-Linkage between Foreign Direct Investment Decisions and Institutions in the African Context-

by

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Declaration

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Abstract

Worldwide, foreign direct investment (FDI) is considered as one of the most important stimuli for economies. Its importance is not only limited to monetary or physical investments; it also enforces technology transfer, which leads to more sustainable economic development.

Many African countries are currently in a process of transition. After claiming independence in the 1960s and 1970s, many countries have suffered tremendously from the breakdown of formal institutions due to civil war and other turmoil. During the period of these conflicts, countries were disconnected from the world markets and foreign investors. Nowadays, however, as African countries' conflicts have been settled over the past decades, institutions have been rebuilt partly, the connection to the world market has been re-established, and new investment partners have been found. The arrival of new investment partners in Africa has strongly changed the 'rules of the game', and has thereby rearranged the balance of forces in the investment sector.

This thesis takes a look at the current status of investment relations between African host countries and foreign investors to reveal the lines along which these partnerships have been built. Each country has a unique set of formal and informal institutions. The importance and dominance of single elements of this set can vary over time and through (historical) events, and strongly determine investment partnerships.

Using a probit model, this thesis takes an actual investor's point of view and examines the determinants of foreign direct investment decisions. By introducing aspects of informal institutions, the model expands the common perception of partnerships based only on formal institutions.

The results indicate that former common findings regarding FDI-attracting determinants are partially misleading. Although property rights, education and a stable government, for instance, are often celebrated as the foundation for foreign investors, the findings relativise this assumption.

The results suggest that old ties between former colonies and (former) masters are still present and important for FDI-receiving economies. However, the degree of property rights and the degree of political stability, as well as the level of formal education, tends to be less important than the literature would suggest. Modern FDI flows do not necessarily rely on these preconditions, and thereby the generated results differ partially from former models. Moreover, ethnic fragmentation has a big negative impact on an investor's decision, while the overall distance between the FDI donor and the receiver is not important. Thus, this thesis finds similarities to other publications regarding institutional structures and their impact on FDI inflows, but also refutes some of them.

Opsomming

Wêreldwyd word regstreekse buitelandse belegging (RBB) beskou as een van die belangrikste stimuli vir ekonomieë. Die belang daarvan is nie beperk tot slegs monetêre of fisiese beleggings nie; dit dwing ook tegnologie-oordrag af, wat lei tot meer volhoubare ekonomiese ontwikkeling.

Baie Afrikalande is tans in 'n oorgangsproses. Ná hulle in die 1960's en 1970's onafhanklikheid geëis het, het baie lande ontsettend swaar gekry na die ineenstorting van formele instellings as gevolg van burgeroorlog en ander onrus. In die tydperk van hierdie konflikte is lande afgesny van die wêreldmarkte en buitelandse beleggers. Sedert die Afrikalande se konflikte egter oor die afgelope paar dekades beslis is, is instellings gedeeltelik herbou, is die verbintenis met wêreldmarkte hervestig en is nuwe vennote gevind. Die aankoms in Afrika van nuwe beleggingsvennote het die 'reëls van die spel' noemenswaardig verander, en het daardeur die balans van kragte in die beleggingsektor herrangskik.

Hierdie tesis kyk na die huidige status van beleggingsverhoudings tussen gasheerlande in Afrika en buitelandse beleggers om die lyne te ontbloot waarop hierdie vennootskappe gebou is. Elke land het 'n unieke stel formele en informele instellings. Die belangrikheid en dominansie van enkele elemente van hierdie stel kan oor tyd en deur (historiese) gebeure verskil en die beleggingsvennootskappe noemenswaardige bepaal.

Met gebruik van 'n probit-model neem hierdie tesis die eintlike belegger se oogpunt en ondersoek dit die determinante van besluite oor regstreekse buitelandse belegging. Deur aspekte van informele instellings te gebruik, brei die model uit op die algemene persepsie van vennootskappe wat slegs op formele instellings gebaseer is.

