in a more detailed manner compared to the previous chapter, which focused more on the empirical aspect of the existing literature. The current chapter is more interested in the relationship between the two parts. Therefore, the motivations that MNCs have, which is certainly affected by the state, is of more focus in the next chapter.

“We suggest that FDI is likely to have incentives to influence domestic institutions simply because it is less mobile than portfolio capital.” (Ahlquist & Prakash, 2010, p. 186) Ahlquist and Prakash argue that if a foreign company cannot exit a host country easily, it has incentive to try to change the host environment to fit its needs (Ahlquist & Prakash, 2010). When it is hard for a multinational company to flee from a country with its investments, for example an oil rig, the company has more reason to change the institutions and rules that the host country have in its favor. FDI, as opposite of foreign portfolio capital, demands much longer and deeper commitments because of the high sunk cost that these investments have. Therefore, a MNC is much more involved in a host country with a foreign direct investment. It is easier for a company to try and change political actions and market rules to benefit them than to move an oil rig out of a country. MNCs have good reasons and possibilities to try and make the environments favorable to themselves. It is a problem for MNCs that many of its foreign investments have high sunk costs, so any type of uncertainty in a host country can be a

problem for the investments (Bénassy-Quéré et al., 2007). FDI is more vulnerable than other types of investments because of its mobility, so uncertainty is something MNCs, when investing FDI into a host country, want to eliminate as much as possible. Types of uncertainty can be changes in policies, weak governments, inefficient governments, unstable property rights and general institutional quality.

States that is interested in foreign investments, which is viewed as positive both by the states and in the literature, have an opposite view and want investments that has high sunk costs (Busse & Hefeker, 2007). If a crisis takes place or uncertainty increases in the state, it does not want investments to have easy access out of the country. Because if it is easy for investments to flee, the investments will do it if the conditions of the country changes negatively. Therefore, investments with high sunk cost, for example big equipment, technology or recourses that is not very mobile, is very attractive for the host countries. When a large part of the foreign investments have high sunk cost, then the state has bigger freedom to change its policies or agreements with a less risk for the foreign investments to flee. As mentioned before, if this is the case, then the multinational companies have an increased incentive to try and affect government's policies and rules, so the changes shifts in its favor.

Larrain and Tavares (2004) suggest that FDI projects have elements of a “hostage relationship” (Larraín & Tavares, 2004). This is because public officials can collect bribes both before and after the investment has taken place, since several discretionary public decisions can affect a projects profitability. They also mention a couple of other reasons as to why FDI is especially vulnerable to corrupt activities. A sum of money that is needed to pay a bribe to a person that works in the public sector is not a substantial amount for a MNC, but it can be very significant for that person that demands a bribe. It can also be an advantage for a MNC, because it can use bribes and corrupt officials to gain market advantages in the host country. This can increase MNC's profits in the host country. The state wants to gain from the multinational companies both before and after the investment have taken place, while the MNCs are very sensitive to changes and uncertainty that could affect its investments negatively.

### 3.6. The behavior of MNCs in a host country

After presenting the relationship between the state and multinational companies, it is time to focus on the behavior the foreign companies have when the FDI have been invested in the host country. One characteristic of MNCs that have been given relative little focus from the literature is its political behavior (Boddeyn, 1988). Political behavior is emphasized in Boddeyn's analysis as particular ways for firms to relate to targets located in "non-market" environments. A firm's task environment is split up into two groups, "market" and "non-market". The "market" is where the company meets its customers, suppliers and compete with other firms, which are typical actors in a market. "Non-market" is where other actors that are not participating as a normal actor in the market are included. These are actors in the task environment that are not buyers or sellers in the market, but they still participate and affects the firm and the "market" through different types of actions. Participants in the "non-market" are actors that have power to support or decline transactions in the market, through something that Boddeyn define as "authoritative permission". These actors can also have the power to give positive or negative sanctions of a noneconomic character, for example give or take away legitimacy for the company. These types of noneconomic sanctions are something multinational companies can respond to. The positive sanctions can the companies exploit even more in its favor and the negative it must find a counter action.

MNCs have several ways to respond to these sanctions. It can use political power it has to try and change the sanction to make it gain instead of harming them. Other measures Boddeyn mentions are cultural, as using status or respect, and social, with using solidarity, to try and better the position and the environment of the company. The last measure is maybe the most obvious one, economic measure. With this measure, MNCs use its economic resources to try and change the sanctions that it is affected by. One way to use its economic resources is to change the sanctions through bribing public agents. Bribed public agents with power to affect the environment of the MNC can then change the sanctions so it does not affect the company negatively. The most important point Boddeyn has on political behavior of multinational companies, is that the companies operate outside of the traditional market sphere that it usually belongs to. Multinational companies are operating outside of its traditional market to try and improve the conditions it are operating under. The "non-market" includes the state, but also the community which is exemplified with the public opinion. Also, groups or



associations with special interest are also included in this environment that is outside of the traditional market that MNCs usually operate in.

Boddewyn's analysis on MNCs political behavior is based on a few assumptions gathered from different disciplines (Boddewyn, 1988). These assumptions are both assuming the environments that MNCs operate in and the objectives that the different actors have. First assumption is that the economy, the polity, the community interpenetrate each other and are also constantly interacting with each other. The second assumption is that the economy can take several forms, and it does not need to be organized as a market with economic competition as the sole form of rivalry among companies. Third, government and firms are both rival and cooperative with each other when it comes to the organization of economic activity. Another notion that is used as an assumption by Boddewyn, is that public policy is not developed in a vacuum. Often, it is an outcome of power plays by interested actors. The last assumption is that a company is not only adapting to its environment, it is also restructuring it in the light of the interdependence. It is these five assumptions that are the basis of Boddewyn's analysis.

### 3.7. Institutional theory: The important economic role of institutions

Since two institutional factors are the dependent variables in this paper, it is also relevant to include an amount of institutional theory. It is relevant because this paper is going to test the effects FDI have on the institutional environment in a host country, and therefore it is important to see what the institutional literature have found on the consequences the countries get when the quality in institutions changes. Both empirical and theoretical examples from the institutional literature are used to illustrate the importance institutions have for the development in countries. This is to give the reader insight in what the consequences are for a country when FDI are affecting its institutions, either positive or negative, since this paper is arguing that FDI is a factor for the institutional quality in the host country.

Weingast describes the fundamental political dilemma of an economic system as: "A government strong enough to protect property rights and enforce contracts is also strong enough to confiscate the wealth of its citizens"(Weingast, 1995, p. 1). For markets to develop, it is important to have a strong enough government that can protect property rights and law of

contracts (Weingast, 1995). Additionally, it is important that the state have a secure political foundation that take away the ability a government has to confiscate wealth from its citizens. A system that can balance these two things is important for a state when it comes to creating economic growth in the markets. If the secure protection for reward to effort weakens, it deters investments which is negative for economic growth. If the state is strong enough, political forces can have potential to harm a fragile economic system, which is relied heavily on property rights and reliability of upholding contracts. If the political forces have opportunity to use its power to confiscate wealth from its citizens, then it can damage economic activity and growth. It is therefore important for a state's development that this dilemma is balanced out correctly. It is fruitful for people to participate in economic activity and to have wealth when this dilemma is solved.

Gagliardi describes three different definitions of institutions and its role when the economic process is viewed as a game. This is based on the concept that in every aspect people pursue as economic agents institutions affect them. The first definition is that institutions can be described as the rules of the game, the rules that we in society follow and the rules that affects our actions (Gagliardi, 2008; North, 1990). The institutional rules are norms that is identified by individuals to discipline its actions, and if it are not followed it will affect the individuals negatively. In the second definition, institutions are defined as the players of the game, as well as the rules of the game. This definition is broader and include also the actors that must apply the rules that exists, not only the rules themselves. Therefore, actors as for example courts and governments agencies that are applying the rules and the framework that already exists are included. The third definition sees institutions as "self-enforcing equilibrium outcome of the game" (Gagliardi, 2008, p. 417). This means that institutions consist of two interrelated elements, the beliefs people form on others` behavior and organizations. These two elements can change the rules of the game.

One of the main explanations on why some nations have economic growth and why others stay poor is that institutions have a central role in the development (Rodrik, Subramanian, & Trebbi, 2004). In this view, rule of law and property rights are considered as two of the most important institutional factors when it comes to economic development. Naturally, the ability

to enforce contracts effectively is also an important factor that must be upheld for a country to have institutions of good quality. North is very clear on its importance:

*"the inability of societies to develop effective, low-cost enforcement of contracts is the most important source of both historical stagnation and contemporary underdevelopment in the Third World. . ." (North, 1990, p. 54).*

This explanation uses first definition from Gagliardi on institutions, which views institutions as the rules of the game that affects the actions of the participants in the society. The rules of the game affect the society through helping to create favorable economic behavior, which is vital to development. Institutions have also gained more attention in the last couple of decades and its focus has been on what effects good quality institutions have on a country. One of the effects that has gained attention is the effects institutions have on promoting and sustaining economic growth (Gagliardi, 2008). A view about institutions that have grown larger with time is that institutions are a key factor when it comes to economic performance. A central argument that lay basis for this view is that individuals can earn gains from trade when they cooperate with each other. One of the challenges this argument has is that it is especially vulnerable when it comes to opportunism and cooperation between trade partners is costly. Institutions have grown to be a popular solution to create an environment that limits opportunism and the high costs that cooperation have.