Die resultate dui aan dat voormalige algemene bevindings met betrekking tot RBB-lokkende determinante deels misleidend is. Hoewel eiendomsregte, opvoeding en 'n stabiele regering byvoorbeeld in baie gevalle gevier word as die fondament vir buitelandse beleggers, relativeer die bevindinge hierdie aanname.

Die resultate stel voor dat ou verbintenisse tussen voormalige kolonies en hulle (voormalige) meesters steeds teenwoordig en belangrik is vir ekonomieë wat RBB ontvang. Die mate van eiendomsregte en die vlak van stabiliteit, sowel as die vlak van formele opvoeding, neig egter om minder belangrik te wees as wat die literatuur voorstel. Moderne RBB-vloei is nie noodwendig van hierdie voorvereistes afhanklik nie en dus verskil die gegenereerde resultate gedeeltelik van vorige modelle. Etniese verbrokkeling het verder 'n groot negatiewe impak op 'n belegger se besluit, terwyl die algehele afstand tussen die RBB-skenker en die ontvanger nie belangrik is nie. Hierdie tesis vind dus ooreenkomste met ander publikasies met betrekking tot institusionele strukture en hulle impak of RBB-invloei, maar weerlê ook sommige van hulle.

Dedication

"A good head and good heart are always a formidable combination. But when you add to that a literate tongue or pen, then you have something very special."

Nelson Mandela

For my Family

in Germany and South Africa

Biographical Sketch

Yves Tohermes grew up in the Lower Rhine Area, Germany, where he developed a passion for the countryside. Over the years in school, his ties and interests into agriculture continuously grew stronger. During a student exchange in Pietersburg, South Africa, he fell in love with the African continent and its people. After Matric and his national service, Yves enrolled at Göttingen University in the field of agricultural sciences. In Göttingen, his interests in trade and institutional economics were further developed. Because of that, he continued with post-graduate studies in Agribusiness. During his studies in Göttingen, Yves frequently travelled to South Africa and Botswana where he graduated internships on various farms, gaining first experiences with commercial farming on the continent. After graduating with a Master of Agribusiness from Göttingen University, he searched to gain more knowledge about the African agricultural sector. His good performance earned him a scholarship and, Yves was able to enrol for a two-year-Master's programme in Agricultural Economics and Management at Stellenbosch University. It was this institution which enriched his perception of the African continent and African agriculture in particular.

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List of Abbreviations

BRICS	Brazil, Russia, India, China and South Africa
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HE	Host Economy
NIE	New Institutional Economics
PE	Partner Economy
VIF	Variance Inflation Factor
WGI	World Governance Indicators

Chapter 1: Introduction

1.1 Background

After the majority of African nations gained independence in the late 1960s to 1970s, they constantly experienced up- and downturns as far as their economic development and political stability were concerned. Since then, investors have tried to identify countries and political systems that are beneficial for potential investment. Institutions were therefore identified as one of the key roles for a promising investment. Not only do good, formal institutions such as governmental bodies provide a haven for foreign direct investment, but informal structures also determine the flow of investments into an economy. Ethnicity, culture and beliefs further influence the length and impact of foreign investment in a certain region. Publications by authors such as Coase (1937), North (2005) and Williamson (2000) have covered the academic discipline of institutional economics while revealing the interaction between industrial organisation, economic performance and institutions. More recent studies by Beazer and Blake (2011), for instance, investigate the linkage between foreign direct investment (FDI) and these very institutions. As countries and economies become more and more (by force) connected due to globalisation, the movement of foreign financial means embodied by FDI plays a vital role in the global economy and provides evidence of a rising trade integration of more and more countries worldwide. The constant increasing flow of investment across national borders raises the question of the reliability of its destination and the purpose of the investment.

In past decades, most of the world's FDI was located in and sourced from the so-called "Triad", which refers to the European Union, Japan and the United States. Therefore, the common understanding arose that investors are highly attracted to economies with a prime landscape of formal institutions, in combination with very good market access (te Velde 2006).

In consequence, FDI flows themselves were also widely used as a reference in order to indicate good governance and the extent to which a nation is linked

to world markets or the global economy. Because of this, governments included FDI-attracting measures in their national agendas.