*"The evolution of institutions can produce a favorable environment for the adoption of cooperative solutions that will foster economic change, hence growth." (Gagliardi, 2008)*

Another view on institutions and cooperation is that actions from one actor have influence on actions from other actors (Gagliardi, 2008). This is because strategic complementarities exist between actors, which means that it is more fruitful for actors to make a cooperative action rather than to do it individually. It is possible to acquire benefits through cooperation between two actors that would be unavailable through individual action. This is another argument in favor for cooperation and another reason for developing institutions of good quality. Institutions help actors coordinate plans that reduces uncertainty, and this helps solving the problem with opportunism and to promote cooperative behavior.

Rodrik et al. studied the effects institutions have on income and controlled it with several other relevant variables as for example geography and trade (Rodrik et al., 2004). The results showed clearly that institution is the most important factor when it comes to effect on income, and the other variables that is included as control have weak effects at best. The results fit with the explanation that institutions are important when it comes to development and as rules of the game contributes to favorable economic behavior. Knack and Keefer studied the effects property rights had on economic growth, by using data provided by country risk evaluators. Data that is actually made to actors that are planning to invest in foreign countries (Knack & Keefer, 1995). In their analysis they found results that supported greatly the proposition that property rights play an important role when it comes to growth and investment. These results is compatible with the results Rodrik and others found when studying the effects institutions have on income. The empirical results show that institutions, are relevant factors when it comes to economic development and growth in a country and it is important that institutions are of good quality. If not, it opens up for opportunism and weakens the possibilities for cooperative behavior which is harming the development in a country.

### 3.8. Hypotheses

Up to now, this paper has presented relevant debates surrounding FDI, the existing empirical literature on the subject and theoretical arguments that are grounded in different parts of the literature on FDI and MNC. From this thoroughly presentation of the different elements that is relevant for answering the research question, it is some mechanisms that are used to create the hypotheses that are presented in end of this chapter. The literature on FDI has found support for the importance to have institutions of good quality if the countries want to receive foreign direct investments from MNCs (Bénassy-Quéré et al., 2007; Busse & Hefeker, 2007). One important reason for that is the high sunk costs that often characterize FDI. Investments with high sunk costs do not want uncertainty and instability in the host country it thinks about investing in (Bénassy-Quéré et al., 2007). After the investments have taken place, MNCs still want stability and good institutions that help providing it.

If the quality of the institutional environment in host country changes negatively, the chances increases for more uncertainty and increased risk for negative policies. In the worst case the reduction in institutional quality could lead expropriation. Investments with high sunk cost have trouble to flee if the conditions are becoming worse. Because it is harder to flee away when the characteristics of the environment changes negatively, a better solution for the foreign investors is to try and affect the environment in a way that strengthens the institutions and eliminates the uncertainties (Ahlquist & Prakash, 2010). The theory on MNCs from Boddewyn is also used to explain the behavior of multinational companies as a political actor (Boddewyn, 1988). Multinational companies operate not only in the traditional market, but also in a “non-market” with actors that have power to change the rules and conditions in the host country. If the MNC are affected by negative policies or sanctions, it would try to change these negative actions using resources and skill that it possess. Combining this with motivations that MNCs have to want stability and protection for the investments in the host country, this paper proposes that the foreign investors would affect the institutional environment in the host country positively. It is easier for a MNC to try and better the conditions it operates under and reduce uncertainty compared to move the investments out of the country. The multinational companies will work to improve factors that reduce uncertainty and instability. Property rights, contract enforcement security and bureaucracy are examples of institutional factors that affects the stability and uncertainty in a country. These factors are the institutional variables that are the dependent variables in the analysis and it is those that the hypotheses are about. Based on the motivations and the characteristics of the foreign direct investments, the chosen institutional factors would be positive affected by actions from the multinational companies.

From these theoretical arguments two hypotheses are created that are tested with a statistical analysis:

H01: FDI stock has a positive impact on property rights and contract enforcement in the host country.

H02: FDI stock has a positive impact on the quality of the bureaucracy in the host country.



## 4. Method and Data

To test the hypotheses a statistical analysis in Stata will be used. An OLS-regression is used to test the relationship between FDI and institutional quality, as specified with property rights, contract security and bureaucratic quality. For the main regression models, Newey-West is used for the OLS-regression because of the high autocorrelation that the variables have (Newey & West, 1986). Newey-West is a method for calculating both high autocorrelation and heteroskedasticity, which is a problem that needs to be solved in these models. Newey-West is therefore the preferred choice.

To answer the question on how Foreign Direct Investment affects institutions in host countries this paper has chosen a statistical approach through an OLS-regression as the best choice to do that. Most of the literature on FDI have used the statistical approach to research the subject, it is possibly this is the case because it exists much data of good quality on FDI, which is retrieved from UNCTAD. The statistical approach does have the opportunity to study a large group of countries and the effects FDI have on its institutions. Case studies is one alternative that could be used to study one country or a group of countries more closely. This alternative is useful and relevant in the FDI literature but would not give as much overview of the consequences the enormous increase foreign direct investment have had worldwide in the latest decades. The statistical approach is the best option to study the research question, especially when studying many countries. It would be more difficult to find enough data to do a case study on a country and it was not a suitable option considering the time perspective and the possibility to collect data. Case studies could be interesting to do more of in the literature on FDI and MNCs. In the future, case studies could be an alternative to the statistical studies that is the preferred choice in the literature.

The data in the models are from the period 1990-2015. It is earlier data available in the dataset, but 1990s have been chosen as starting point in the models for a couple of reasons (Ahlquist & Prakash, 2010). The first one is that in the 1990s it was immense institutional changes in Eastern Europe with the Soviet Union collapsing and the following adoption of market institutions in many of the states that came up from the former Soviet bloc. At the same time China developed to be a prime destination for a significant part of the FDI. Also, as

reported earlier in the paper, the 90s was a period where the view by many countries towards FDI was improved. Many policies in favor of FDI started around 1990. Developing countries in Latin-America and Asia implemented processes where these countries privatized enterprises owned by the state, and several of them was overtaken by investors in foreign countries. The final reason is that several financial crises took place in this period, which gave the governments in countries more reason to respond to the preferences that international capital have. All these events are reasons to why 1990 is chosen as the start period in the analysis.

#### 4.1. Dependent Variable

As dependent variable, the analysis includes both subjective and objective indicators for measuring institutions. The objective indicator is contract-intensive money (CIM), based from the work of Clague, Keefer and Knack (Clague et al., 1999). The subjective indicator is bureaucratic quality (BQ) from ICRG.

In this analysis, using both CIM and the subjective indicator give us an opportunity to compare subjective and objective measures. The problem with much of the measurements that are existing for measuring institutions, is that it is subjective. Experts and people that lives in the country are giving its opinion on the matter, and therefore it is difficult to know if this fits with the actual reality. The things that these are saying can be lies, poor analysis of the situation or they can just have another view that does not fits with the reality. This has been a problem with much of the literature that has institutional variables in its models. It is a problem to verify that the indicators measure institutional factors accurately, since it does not exist objective measures that measure institutional quality directly. To solve this, Clague and others came up with the contract-intensive money indicator, that is meant to be an objective proxy for institutional quality, more specifically enforceability of contracts and security of property rights that is two important institutional qualities (Clague et al., 1999).

Including both a subjective and an objective measure of institutions, which can be compared with each other, gives a broader perspective about institutions. A model that is relying only on subjective indicators for institutional quality will meet the same problems as described above, how subjective ratings may not illustrate the actual world correctly. This paper has attempted



to eliminate this problem with including an objective operationalization for institutional quality. Subjective ratings are useful even with some limitations. The ratings can be used when measuring institutions, and therefore it is important to try and eliminate the validity problems that it has. Both subjective and objective measurements are used to measure institutions to give the most valid results.

When it comes to an objective measure on institutions, the theory on contract-intensive money argues that this measure can be used as an indicator on contract enforcement and property rights (Clague et al., 1999). The argument also proposes that contract enforcement and property rights are two important factors when it comes to productivity and economic growth in countries. CIM is defined as the ratio of non-currency money to the total money supply. This is formulated as  $(M2-C)/M2$ . M2 is a broad definition of the money supply, while C is the currency that is not in the banks.

When contracts are not enforced, and no one can rely on contracts being upheld, people cannot trust that money placed in financial institutions are safe. Because of poor contract enforcement and property rights in a society, people will rather have money not placed in financial institutions and other places that is upheld by a contract since these contracts cannot be trusted. When the institutions are functioning and contracts are enforced by third-parties, citizens are more likely to let other people hold their money if they are compensated for it. If citizens let banks and other institutions hold their money, then CIM is going to be higher. This is because fewer people are going to have currency outside of these institutions and C is going to be lower. If C is low, then the total CIM is higher. Clague et al. (1999) argues that CIM is important based on three different propositions (Clague et al., 1999). The first one is that the ratio for CIM is a measure of the proportion of transactions that rely on third-party enforcement. Second proposition for CIM is that it is a good indicator of the security of property rights and the reliability of contract enforcement in states. Final proposition is that both property rights and contracts enforcement are important when it comes to productivity and fast economic growth.