Countries in transition, however, still only attract a small percentage of the world's FDI, while the investment is highly aggregated. The top 30 host countries receive 95% of the global FDI flow (Pournarakis & Varsakelis, 2004).

However, developing economies have been able to gain a substantial share (with an increasing trend) not only in global FDI inflows, but recently have also become FDI donors themselves. This marks a turning point in recent economic history, as the dominance of westernised economies on the world stage has become increasingly contested.

It therefore is particularly important to reveal the role of FDI and its impact on foreign economies on all levels, as direct investment affects not only large capital transfers (while debt and aid rather play a minor role), but also incorporates a whole informal and social dimension that mostly remains unrevealed (Summers 1991).

Recently, the choice to invest in a certain region or country was defined by the advantageous position an investor might gain. Furthermore, these advantages derive from the demand side as well as from the supply side. Therefore, labour skills and costs, market size and growth are one part of the foundation for FDI. In addition, according to the literature, market access still is one of the main drivers for international FDI.

Daniele and Marani (2006), for instance, found that, for emerging economies, market size and economy integration are among the main factors determining FDI choices, besides changing international competition. Moreover, developing economies often suffer from slow and insufficient economic and trading reforms. Furthermore, an unstable political and macroeconomic environment hinders FDI inflow into regions, as revealed by Kaufmann and Kraay (2003).

Regions or countries with a high rate of fragmentation and political disruption are thereby naturally in a disadvantageous position, as cross-border trade is limited and market access denied, resulting in a lower level of FDI inflow,

although (on the other hand) market performance does not necessarily rely on privatisation and market liberalisation (Pournarakis & Varsakelis, 2004).

Because of this, emerging economies, especially in Africa, have been widely neglected by modern research, as the countries' institutional environment and economies do not look as promising as those in already developed countries.

We therefore experience a divergence in world FDI flows. As European and North American economies tend to pull out or at least reduce their financial investment in these countries, other players, for instance from Asia, emerge and replace former main investors while playing according to changed rules.

A broad collection of literature has tried to define the *rules of the game* for modern FDI outward and inward flows. However, these rules have been widely neglected so far in the context of emerging economies, and were particularly side-lined in the consideration of informal institutions, which leaves us with an incomplete perception of investment decision-making for developing economies.

1.2 Problem Statement and Research Question

As foreshadowed in the previous paragraph, international FDI flows have changed dramatically in the past decades and this thereby questions the validity of former literature on the topic.

The increase of FDI flows from and to developing economies stands in contrast to former institutional economic theories and reveals the new rules of the game.

At this point, the current literature is not able to fully explain the motives behind FDI schemes for recent flows, particularly for emerging and developing economies. Economists usually try to explain FDI flows in terms of a degree of economic development and institutional quality. However, evidence from the past year partly contradicts these theories and marks them as incomplete for two reasons:

First, countries with a lower degree of institutional quality have become economically successful. Secondly, these very countries, in turn, have not only expanded their operations into well-developed economies, but also – and with increasing momentum – made their way into the lesser and least-developed countries. Moreover, these newly formed partnerships start replacing old ties between countries that were often bound together by either economic power sharing, former colonial rule, or other dramatic historical events and their consequences.

As a result, there are several questions that have to be answered in order to update the literature and to provide an updated explanation for recent FDI developments.

First, why do emerging economies' investment schemes differ from those of already developed countries? Second, what is the underlying pattern behind these FDI flows among developing countries in terms of institutions?

In a nutshell, one may ask, "which rules have changed in the past years?" or, in contrast, "which rules were never really applicable?" in terms of explaining international investment motives and FDI flows.

In order to answer these questions, we have to question the prevailing benchmarking of FDI level according to the level of institutional quality. Furthermore, we must examine the role of formal and informal institutions as FDI determinants. Only thereby we can reveal deeper underlying patterns that will allow us to broaden the literature on FDI choice-making.

With that being done, we can progress and scan cross-country FDI determinants for formal and informal attributes – both for the recipient country and the donor economy. We will thereby link not only the theory of basic economics and investment behaviour, but also of socio-dynamics, social behaviour, and ethnic integration and compatibility. This, in turn, will give us a much better understanding of the modern rules of FDI patterns.

1.3 Objectives of the Study

- This study will review two different sets of literature. First, it will provide a literature review of institutional theories revealing the interaction between economic and entrepreneurial behaviour (with elements of social behaviour) on the one hand, and institutional formation and institutional economics on the other. Second, relevant publications on FDI formation and theory will be reviewed and connected to the literature on institutional economics.

- Thereby, this thesis will ensure an advanced understanding of both theoretic backgrounds, which are vitally important for a further discussion and form the two pillars of this study.

- Furthermore, this thesis will highlight the former and current development of FDI flow formation among both developed and developing economies in order to give a broader understanding of current global FDI dynamics.

- Using a probit regression model, this thesis will reveal actual determinants of FDI decision-making, based on an investor's point of view.

- This thesis will further draw a conclusion that provides answers for social, economic and development compatibility among countries.

1.4 Outline of the Thesis

This thesis is structured as follows. As already mentioned above, we will firstly take a look at the most relevant literature to provide us with insights into institutional economics, its content and its development over the years so as to understand the very components of theory that lay the foundation of this study.

Thereafter, we will further examine the literature on foreign direct investment. We will reveal the role of FDI in general, and in terms of economic development for developing economies. After that, this thesis links these two fields of literature with practical observations during the last decade according to

investment choices taken by various partners, highlighting the interconnectivity between FDI and institutions.

The following probit model will examine the degree of influence on the investment decisions of formal and informal institutions on the one hand, and typical market determinants on the other. Thereby, the model will also reveal communalities between FDI and trade-promoting determinants.

The eventual results will further be critically examined on the basis of their validity and informative value, on which policy recommendations will be formalised to provide guidelines for developing economies receiving future FDI from their partner economies. Finally, the conclusion will briefly sum up the most important findings and statements regarding the linkage between FDI and institutions.

Chapter 2: Literature Review

In order to understand the underling theories highlighting the relevance of institutional quality in the context of foreign direct investment, we go back to the source of modern transaction cost theories, as they are vitally important for understanding modern transactions as well as investments.

2.1 The Development of New Institutional Economics

While Ronald Coase is celebrated as one of the most important pioneers in the discovery and development of the theory around transaction costs, he simultaneously founded the principles of modern (new) institutional economics (NIE).

Coase started his research on the base of former economic considerations. Representatives of these considerations state that the "normal" economic system is autarkic and self-sufficient, and it thereby has no need for any type of control or supervision. Furthermore, the whole system is balanced by the co-ordination of production and consumption, and supply and demand (Coase 1937). The system's judge and executive at the same time is only the price mechanism, while society only incorporates the idea but has no actual meaning in matters of organisation (Hayek 1933). Coase (1937) furthermore states that these considerations draw an incomplete picture, as estimated production factor allocations within the economic theory do not meet reality. The reason for this is that the planning within a company undercuts the theory of the economic system. Consequently, we have to consider the fundamental differences between individual and market planning, which have been neglected by former economists.

While the market itself is regulated by the leverage of price movements, the firm, on the other hand, is managed by a co-ordinator replacing exchange transactions within the enterprise and directing production. In contrast, the former economist stated that only price movements define and regulate

production, while the organisation has no significant impact on this. Consequently, the logical question must be: "Why is there any organisation?" (Coase 1937).

As the normal co-ordination is usually carried out without the price mechanism depending on the factor of production, vertical integration takes over and reduces or diminishes market effects, depending on the structure of the industries (Coase 1937). Meanwhile, Maurice Dobb understands the entrepreneur as a linkage to modern markets while he forms and organises a functioning cell (firm/enterprise) within an economic system, but simultaneously is part of a greater mechanism (Dobb 1973). Ronald Coase therefore identified a gap in the theories, as the assumption of resource allocation is defined by the price mechanism on the one hand, and that allocation is closely linked to the individual entrepreneur's co-ordination on the other hand (Coase 1937).