Contract-intensive money measure is created from a couple of statistics from the International Financial Statistics (IFS), and it is based on the same way as Clague did it. C is built from line 14A from IFS, “currency outside deposit money banks”. M2 comes from several categories from IFS. M2 is defined by IFS as the sum of money and quasi-money. From IFS it is the sum from the lines 14A “currency outside deposit money banks”, 15 “time deposits”, 24 “demand deposits” and 25 “time and savings deposits, including foreign-currency deposits of resident sectors other than central government”.

As an addition to the objective measure for institutional quality, it is also included a subjective measure. The subjective measure that is used as the second dependent variable is gathered from International Country Risk Guide (ICRG) (*International Country Risk Guide*). ICRG is a private international investment risk service that do commercial risk analysis and rating. They offer their analysis and risk ratings to customers that for example consider investing in a foreign country. These ratings are updated monthly. Data from ICRG has also been popular in several different research literatures. It has been widely used in institutional literature as a solution to measure different institutional factors. The lack of good existing institutional variables has forced researchers to use subjective ratings from commercial risk ratings agencies as a solution. Using their analysis and ratings have been the most popular and arguably the best existing way to do cross country studies on institutions. The ratings are not perfect, even though it is experts that are doing the collecting of data and is giving the ratings. Ratings from ICRG has still validity problems, which these kinds of subjective ratings always will have. The variables are from a system based on a set of components that are categorized into three groups of risk, economic, financial, and political. In this research one political component from this system is in the models as the subjective dependent variable.

The variable that is gathered from ICRG is bureaucratic quality. This is a measure on the institutional strength and quality of the bureaucracy. ICRG gives higher points to a country with higher bureaucratic quality. On a scale from 0 to 4 the ICRG rates the countries bureaucracy. ICRG are viewing the strength of the bureaucracy as a shock absorber that often minimize the revisions of policy when it is a change in government. Therefore, it is given high points on the scale to those countries that have well enough institutional quality in the bureaucracy that it can use expertise and strength to govern without any radical changes in

policies or disruption in the government services. The countries that have these strengths and expertise in the bureaucracy, which lower the political risk in this aspect, gets higher ratings on the bureaucratic quality variable. In the opposite case, countries that do not have a bureaucracy that is strong enough to operate somewhat autonomous from the pressure from political actors are receiving low scores from ICRG.

Bureaucratic quality is chosen as the subjective dependent variable in this paper because it is an important part of the institutional quality in a country. To have a bureaucracy that can be highly autonomous from the political actors, especially in times where the government changes, is ideal when it comes to be a good control mechanism. If the bureaucracy is strong enough to govern without drastic changes in policy or interruptions in government services, as ICRG gives high points to countries that have this, it could be a control mechanism on the power that government have to confiscate the wealth of its citizen. It is related to the quote from Weingast, that a state strong enough to protect property rights and enforce contracts are also strong enough to confiscate the wealth from the citizens that it protects (Weingast, 1995). As ICRG measure bureaucratic quality, the bureaucracy of good quality can be crucial to avoid radical changes in policy when there are changes in the government.

The two dependent variables, contract-intensive money and bureaucratic quality are used to test institutional quality, one objective and one subjective variable. Contract-investment money is a proxy for property rights and contract enforcement, while bureaucratic quality is measuring the quality of the bureaucracy and the strength to operate as autonomously even with radically changes in government. Both variables are institutional, and factors when it comes to protection of the wealth that citizens have and from potential misuse of power from the state. If a country has high degree of property rights and contract enforcement, then it is safe for people to enter into agreements with each other and to also accumulate private wealth without be concerned that others can take it away. To have a bureaucracy of high quality is also a factor that would help as a control mechanism against power abuse from the government. If the government is of good quality, then it can be a hindrance for a new government to push through radical changes in policy. An example could be to take away wealth from the citizens and weaken the institutional infrastructure that exists.

Both these variables measure significant institutional factors that are essential control mechanisms against the potential power that government can use to confiscate the property and wealth of the citizens. Additionally, the quality of bureaucracy, property rights and security of contract enforcement are all important for the institutional framework. A bureaucracy good quality is important to have stability, which also can be provided when radical changes or policies take place in the government. One example is expropriation of property from the population. Property rights and secure contract enforcement are also important when it comes to cooperation and to make it fruitful for citizens to hold property and value. These are factors that are significant for development in countries and is a reason for why these variables are used in the analysis to test institutional quality.

These two dependent variables are tested on how well they are correlated. They differ in the way that one is subjective and the other one is an objective proxy for institutions. The variables have also some differences in the institutional factors they are measuring. CIM is a proxy for contract enforcement and property rights. The variable for bureaucratic quality measure the strength and expertise to govern and to remain quite autonomous even when there are radical changes in the government and in policies. Contract-intensive money and bureaucratic quality have also similarities, since they are institutional variables and both are connected with the protection from power abuse by the state on the population. To test the similarities between the two dependent variables, a correlation test is used to see how well they correlate with each other. When doing a correlation test in Stata, the two dependent variables have a correlation value of 0.58. The results show that the variables are quite correlated even with differences in measuring techniques. Result from the correlation test show that even though it is some parts that differ, the variables also have similarities in what it measures.

#### 4.2. Main independent Variable

The main independent variable is the Foreign Direct Investment inward stock, and it is gathered from United Nations Conference on Trade and Development (UNCTAD) (*UNCTAD STAT*). FDI stock is estimated by UNCTAD as cumulating FDI flows over a period. UNCTAD is using definitions from two sources when defining FDI in their data (UNCTAD). When collecting FDI, UNCTAD uses definitions from both Balance of Payments Manual

(BPM5) and Detailed Benchmark Definition of Foreign Direct Investment (BD3). BPM5 defines FDI as “an investment made to acquire lasting interest in enterprises outside of the economy of the investor.” ((IMF), 1993). Another quality with FDI is that the investor has a purpose to gain an effective voice in the management of the enterprise that is outside of the home country that the investor has. “Direct investor” is the title given to the foreign entity or group of associated entities that make the investment. The enterprise that the foreign direct investor has made the investment in is called “direct investment enterprise”.

How to determine if the investment from the foreign direct investor is significant enough to gain an effective voice is done through the degree of equity ownership, since it is often considered to be associated with an effective voice in the management of an enterprise. BPM5 suggest a percentage threshold of equity ownership for when an investor is qualified as a foreign direct investor. The threshold to be defined as a foreign direct investor is 10 per cent of equity ownership. Another important definition when it comes to foreign direct investment is to define which capital flows between an entity and an enterprise that is FDI. They see the most defining feature of FDI as the lasting interest of the foreign direct investor in an enterprise in another country. With that accounted for, capital that is only provided by the foreign direct investor either directly or through other enterprises that is related to the direct investor, is those that should be classified as foreign direct investment. The forms of investments that is done by the foreign direct investor and is classified by the BPM5 as FDI are the reinvestments of earning, equity capital and the provision of short-term and long-term intra-company loans.

The definition of FDI that the BD3 has is highly alike the definition from BPM5, but it is some minor distinctions between the two. Both uses the 10 per cent threshold, the percentage of ownership the foreign investor must have in the direct investment enterprise. While BPM5 uses equity ownership, BD3 uses ordinary shares or voting power when it comes to ownership percentage for the investor ((OECD), 1996). An exception that BD3 have is that if it can be proven that the 10 per cent of ownership does not give an effective voice, or in the opposite case that the investor owns less than 10 per cent but have an effective voice. If the investor does not have an effective voice in the direct investment enterprise, then it is not regarded as FDI with either the definitions from BPM5 or BD3. BD3 defines an effective voice in

management as direct foreign investor influence on the management of the direct investment enterprise, but it does not mean that they have absolute control. BMP5 had the most important feature of FDI to be the lasting interest of a direct investor in the enterprise. BD3 has a similar characteristic for the most important that FDI have, with it being that the direct investor invest in the enterprise with the intention of exercising control over it. This is a significant distinction between FDI and foreign portfolio capital, since FPI is being much more fleeting.

As mentioned previously in the paper, stock is a better measure than flow to measure FDI and how it affects different aspects of the host state. An important reason for choosing stock rather than flow, as a measure for FDI, is that stock is less volatile than flow (Neumayer & De Soysa, 2005). Stock is not as easily affected by one big takeover, which may be the case for flow if it has usually low flow of investments. This would be the case for smaller countries that do not generally have as much inflow of FDI in a year, one huge investment could affect the flow data significantly. Stock is accumulated over many years and will therefore be less affected by one investments. Flow is measured over one year, and one investments can possibly have a significant effect of the total flow to a host country in a year. When researching what effects foreign direct investments have on different aspects of a host country, it is better to use stock instead of flow because it includes investments that have been operating in the country over several years. Flow is a measure for when FDI recently, maximum a year, have taken place in the host country. In this research it is more interesting to find what effects these foreign investments have on the host countries over long time, and this is another reason for why stock is preferred over flow as a measure for FDI. With flow, only the short-time effects would be measured.