Furthermore, Coase found out that the usage of price mechanisms is linked to certain costs, and this is why it makes sense in terms of profitability to build up an enterprise in order to further reduce these costs of organisation. Although these costs might be reduced, it should be clear that it will not be possible to fully eliminate them. Besides the seeking and gaining of information, which is one of the first transaction costs introduced by Coase, he further states that working contracts are an especially difficult subject. While (long(er)-term) working contracts substitute series of single contracts, they thereby already reduce the cost of organising. Nevertheless, it must be clear that, as one aspect is diminished, another one appears, as the question about supervising the new terms of contracts and their surroundings are not yet fully answered (Coase 1937).

Summing up, Coase overall presents the idea that operating a market is linked to the appearance of certain costs, which can be reduced by at least "forming an organisation and allowing some authority to direct the resources" (Coase 1937, p. 392). In addition, the question arises why the allocation of resources is not exclusively managed by the price mechanism itself. Coase came up with the approach that an enterprise's operations decline, as additional transactions

(and their costs) are not fully managed. Furthermore, the opposite holds true in the case that management is at its greatest, leading to the expansion of the enterprise. Consequently, it should be explored whether it is possible to distinguish the single forces/factors involved in determining the growth of a company, enterprise or any other firm (Coase 1937).

Former economists like Frank Knight doubted the possibility of scientifically tracking down the determinants that form the size of an enterprise, although he highlighted the set of problems between efficiency and the size of an enterprise in the first place. Nevertheless, Coase chose this set of problems in order to explain economic organization.

According to Coase (1937), there is a certain paradox that has to be solved: while a firm is becoming more and more inefficient in its growth and expansion on the one hand (e.g. increasing transaction costs, like supervision for instance), it can only take over other enterprises when it can ensure that its taking over will reduce the overall transactions previously operated by the competitor on the one hand, and still undercut the costs of market transactions for the same product on the other.

Furthermore, we have to change our view of markets in that we have to recognise that exchange transactions through the price mechanism across markets are not homogeneous and can vary quite dramatically, just as the costs of organising these very transactions. Therefore, "it seems possible that […] the costs of organising certain transactions within the firm may be greater than the costs of carrying out the exchange transaction in the open market" (Coase 1937, p. 396). Nonetheless, there is no need for the involvement of a second body or another firm in the exchange system in certain industries. In some areas, the allocation of resources or factors of production do not necessarily depend on price mechanisms and can rather be managed by a company's management. In addition, enterprises will expand if they are able to lessen the costs of organisation and, at the same time, slow down these very costs with a simultaneous increase in overall transactions being organised. The same holds validity for mistakes being made by the entrepreneur. Since transactions are being organised either on a different level

of structure/type or in a different place, the accruement of mistakes supports the idea that the rising number of transactions at the same time reduces the firm's efficiency. As a result, technical improvements (like the telephone) reduce the costs of transactions, as they make it possible to overcome local boundaries. Therefore, technical improvements enhance and stabilise a firm's expansion and growth, while reducing transaction costs (Coase 1937).

In order to further validate the theory of transaction costs, Knight (1921) provides us with an essential base – in a world without any uncertainty, as everyone has perfect access to information and knowledge, there would be no need for any supervision at all. But, as soon as uncertainty plays a role, "ignorance and the necessity of acting upon opinion rather than knowledge" take over (Knight 1921, p. 268). Furthermore, the worker's priorities change quite dramatically because the execution of tasks becomes increasingly irrelevant as the workers' focus on "what to do?" and "how to do it?" increases. As a result, uncertainty really brings out the major characteristics of modern organisations. Firstly, it is the producer who takes the risk and responsibility in forecasting the consumers' needs and wants. Secondly, as a result of uncertainty, the entrepreneur is the key figure in the organisation as far as he combines the control of production, technological settings and market forecasting in one person (Coase 1937).

To explain the impact of uncertainty one should look again at the development of wages. While uncertainty exists, people are forced to forecast future developments and to assess them at the same time. People's judgement and self-confidence obviously differs, and due to this some people get into the position of directing other people while they supply them (their workers) with a guarantee (in this case wages) (Knight 1921).