#### 4.3. Control variables

In the model, it is included several variables to control for the relationship between the main dependent and independent variable, and that it holds after these are considered in the model. These variables are chosen based on the background of the existing literature on FDI and institutions, since they can affect the relationship between the two main variables. Therefore, they are included in the model to control that the results in the model are correct, and to see if the inclusion of these variables changes the relationship between FDI and institutions in any way. In this part, the control variables are described and explained on why they are chosen to

control the relationship between the main variables. All the control variables are gathered from the World Bank's database except the democracy variable ((*World Bank Open Data*)).

The first independent variable that is included to control the relationship is GDP per capita, which is included to control for economic development in the countries. It is made up by gross domestic product divided by the midyear population. GDP per capita is gathered from the World Databank and is included because economic development is a determinant for institutions. Per capita per income is closely associated with having efficient and transparent institutions (Larraín & Tavares, 2004). The link in the relationship starts with good institutions considered as a normal good, which will increase in demand by the people when per capita per income is higher. Additionally, good institutions are also "easier to afford" for countries with high incomes, since these countries will also have human and physical capital more available. As partly mentioned with North earlier, an environment where it exists secure contract enforcement is associated with high degree of economic development (North, 1990). Countries that are richer are therefore expected to be associated with better institutional quality, especially when it comes to contract enforcement and property rights.

Another control variable included in the model is the country population, since the size of the country could explain some of the institutional differences in the countries. This variable is also retrieved from the World Databank. The variable measures the total population in the country. All people in a country is counted, legal status or citizenships is not required. Every year in the population data are midyear estimates. The size of the country could explain differences in the institutional qualities and the services that are being offered. Different studies have found results and argued for that both small and larger states could affect the quality of institutions negatively, some have found in their analysis that larger states could affect institutional quality poorly, but other studies have also found that it is smaller states that could have this problem (Fisman & Gatti, 2002; Knack & Azfar, 2003; Treisman, 1999). Therefore, it is relevant to include population as a control variable in this analysis.

The control variable for resources is natural resources in the country divided on its GDP. As many of the other control variables, this measure is also retrieved from the World Bank's

database. The percentage of natural resources on a country's GDP measures how reliant a country is on the natural resources. It is in previous research found that natural resources are a factor that affects institutional quality, and this is especially the case when it comes to corruption, but this could affect other types of institutional factors as well (Leite & Weidmann, 1999). High levels of natural resources in a country is prone to have high level of corruption. Another example is that high level of natural resources could weaken the government efficiency which again slows the economic growth in the country (Sachs & Warner, 1995). Therefore, the position natural resources have in the economy could be a factor on different institutional factors.

A variable that measures democracy is also included in the model (*V-Dem Dataset*). It is from the database Varieties of Democracy and it measures the electoral democracy level in a country. Varieties of Democracy defines that the electoral principle of democracy has a goal to embrace the value of making rulers responsive to its citizens, which is achieved with electoral competition for the approval of the electorate under the conditions that those that has the right to vote is extensive. The democracy variable is built on different components. These are that the political and civil society can operate freely, that the rulers are responsive to citizens through competition during periodic elections, the elections are clean and not tampered with and that the chief executive of a country is elected through either indirect or direct elections. Between elections it is also freedom for the citizens to express what they want and it exist media that have the opportunity to present other views on matters that have political relevance. Together, these components are used to measure the level of democracy that a country has.

All these components mentioned makes up an interval scale from zero to one. A country with a low score have a poor electoral democracy and scores low on many of the components that makes up the scale, and opposite with a country with a high score close to one. The control for democracy is included, since the political tradition of a country is a factor on the institutions (Kwok & Tadesse, 2006). Important democratic factors as the right to vote, free press and regular and open elections can be factors that improve the institutional environment of a country. These factors could spotlight institutional problems and make citizens more aware of them, which could lead to change in the government in an upcoming election if they



are not satisfied with the current leadership. A political tradition with democracy of good quality could help improving institutions and developing solid institutional controls against power misuse.

#### 4.4. Instrumental Variables

In addition to the main models, two variables are included as instrumental variables for an instrumental variable analysis. This is to try and solve the problem about reverse causality, that much of the literature have had problems with previously, since institutions can have effects on foreign direct investments. Instrumental variables are a method to try and associate the exogenous components of FDI to institutional quality. It exists some variables that have been used as instruments in the literature, but many of them are institutional variables. These variables are not useful since the dependent variables are institutional and FDI also are driven by the institutional environment. Others have tried to find instruments that are outside of this institutional environment, but the attempts have not been successful.

One example on an attempt is using infrastructure variables as electricity usage and communication networks (telephone lines and mobile cellular users) as instruments for the IV analysis (Kwok & Tadesse, 2006). Another example that have been used when solving the reverse causation problem with FDI and, in this case, economic reform is real exchange rate fluctuations (Malesky, 2009). Both solutions have the same problem with its instruments when using them for the relationship between FDI and institutions, since both exchange rate fluctuations and infrastructure variables as electricity usage and communication networks are both affecting institutions. The key to find a good instrument is to find a variable that explain FDI and is not likely to be related to institutions. These examples that are mentioned are factors that affect FDI, since they affect costs (exchange rate) and the infrastructure is also a factor that plays a role for FDI (communication networks). The problem with these examples is that institutions could affect them. If the institutions are of bad quality, the demand for the currency could fall and change the value of the currency. Same arguments count for the infrastructural variables, because the infrastructural development could be harmed by institutions of poor quality. These arguments make the examples above a bad choice when finding an instrument for the IV analysis in the attempt to solve the causal problems between FDI and institutions.

To try and solve the problems with the lack of suitable instruments in previous literature on FDI, an instrument is drawn from the trade literature (Carr et al., 2005). Two instruments are used to solve the problems, and both are geographical. The first one is distance to markets, the distance each country has to the notable markets. This variable uses the distance to three markets that is the most substantial ones, USA, Japan, and Europe. The variable is built of these three distances and an average is created from the data. This is the average distance a country has to the three markets. Every distance a country has to the markets are measured using the capital as the position to measure from. The data is gathered from the dataset that Kristian S. Gleditsch has created (Gleditsch). For USA the distance is measured from Washington, it is therefore important to note that countries that are closer to the west of USA have a bit longer distance in the data. For Japan it is naturally Tokyo, and Brussel is chosen to be used for the European market. The second instrument is a dummy variable that measures if a country is landlocked or not. If a country is landlocked it borders only to other countries. This dummy variable is coded the way that the country has the value 1 if the country is landlocked, and the country has value 0 if it borders to an ocean. If a country is landlocked it has no access to the oceans and no port. This means that landlocked countries have high transportation costs since these have no access to ports and shipping operations.

The first instrument, distance to market, is affecting FDI but is not related to institutions which make it suitable as an instrument. Distance to market is something that has been used in the trade literature, but it exists few arguments against using it as an instrument in the FDI literature. FDI is affected by the distance, since it is naturally that companies invest in neighbor countries and that this is a factor when deciding where to invest. Closer distance to a MNCs home country makes it in some ways logistically easier to make investments. In this case it is the average distance away from the three biggest markets, USA (Washington), Japan (Tokyo) and Europe (Brussel), which many of the multinational companies has as its residence. This distance is not a factor when it comes to institutions. The distance a country have to the three markets should not affect institutions it have in any significant way.

The second instrument, which is if country is landlocked or not, is like the first one. To have a port could affect the coordination for a MNCs when making an investment, much of the same

logic used with the variable on market distance. It is logical that geography could be a factor for multinational companies when deciding for a country to invest in. These geographic elements as port or market distance is not related to institutions, to have a port is not a factor that decides the institutional quality of a country. As argued above, these two variables that are geographically is a factor for FDI and not related to institutions. This makes the variables possible to use as instruments.

Time-fixed and country-fixed effects are included in the OLS-regressions. Time-fixed effects are included in all estimations in this paper, while country-fixed effects are included in half of the estimation to show the differences when country effects are accounted for and when they are not. This is to see if special characteristics that each country have are affecting the results in the models, and that the result are differing from the models that do not consider these country characteristics (Wilson & Butler, 2007). OLS-regression does not consider these special characteristics that each country could possibly have. When country-fixed effects are not included, the unique effects are not existing and the estimations are not accounting for it. These special traits countries have is interesting to add see if they are affecting the relationship between the dependent and the independent variables. Most of the variables in the models are also being logged. They are logged to solve that the variables have problem with skewness. Additionally, the variables in the estimations are lagged. This is to get the last year's effect from the independent variable on the dependent variable.

Wooldridge test for autocorrelation in panel data is used to test if there is any autocorrelation in the data that is to be used in the model. The test show result is significant with a value well below 0.05 and therefore the null hypotheses for no first order autocorrelation must be thrown away. This result does it necessary to use Newey-West for the OLS-regression, since Newey-West solves the problem with autocorrelation. The model is also tested for heteroscedasticity with the use of the Breusch-Pagan test. Both tests for the two dependent variables show that the models have heteroscedasticity, since they got significant results on the test. This means that the null hypothesis that it is constant variance is not valid, which then mean that it is heteroscedasticity. This is another reason for why Newey-West is used for the regression models. Newey-West is used here since the variables have both problem with heteroscedasticity and autocorrelation (Newey & West, 1986).