Furthermore, we have to take a look at the conception of cost curves, as this will allow us to apply the theoretical thoughts to the real world and to reveal its relevance. It is often argued that a company's cost curve slopes upward under perfect competition and therefore is limited in size and expansion. On the other hand, a company is also limited under the assumption of imperfect competition in terms of economic theory (Shove and Robinson 1933). Nevertheless, Coase

(1937) argues that the often-used one-product assumption on which these former statements are based does not meet reality and therefore is invalid. Moreover, one has to realise that a company produces not one but several products, and therefore the main question must be whether the resulting marketing costs, which represent the use of the price mechanism in open markets, can be quantified. Consequently, one has to compare marketing costs against the cost of organisation for each entrepreneur. This will make it possible to distinguish which company is producing a certain quantity of a single produce or product.

Overall, Coase (1937) points out that the neo-classical approach to market theory is undermined by human characteristics such as limited rationality, asymmetric information and, finally, the resulting and long-discussed transaction costs. Moreover, Coase established the very foundation of NIE as he connected transaction costs to property rights in his later Coase theorem. In this theorem, he states that, in a world without any transaction costs for the treatment of appearing externalities, the presence of property rights does not matter. However, as soon as transaction costs appear, property rights have a crucial impact on the way resources are allocated. Therefore, NIE plays a very important role, as governments and institutions should try to minimise transaction costs to promote the correct allocation of resources in the cheapest way in order to decrease misallocation (Coase 1960).

2.2 NIE and its Content

We have just linked Ronald Coase's transaction cost theory to the necessity of (government) institutions to limit appearing/arising transaction costs in the economy, and now it is important to look further.

In the following paragraph we try to break down the most important parts of NIE to reveal the connection between institutional quality, market parameters and investment decisions.

To clearly examine and isolate the most striking institutions responsible for enduring economic development and performance, it is necessary to break down NIE into its elements, showing the interlinked components that create the backbone of a prosper economic landscape. Therefore, we go beyond general definitions of NIE, but acknowledge the fundamental baselines of NIE as provided by North (1990), who states that there is a formal and an informal set of rules of conduct. Moreover, these sets of rules facilitate the co-ordination of or even direct relationships between groups or individuals. Therefore, institutions foster a more certain environment for human interactions (North 1990). Due to the latter aspects, institutions influence human behaviour and therefore determine results like economic growth, performance, development, efficiency, as well as investment decisions (Kherallah & Kirsten 2002).

While trying to examine every single component of NIE, it is important to start from the very general and move to the most specific differentiation within the NIE body. As Williamson (2000) states, there are two basic levels on which NIE operates. The first one is the macrolevel, which covers the institutional environment, also often referred to as the "rules of the game, which affect the behaviour and performance of economic actors and in which organisational forms and transactions are embedded. Moreover, these rules form the fundamental political, social and legal grounds that establish the basis for production, exchange and distribution" (Kherallah & Kirsten 2002, p. 112).

The second level of NIE is the microlevel, often also called the institutional arrangement, which covers the institutions linked to governance. According to Williamson (2000), these institutions refer to the process of managing

transactions between partners, which also include various types of markets and hierarchical contracts. Therefore, "[a]n institutional arrangement is basically an arrangement between economic units that governs the ways in which its members can cooperate and/or compete" (Kherallah & Kirsten 2002, p. 112).