## 4.5. Descriptive statistics

Table 1

Variables	Mean	St. Deviation	Min	Max
CIM	.758269	.1830148	.1073446	1
BQ	2.141364	1.176222	0	4
FDI stock/pc	6.044871	2.597703	0	16.82508
GDP per capita	8.208967	1.511917	4.748713	11.88601
Population size	14.73654	2.437303	8.361475	21.03897
Natural resources/GDP	1.616582	1.204394	0	4.532803
Democracy (v-dem)	.4280011	.2879509	.0121133	.9584104
Dummy port	.19966	.3997584	0	1
Distance to market	8310.393	1990.881	5191.667	13998.33

## 5. Results

### 5.1. Bivariate models

The first models, in table 2, is only a bivariate regression of the relationship between the main dependent and independent variables, without the control variables included. Model 1 in table 2 is analyzing the relationship with contract-intensive money as an objective proxy for institutional quality, an indicator for contract enforcement and property rights. Model 2 in the same table has bureaucratic quality as the dependent variable. The main independent variable, FDI per capita, are lagged and logged as elaborated on in the method section, to solve skewness problems and to include the effect previous years have.

Table 2	(1)	(1)
Bivariate models	CIM	BQ
Log FDI stock/pc t-1	0.04*** (0.00)	0.30*** (0.01)
Constant	0.58*** (0.01)	0.29*** (0.05)
Observations	3,598	3,932
Standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		
Time-fixed effects	No	No
Country-fixed effects	No	No

The estimations in the first model in table 2 show that MNCs activity, through foreign direct investment that are invested in the host country, have a positive effect on the objective indicator for institutional quality, contract-intensive money. FDI is in the bivariate model positively associated with CIM, this means that CIM is higher in countries with more investments from multinational companies. When CIM is high it means that citizens place their money in the banks and other financial institutions instead of holding onto the money for themselves, which is the case when the CIM is low. Citizens will not place their money in banks if the society have poor contracts enforcements and poor protection of property rights. Therefore, CIM is a proxy for the quality of contract enforcement and property rights protection. The higher CIM is, the better is the quality of these important institutional elements. Initial results from testing the relationship with a simple bivariate model indicates

that foreign direct investments have positive effects on this institutional factor, since FDI is positive associated with contact-intensive money. The result in the bivariate model is significant at the 0.01 level.

The second model in table two is also a bivariate analysis, but this time it is the other dependent variable that is included. Bureaucratic quality is the dependent variable in model two with the main independent variable being still FDI stock per capita. As the first bivariate model with the dependent variable CIM, the bureaucratic quality variable is also positive associated with FDI stock per capita. The variable is the same as contract-intensive money, the higher the variable is the better quality of the institutions has the country. In the second bivariate model results show that FDI is positive associated with bureaucratic quality. If a country has higher level of FDI, then it also has higher bureaucratic quality. The relationship between the main variables are also significant for bureaucratic quality in the second bivariate model at the 0.01 level.

## 5.2. Main multivariate models

After the bivariate models have been analyzed, the models are continued built on with several control variables included. The control variables are variables that also have explanatory power on institutions and its quality. In the next models, in table three, the control variables GDP per capita, population, percentage of resource rents to GDP and democracy are included in the models. There are four models in table three, two of them with CIM as the dependent variable and the other two have bureaucratic quality as the dependent variable. Each of the two dependent variables have one model that only have time-fixed effects included and another that have both time-fixed and country-fixed effects included. This is to see what differences these two models have, and to find out if any special characteristics with the countries affect the results in the models.

Table 3	(1)	(2)	(3)	(4)
Main multivariate models	CIM	CIM	BQ	BQ
Log FDI stock/pc t-1	0.01** (0.00)	0.01 (0.00)	0.12*** (0.02)	0.06*** (0.02)
Log GDP per capita t-1	0.04*** (0.00)	0.11*** (0.02)	0.32*** (0.03)	0.52*** (0.08)
Log Population size t-1	0.01** (0.00)	0.22*** (0.04)	0.10*** (0.01)	0.04 (0.14)
Log Natural resources/GDP t-1	-0.02*** (0.00)	-0.01** (0.01)	-0.12*** (0.02)	-0.07* (0.04)
Democracy (V-dem) t-1	-0.00 (0.02)	-0.01 (0.02)	0.69*** (0.09)	0.17 (0.21)
Constant	0.35*** (0.05)	-3.94*** (0.72)	-2.85*** (0.28)	-3.46 (2.42)
Countries	144	144	122	122
Observations	2,135	2,135	2,709	2,709
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				
Time-fixed effects	Yes	Yes	Yes	Yes
Country-fixed effects	No	Yes	No	Yes

The first model in table three, which show the main models in the analysis, are CIM as the dependent variable. In this model, only the time-fixed effects are included in the model and not country-fixed effects which is added in the second model. The results have not changed between the contract-intensive money and the main independent variable FDI stock per capita from the bivariate model to the multivariate model. The relationship between CIM and FDI stock per capita are still positive associated after the control variables and time-fixed effects are included in the model. When FDI stock is high in a country then CIM is also high.

Contract-intensive money is a proxy for property rights and contract enforcement, and if CIM has a high value then the country has better quality on the institutional factors mentioned.

A country with high values of CIM is a country where the citizens have most of their money in financial institutions. The citizens put the money in financial institutions because the country has property rights and contracts enforcement security of good quality. Citizens do it since they think it is safe to put their money in for example the local bank. If the money that the citizens have are not protected by the institutional controls, then they would not place their money in banks in fear of it being stolen. Low value of CIM is characterized with poor

property rights and low security of contract enforcement. Therefore, FDI is in this model positively associated with property rights and contract enforcement. The positive relationship between the two main variables in the first model are continuing even after control variables are added into the model. The result between these two variables are also significant with a significance level at 0.05 in the model.

The second model in table three is having the same main and control variables as the first one. Only one change has been done in the second model, which is that country-effects, the special characteristics every country has, are accounted for. In this model both time-fixed and country-fixed effects are included. After taking country-fixed effects into the model for contract-intensive money, several changes in the results occur. The most notably change is in the relationship between the main variables. When the special characteristics of a country are included, the effects FDI has on CIM is no longer significant in the analysis. With a significance level of 0.101 is barely too high to be significant at the 0.100 level. Special characteristics that every country has are taking significant explanation away from the relationship between FDI and CIM, which is in the correlation. In the first model higher values of FDI stock was associated with higher CIM that consequently meant better quality of property rights and enforcement of contracts. In the second model this can no longer be seen, as this relationship is no longer significant. It can be discussed, with the significance level being at 0.101 that the relationship are actually significant at the 0.100 level when it is so close to.

For the next two models, model three and four in table three, the dependent variable is changed. In the first two models contract-intensive money was used as the dependent variable, but it is replaced by bureaucratic quality in model three and four. Bureaucratic quality is measuring institutional quality, but as discussed in the method chapter it has some differences compared to CIM. Primarily, it is a variable for the bureaucratic part of the institutional environment, and it focuses not specifically on either property rights or contract enforcement. It is also used in this analysis because it has the same quality as property rights and contract enforcement in the way that it protects citizens from misuse of power, and especially misuse from the government. Expropriation of wealth that belong too citizens could in many cases be characterized as misuse of power. This is a key similarity that these



two dependent variables have, and one of the reason that both are used in the analysis. A bureaucracy of good quality is an important control mechanism against policy changes under radical changes in government.

Model three is the first model with bureaucratic quality as dependent variable that have all the control variables added. Time-fixed effects are also included in this model, but country-fixed effects are only included in model four. Compared to the bivariate model that was done first with bureaucratic quality as the dependent variable, it is no notable changes when the control variables are added in the multivariate analysis. FDI is still positively associated with bureaucratic quality. Countries with higher FDI has also higher values of bureaucratic quality, which means that its bureaucracy has quality enough to give stability in times with radical changes in government. It has also enough quality and strength to get the services done and not exposed for any radical changes themselves. The bureaucracy is qualified enough to be that control mechanism that it is supposed to be ideally. This result is also compatible with the first model on CIM, since FDI also was positive correlated with the proxy for better property rights and contract enforcement security. This result is significant with a significance level at 0.01.

In the fourth model, country-fixed effects are included to see if it is any changes in the model, which was experienced with adding it in the model with CIM as the dependent variable. Also, in this case several notable changes have taken place after the special characteristics of a country was accounted for. When it comes to the main variables, the results hold itself strong even after country-fixed effects are added in the model. FDI is still positively correlated with bureaucratic quality, so countries with higher stock of FDI have also higher bureaucratic quality. The relationship is still significant, with a value for significance on 0.01 level.

The most important results from the analysis are that FDI is positive associated with both the dependent variables. Contract-intensive money and bureaucratic quality are positive associated with FDI when time-fixed effects and control variables are included in the model. These results are also significant. When country-fixed effects are included in the models, only the relationship between FDI and bureaucratic quality stays significant, while the correlation

between FDI and CIM turns insignificant and have no longer any explanatory power in the model. In three of the four main multivariate models there are results that indicating that FDI have positive effects on the institutional environment. The results show that FDI is being positive associated to both property rights and contract enforcement security through contract-intensive money as a proxy. It is also positive associated with the subjective variable for bureaucratic quality. Special characteristics of a country make the effect FDI have on property rights and contract enforcement not significant, but the other three models give a picture of FDI correlating positive with the chosen institutional factors.

The results the models have on the relationships between the control variables and the dependent variables are quite consistent with previously literature. Income, that are measured with the GDP per capita variable, are positive correlated with the dependent variable in all the four main models. This is fitting with previous literature that have per capita per income closely associated with having transparent and efficient institutions (Larraín & Tavares, 2004). The notion that more economic developed countries has an institutional environment of higher quality is something that fits with the results from the main models. In the literature on the effects population have on institutions it is argued that the size of both smaller and larger countries could affect the institutions negative. In this analysis it is found support for those that argues for the notion of smaller states have negative effect on institutions, with significant findings in three of the models, population size are positive correlated with the institutional variables.

The results on the relationship that natural resources and institutions have are also consistent with the existing literature. Existing literature had found that natural resources could have negative effects on institutions through both increase in corruption and lower efficiency in the government (Leite & Weidmann, 1999; Sachs & Warner, 1995). Results from the models are compatible with previous literature, having found that natural resources are correlated negative with both the proxy for contract enforcement and property rights in CIM and bureaucratic quality. Countries with high level of natural resources is associated with poorer contract enforcement security, property rights and quality of bureaucracy is fitting with the argument that natural resources are harming the institutional environment. The last control variable, democracy, had only one significant results in the four main models so it is not much

that is compatible with the existing literature. One significant result the democracy variable had was positive relationship with the bureaucracy variable before special country characteristics was included. This result is consistent with literature that have political tradition of the country as a positive factor on the institutions, but with only one of the models significant it is not much that is consistent with the literature on the relationship.

To test the robustness of the models, two tests are used to check if the results are robust. Firstly, the models are tested with excluding some of the countries that are in the main models. Therefore, a model that has excluded twenty-three western countries compared to the earlier models is included to test the robustness of the main models. This is to check if the results change when twenty of the most developed countries in the west are not included and to see if the results are still robust when these changes are made. All the countries that are removed from the original models are named in appendix (Appendix 2). Most of the European countries are excluded from this model since these are characterized as highly developed. Countries as USA, Australia, Canada, New Zealand, and Japan are also excluded from the model, since these are also part of the developed countries. These countries are excluded to see if the results changes from the main models when dropping, as the dependency theory calls it, the countries from the core. The dependency theory argues that the developed countries from the core are taking advantage of the developed countries in the periphery for its own gain.

With excluding the rich countries from the west, the study is trying to see if there are any changes when the FDI that operating in the rich countries are taken out. The richest countries could affect the results that are given from the models on the relationship between FDI and institutions, and it is a useful robustness test. Other studies have not gotten very difference results when these countries from the core has been excluded compared to the models that have it included (De Soysa & Oneal, 1999). It is useful though to see if the richer countries change the results on how FDI affects institutions, especially since many of the multinational companies have these countries as its home country. When testing all the models over again with the group of highly developed countries taken out of it, the results on all the models stays much the same, no special mentionable changes (Appendix 1). Therefore, the results from the main models are still good after testing it with this test for robustness.

### 5.3. Instrumental variable analysis

A problem, in many cases, when it comes to the literature on FDI, is the causality problem. When studying what effects FDI have on the host country it is important to make clear that causality problems are avoided, which is that factors in the opposite relationship of the main variables, affect the results in the analysis. This is something that is the case in much of the literature on FDI. To solve the causal problems the relationship between FDI and institutions has, an instrumental variables analysis have been included. The literature on institutional factors have tried to identify variables that could work as an instrument for these types of IV analysis, but it is not an easy task. This is especially the case since both FDI and the institutional factors contract enforcement and property rights are influence by the institutional environment, which makes customary institutional variables as colonial history and legal origin unusable.

Others have tried to use variables connected to infrastructure as for example electricity usage and communication networks (Kwok & Tadesse, 2006). This is not successful either, since FDI is also affected by these types of infrastructure. Communication networks and power resources are factors for multinational companies when it are deciding which countries to invest in. To find a successful instrument, it is necessary that the variable explains FDI and is not related to institutions, since it is the exogenous component in FDI on institutions that an instrumental variable analysis are looking for. The instrumental variables that are used in this paper to solve the causality problems are the distance a country has to the big markets and if the country has access to a port. These instrumental variables are gathered from the trade literature and can be used in this analysis. It is no differences between trade and FDI that should make it unavailable to use as instruments for FDI.

To try and solve the reverse causation problem an instrumental variable analysis is used with the generalize method of moments estimator (GMM). When doing the instrumental variable analysis to check the robustness of the main models, the results show that the instrumental variables chosen for the model with bureaucratic quality as dependent variable are not valid instruments. The instrumental variables are tested for the conditions that an instrumental variable analysis has, and not all of them are passed when bureaucratic quality is the dependent variable. Port and distance to market are not good enough instrumentals for the

relationship between FDI and bureaucratic quality when all the control variables are included. The variable for FDI in the model are endogenous after testing for it using the C-test. After performing the test, results on the tests are significant and the null hypothesis that the variable are exogenous can be thrown away. It is therefore correct to perform an IV analysis, to solve the problem with endogenous variables.

The model is also correctly specified and valid when testing for it using Hansen's J- test. Both test scores have a high p-value that means the null hypotheses, which is that the model is correct specified and valid, is not thrown away. The problem with the model in the instrumental variable regression is the third test that test if the instruments are weak. This test, the first-stage regression summary statistics, is where the results indicate that the instruments are not good enough. The test shows that the instruments are not good enough when solving the reverse causation between FDI and bureaucratic quality. Instruments chosen for this model are therefore not useful.

The other model that have contract-intensive money as dependent variable, is more successful when using the instrumental variable analysis to solve causation problems. When testing the conditions for the instruments in the analysis, it results in better results compared to the other analysis with bureaucratic quality as the dependent variable. The C-test is significant, which means that the FDI variable are endogenous, and it is fair to use an instrumental variable analysis. The same goes for the Hansen's J-test when testing for over identifying restrictions, it is not significant at all, which means that the null hypotheses on correct model specification and validity stands and should not be thrown away. Last test for the instrumental variable analysis is the first-stage regression summary statistics, to see if the instruments are good enough and the model is valid. This was the test were the instrumental variable analysis failed for the model that had bureaucratic quality as dependent variable. In this test the results are more positive with a valid model, since the "prob(F)" are at under 0.05 with a value on 0.0036. With that level the null hypotheses, which is that all the regression coefficient is zero, can be thrown away with a large amount of certainty. It was here the first model was not valid since the instruments was too weak, but here the instruments are useful.

The results for the model in the instrumental variable analysis, which are trying to solve problem with endogenous variables and to highlight the exogenous effects that FDI has on institutions, are consistent with the main models (Appendix 3). FDI has the same effect on contract-intensive money as in the main model, where they were positive associated with each other. It is worth to mention that the reverse causation problem is not entirely solved, with only one of the models having successful instruments, but it is a problem that the FDI literature and much of the other social sciences, have struggled to find superb instruments.

## 6. Analysis

### 6.1. FDI and institutions

The main motivation for this paper was to research the relationship between FDI and institutions, and to find out what effects investments from multinational companies have on the countries that receive them. Institutional quality was specified more closely as the quality on property rights, contract enforcement and bureaucratic quality. This analysis is done with the background of the radical increase in FDI in the latest decades, and the policy changes that many countries have done in the same time span, warming up for these types of investments (Lipsey & Sjöholm, 2005; Narula & Pineli, 2017). A contrasting view when compared to the attitude that many countries had in the 1960s and 1970s. To find out if these changes have affected institutions these countries in a positive way, several models was created with two different measures for institutions. This paper focuses on the long-term effects, so it is possible that the short-term effects are different, but this has not been explored here. The main results this paper has found is that three of the four models, the last one had no significant result, had positive association between FDI and institutional variables.

After several test that checked the robustness of the results, it was found that the results from the models are still robust. Only contract-intensive money variable when special country characteristics was accounted for did not produce significant results for the relationship between the main variables. Hypothesis one, H01, was that FDI had positive impact on property rights and contract enforcement in the host country that FDI was invested in. This hypothesis cannot be kept with full certainty, since special characteristics of a country takes away the significant explanatory power from the relationship between FDI and CIM. Therefore, the analysis gives not fully support to the first hypotheses, H01. Another result on the relationship between FDI and CIM, is the positive find in the IV analysis that was performed. An analysis that was used to solve the causation problem that FDI and institutions have. The IV regression found that the results was robust even when the problem with reverse causation was accounted for. This find is strengthening the first hypotheses. The second hypotheses, H02, gains much support from our analysis. This hypothesis was that FDI have positive impact on the quality of the bureaucracy in the host country. In our analysis both models that tested the hypotheses on bureaucracy found significant and robust results that

fitted with it. Both models found results that supported that FDI had positive impact on the bureaucratic quality in the host country.

The most prominent and essential actors of FDI, multinational companies, are not passive in the host country, as argued for in the theoretical part of this paper. MNCs have several reasons and motivations to participate and affect several parts of the host country. The multinational companies would be motivated to change the environment that it operates in when the investment have taken place. Reason for MNCs to be motivated to influence its environment, which also include the institutional environment since MNCs are also an actor outside the usual market, is that FDI is less mobile than for example portfolio capital (Ahlquist & Prakash, 2010; Boddewyn, 1988). FDI has often high sunk costs and can therefore not flee the host country easily if the operating conditions change radically. It is easier for the multinational companies that have FDI in a country, to change the conditions in a way that minimize the risk for negative effects on the investment instead of moving for example an oil rig. Uncertainty in the host country is something the foreign investors want to eliminate because of the high sunk cost that FDI have which make them vulnerable. If the country tries to expropriate investments the MNCs have or new radical policy changes are implemented that follows a regime change, then it is not easy for the FDI to leave the country. Because of these reasons MNCs want to eliminate instability and uncertainty, and one way to do that is to use the resources available to participate and affect the host country.

The lack of mobility that FDI has is a reason for why host countries think these types of investment are more attractive than for example foreign portfolio investment, a type of foreign investment that flees easily from the country if the market conditions changes negatively (Busse & Hefeker, 2007). In a relationship between FDI and host country, the host country can take advantage of the lack of mobility through high sunk costs that FDI have. The host country can do it with for example expropriation or policy changes. For MNCs to avoid this the companies can use political behavior in the “non-market”. Boddewyn defines it as the market where other actors that are not participating in the normal market, but the actors are still part of the company’s task environment, (Boddewyn, 1988). Actors in the “non-market” are those that have power to either support or decline transactions in the market or the power to give positive or negative noneconomic sanctions. It is in this market through political



behavior multinational companies will remove the uncertainty and risk that exist in the host country, meaning that MNCs try to affect the actions of actors in the “non-market”.

MNCs motives when affecting the “non-market”, the ones that are deciding the rules that the multinational companies are operating under, are to create good conditions and stability for themselves in the market. If it can operate in a host country with stability and a low degree of uncertainty that would be close to optimal and something the MNCs would try to achieve. It is often too late to flee from instability and uncertainty when the foreign direct investment has taken place. This paper argues that because of the motives MNCs have on how it wants stability and low degree of uncertainty when FDI are invested in the host country, it would try to strengthen the institutional environment. The results from the analysis support these claims about FDI contributing to the institutions in the host country, since the results show that FDI is associated positive with property rights and contracts enforcement security in one of the main models and bureaucratic quality in two of them. These three institutional factors are all qualities in a host country that would limit the uncertainty for the foreign investors and provide more stability.

The discussion on the motives MNCs have, bring up another point. FDI does not want to go to places with good institutions and low degree of uncertainty. This is a point that have been getting a great deal of focus in the FDI literature, and it has been relatively well established that institutional factors are strong determinants for FDI. If the host country has great quality on its institutions then it limits uncertainty and increases stability, so it is more attractive for FDI to establish themselves in the country (Bénassy-Quéré et al., 2007; Busse & Hefeker, 2007). Again, some of the motives MNCs have is the same both before the investment have happened and after the investment have taken place in the host country. One important reason for this is low mobility of FDI and that it has high sunk cost. Good institutions are something that FDI sees as attractive both before the investment have taken place and after when the MNCs have established itself in the host country. This means that it is a relationship between FDI and institutions that goes both ways, FDI are both being affected by and affecting institutions. To solve the reverse causation problem that parts of the literature have struggled with, an instrumental variable analysis has also been done. The instruments used are if countries has access to a port and the average distance to the big markets in USA, Europe, and

Japan. The instruments only worked on the objective variable contract-intensive money, and they were not good enough instruments for the subjective variable on bureaucratic quality. The results stayed robust when doing the instrumental variable analysis on the contract-intensive money variable, which was a successful attempt in trying to solve the reverse causation problem, unfortunately good enough instruments were only found for one of the two main dependent variables.

## 6.2. Revisiting the globalization debate

The results from the models indicate support for the pro-globalization theories and are not supportive for the dependency theory. FDI is a central part of the more globalized world that have taken shape in the last couple of decades. Globalization is the process of greater integration within the world economy through movements of goods and services, but also technology and capital, and as a consequence of that global conditions influence economic decisions to a higher degree than before (Jenkins, 2004). The increase of FDI that has taken place in the last decades is a central part of these movements. More investments have been done by companies in other countries that its home country and host countries have changed its policies in favor of MNCs. The policies have been changed from not being interested in investments from foreign companies, to actively seeking its investments. This is in stark contrast to many countries view of FDI in the 1960s, especially in South-America, to the host countries view of FDI now. This change of view can be seen in context with the globalization process and countries become more connected to each other. It is with this background that different camps discuss globalization, which FDI is a part of, and what positive and negative effects it have on different aspects of countries and the whole world. In the debate it is focused on the effects globalization have on developing countries and the relationship between developing and developed countries.

The pro-globalization camp has naturally a positive view of globalization and the effect the process has. Those that are pro globalization argue that globalization is gaining both developed countries and developing countries, no one is coming poor out of the process. Dependency theory is the opposite of the pro-globalization theory, a theory that argues that globalization and the parts that follows from it has negative effects on the developed countries. The theory argues that the global economic system has a structure made of two

parts. In the structure, the two parts are a core of developed countries and the developing countries are in the periphery. The core is positively affected from the globalization process with more trade and so forth, while the developing countries are harmed by this in several ways that have a negative effect on its development. The results from the models that have tested the relationship between FDI and institutions indicate that in this case, with FDI and multinational companies, the arguments from the pro-globalization camp are more valid compared to those from the dependency theory. With the results from the models, several of them have significant results showing that foreign direct investments from multinational companies have a positive effect on the different institutional factors, specifically the bureaucracy quality, property rights and contract enforcement.

These results indicate that multinational companies are improving the institutions in the host country, which is opposite of the arguments from dependency theory. The arguments from dependency theory claim that the core, which is the developed countries, is harming the periphery of developing countries. Most of the multinational companies are companies that have home country in a developed country from the core. Therefore, if the results from the model had been FDI affecting institutions negatively, then the results would have supported this argument from the dependency theory. Since FDI is a significant part of the globalization process, negative effects on a host country are something those against globalization would use to try and reverse the process.

Dependency theory would argue that the negative effects fits perfect in the picture that the core, in this case MNCs, is harming the periphery of developing countries to its advantage. With the results this paper has found, it seems to be the opposite case. FDI is positively associated with important institutional factors, and as the literature on institutions have found, institutions of good quality are important for the host country. The literature on institutions have theorized and found some empirical results that suggest that institutions is important for the development of a country, and this is especially the case for economic development. If FDI has positive effects on the institutions in host countries, then the pro-globalization argument about the globalization process is positive for both developed and developing countries gains support. Findings from this paper are supportive for this argument. The trend of companies investing and operating in host countries outside its own home country, is

something that have grown more with countries opening up for foreign investments and more economic cooperation between countries have taken place. With these investment having positive effects on the institutional aspect of the host country, it certainly strengthens the arguments to those that wants this trend to continue. Since institutions plays a central part in a country's development, the positive effects that FDI have on it makes the case better for the trend to continue further.

This study has only focused on the institutional aspect of host countries, and therefore FDI could have either positive or negative effects on other parts of the host country that would be in favor for either the dependency theory or the pro-globalization theories. Other parts of globalization are also affecting host countries in different ways, but it is not relevant to discuss these elements further. FDI is not the whole picture in the debate on globalization debate, but it is a part of it and that is why the globalization debate is used as context when discussing the results from the models. The globalization process is something that has opened for more FDI, since more economic cooperation across borders and greater economic integration from globalization are something that have been factors for the increase in foreign direct investments worldwide. When it comes to institutions, the results from shows support for those that favor globalization

The findings in this paper is fitting with the arguments of the pro-globalization theories when looking at the two main theoretical camps in the globalization debate. It is also compatible with a significant part of the earlier studies that have looked at the effects FDI have on a host country. A majority of the literature have found that FDI has positive effects on different aspects of the host country, which is also the case in this study. While this study has found FDI being positive associated with the institutional factors property rights, contract enforcement security and bureaucratic quality, other studies have found FDI having positive effects on for example corruption, economic institutions, and contract enforcement costs (Ahlquist & Prakash, 2010; Dang, 2013; Larraín & Tavares, 2004). The results from this paper also fits with studies that have found positive effect on non-institutional aspects, as for example human rights and child labor (Meyer, 1996; Neumayer & De Soysa, 2005). This study places itself with the literature that have found results indicating FDI having positive effects on parts of the host country.

### 6.3. Policy implications

What can these results tell us when it comes to policies and how the states relationship with multinational companies should develop in the future? In the latest decades both countries and the research literature have been supporting the view of receiving most foreign direct investment as possible. This is illustrated with the policy changes in favor for FDI that was done in the 1990s, and how much of the FDI literature have had most of its focus on what factors that attracts FDI to host countries. These changes stand in stark contrast to many countries treatment of these types of investments in the 1960s and 1970s. Has the changing of view from the restrictive lane in 1960s and 70s, to the more positive perspective on multinational companies and its investments been positive for the countries that have received it? With looking at the findings from this paper it is possible to conclude that it has not harmed the host countries' institutions, which are positive associated with having property rights, contract enforcement security and bureaucracy of good strength. In the next paragraph, this paper is going to discuss what effects the positive effects on institutions have on the host countries. Institutional theory that was explored in the theoretical section of the paper are used to discuss the subject.

The question about how multinational companies affect institutions and factors connected to it are important. One of the reason is that the literature, as gone through in the section about institutional theory above, has found findings which suggest that institutions play a big role when it comes to economic development, and that institution is an important factor for the difference in countries' economic situation. Both Rodrik et al. and Knack and Keefer found in their analysis results that supported the theoretical view about institutions playing a big role when it comes to countries development, and that it is a more necessary factor than for example geography (Knack & Keefer, 1995; Rodrik et al., 2004). It is two things that makes it relevant to study the effects MNCs have on institutions in host countries it invests in. Firstly, it is interesting and important to see what effects multinational companies have on the host countries, especially when seeing the major growth in investments these last decades, and as previously mentioned, it is a part of the FDI literature that have not received as much attention as it should have. The expansion of this part of the literature on FDI and MNCs activity is something that should be done more of. Secondly, the effects that MNCs and its

investments have on the host countries institutions is relevant to study. This is based on institutional theory that view institutions as valuable in countries' development.

Based on this assessment of the importance of institutions, it is clearly that it is relevant for the FDI literature to research the relationship between the activity of multinational companies and institutional quality. If the effects from multinational companies are affecting the host countries negative, it could harm the host country in several different aspects. Also, if multinational companies are harming the quality of the institutions with its investments, then it will damage the countries' development and economic progress. Since the value of having institutions of good quality, as the literature on institutions have found support for, is considerable when it comes to economic development, a deterioration of these institutions by multinational companies would be problematic for the host countries. In the opposite case, if MNCs and its investments have a positive effect that strengthens the quality on the institutions, then these investments from these foreign actors would help the host countries with its development and economic growth.

This paper has found results that suggest the latter, and this is important knowledge for the policy makers in the host countries. The analysis that has been done in this paper gives support to the changes that was done in policies towards FDI and MNCs in the 1990s. With results that support the notion that FDI and MNCs have positive effects on institution, which again is an important factor for a country's economic development, makes it possible to argue that host countries should continue to open up for FDI and MNCs. The findings in this paper could be an argument to the continuing of pro-FDI policies in host countries, because of the positive effects that have been found on institutions. This paper is only focusing on a small part of the effects that FDI and MNCs have on host countries, and is not telling the whole story on the relationship between FDI and a host country. It does not find any results that suggest that the policy changes towards FDI was wrong, with the results indicating the positive effects that FDI have on the chosen institutional factors.

#### 6.4. The results in the context of the existing literature

This paper has tried to solve the validity problems concerning measuring institutional factors, since this is a known problem in institutional literature. Subjective measures on institutional

factors have problems concerning validity because of a couple of reasons. The main problem is that experts or locals view on institutional quality are not necessarily correct. They could lie, lack knowledge on the situation or have a view that is not correct with the real world. Therefore has this study an objective dependent variable for institutional quality that is an indicator for the two important institutional factors contract enforcement and protection of property rights. Subjective measurements for institutions should not be fully rejected for the reasons above, but with adding an objective measure that is a proxy for property rights and contract enforcement it could help with solving some of the validity issues that these types of studies are facing.

Even though contract-intensive money is not a direct measure, but an indicator, it is an interesting variable to use when testing these two institutional factors. This is an indicator that have not been widely used after it was introduced by Clague and others, but it is something that could be used more in the literature when testing the quality of property rights and contract enforcement (Clague et al., 1999). To include both a subjective variable in the analysis and an objective one is also something that differ from much of the existing literature, since the variable for contract-intensive money is something that could be used more as a complementary to the subjective variables for institutions, especially when studying contracts enforcement and property rights. Even though CIM is included as a second dependent variable in the models, it does not exist a perfect variable for measuring institutions directly, and other solutions must be used as for example perception-based variables and objective proxies. Currently, these are the best ways to measure institutions in the literature, and the validity problems have been dealt with in the best existing way.

The use of FDI stock as the measure for FDI in this paper instead of flow is something that have been done much rarely than the opposite case, since most of the literature have preferred flow. Previous literature has also focused much more on what affects FDI penetration, than studying the effects the investments from multinational companies have on different aspects of the host country. It is also better to use stock than flow when studying the effects that FDI have on the host country. The main reason is that stock is including all investments that still are in the host country, so it is measuring the effects over a longer period. Flow is only measuring investments that is invested in that year, while stock measure all investments that

is in the host country that year regardless of when the investment happened. Therefore, studying FDI with flow is only measuring the short time effects that these foreign investments have on the host country. Using stock will give a longer period, and even though it is useful to study the effects foreign direct investment have on the host countries in the early stages of the investment period, it is even more relevant to look at the long-term effects that FDI have. FDI stock have all the investments that are in the country at the specific period, and that includes also the flow that have been invested in that same year. Because of the advantages stock has compared to flow as a measure for FDI, it should be the favorable measure when wanting to study how the investments affect the different aspects of the countries that receives them long-term.

It is a couple of possibilities to study this subject further. It is a problem to find a lot of data that have the foreign direct investments categorized into different work sectors, which differentiates the diverse investments that exists instead of having them all together. Some studies have done it with a small data selection of years and countries, but it has not been done with a large dataset (Walsh & Yu, 2010). Another option that could be explored in this part of the FDI literature, is to study other aspects of a host country that may have not had a lot of attention and find out how MNCs affect these parts of the host country. It is also possible to look at other parts of countries institutional infrastructure. In this study it has been focused on property rights, contract enforcement and bureaucratic quality, but it is possible to move the focus over to other institutional factors and study the relationship between them and FDI, to see if it have the same results.



## 7. Conclusion

To conclude, this paper has found support for the notion that FDI has positive effects on institutions in the host country, with this paper focusing on property rights, contract enforcement and bureaucracy. The main goal to this paper was to check the institutional aspects, and to build on the overlooked part of the FDI literature that studies the effects the foreign direct investments have on different aspects of the host country. Another goal has been to check what effects MNCs have on the host country long term, which is the reason for why stock has been used as the measure for FDI instead of the more widely used flow. This is two factors that distinguish this paper from the majority of the FDI literature and is a part that could earn more focus in the future.

The main findings in this paper are that both institutional variables, which are used as dependent variables in the analysis, are positive associated with FDI. Especially the results on the variable for bureaucratic quality holds up significantly. A problem that the FDI literature is well familiar with is the reverse causation problem. FDI and institution are two variables affected with each other strongly both ways, with a large part of previous studies have found that institutional factors are important determinants for FDI and where it goes. This paper has done an attempt to solve this problem which have resulted in some useful results when testing the main models. By using instrumental variables, it has managed to test the variable contract-intensive money, the proxy for contract enforcement and property rights, on the problem with reverse causation. Gathering instrument variables from the trade literature, distance to the big trade markets and if a country is landlocked, it has been possible to perform an instrumental variable analysis with robust results.

The findings from this study are in a larger perspective in compliance with pro-globalization theories and its arguments. The same results are not fitting with the dependency theory and the view it has on globalization. FDI is a part of globalization that have had a rapid development these past decades as the process with economic integration between countries and more openness have taken place. The findings from this study are only a small part of debate on globalization. Findings from the study are supportive of the side in the debate that argues for the positive effects the globalization process has, since FDI positive effects on

institutions is a part of this. The effects FDI have on different parts of the host country is something that could receive more attention from a research field that has been more interested in what attracts FDI. With the rapid increase of FDI in the later decades, a trend that most likely will continue, it is necessary to shift more of the focus in the literature over to the effects FDI has and over time on the host countries.

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## Appendix 1

Table 4	(1)	(2)	(3)	(4)
Western countries excluded	CIM	CIM	BQ	BQ
L.log FDI stock/pc t-1	0.01*** (0.00)	0.01 (0.00)	0.10*** (0.02)	0.07*** (0.02)
Log GDP per capita t-1	0.05*** (0.01)	0.11*** (0.02)	0.26*** (0.03)	0.52*** (0.09)
Log Population size t-1	0.01*** (0.00)	0.22*** (0.04)	0.11*** (0.02)	0.00 (0.16)
Log Natural resources/GDP t-1	-0.03*** (0.00)	-0.01** (0.01)	-0.13*** (0.02)	-0.08** (0.04)
Democracy (V-dem) t-1	0.00 (0.02)	-0.01 (0.02)	0.45*** (0.09)	0.09 (0.22)
Constant	0.24*** (0.05)	-3.95*** (0.76)	-2.44*** (0.34)	-2.81 (3.01)
Observations	1,909	1,909	2,194	2,194
Standard errors in parentheses				
*** p<0.01, ** p<0.05, * p<0.1				
Time-fixed effects	Yes	Yes	Yes	Yes
Country-fixed effects	No	Yes	No	Yes

## Appendix 2

Western countries excluded in table 4:

USA

Canada

Great Britain

Norway

Sweden

Finland

Russia

Denmark

Germany

Netherlands

Switzerland

France

Belgium

Ireland

Spain

Portugal

Iceland

Italy

Austria

Greece

Japan

Australia

New Zealand



## Appendix 3

### Instrumental variable analysis

VARIABLES	(1) CIM
Log FDI stock/pc	0.56*** (0.17)
Log Natural resources/GDP	-0.14*** (0.04)
Log GDP per capita	-0.54*** (0.18)
Democracy (V-dem)	-0.26** (0.11)
Log Population Size	0.13*** (0.04)
Constant	0.36** (0.16)
Observations	2,899

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1