Because NIE was a fast-growing and wide-spread field of research, it simultaneously touches various disciplines linking social science with economics, and thereby becomes a multidisciplinary field of study (Olson & Kähkönen 2000).
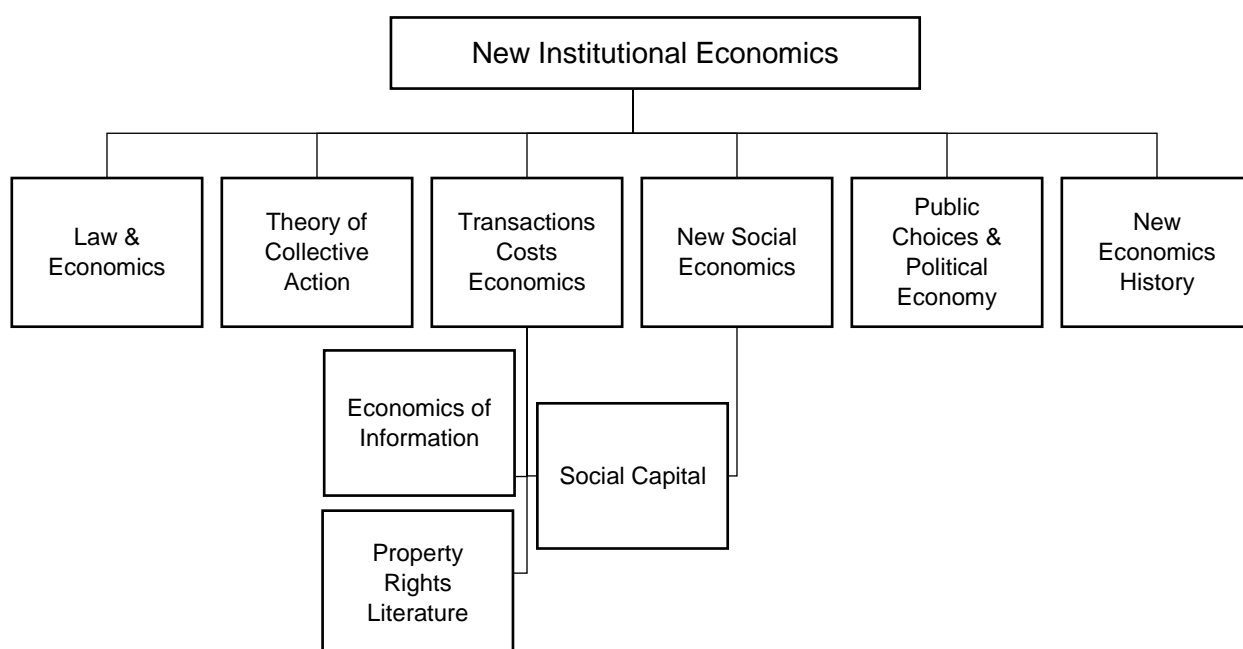
Figure 1: Branches of the NIE

Source: Kherallah and Kirsten 2002

As seen in Figure 1 above, NIE diverts into various branches that have been studied by different scientists originating from different fields of study. The field around law and economics was examined mostly by Posner (1971, 1974, 1984, 1998), who focused on regulations, legal decisions and litigations in order to uncover the mayor players in the legal system. He points out how these very players within the system try to maximise their returns from legal action and regulations. Going further, the theory of collective action reveals approaches to solve free-riding problems by offering co-operative solutions for the case of common resources and public goods. Olson (1971), in particular,

investigated the way in which interest groups act collectively in order to reach common goals. Moreover, the most important aspects of the successful management of common property or rights are purpose, size, and homogeneity of the group (Kherallah & Kirsten 2002). Especially the usage of water, land, fisheries and forests, etc. has been a mayor focus within this branch of NIE, while these common-pool resources often suffered from the 'tragedy of commons'. However, Ostrom was able to solve occurring problems by the introduction of local institutions, also covering customs and social conventions. He thereby showed how co-operative solutions are able to overcome collective difficulties and foster efficiency in resource use (Nabli & Nugent 1989).

Transaction cost economics was widely introduced by Ronald Coase (1937) (as already stated above), who was the leading pioneer in stating that institutions are arrangements to minimise transaction costs because market exchanges do not come without costs. Coase furthermore concludes that especially transaction costs in the organisation of firms and other contracts play a very important role, as the cost of negotiation, gaining information, monitoring, co-ordination and enforcement of contracts have to be monitored and limited. Coase underlines the idea that companies merge in order to "[…] economize transaction costs of market exchange and that the boundary of a firm or the extent of vertical integration will depend on the magnitude of these transaction costs" (Kherallah and Kirsten 2002, p. 116). Moreover, Williamson (1993), who expanded on Coase's theory, links opportunistic and limited rational behaviour to contractual choice and the ownership structure of an enterprise or company.

New social economics has been introduced by Becker (1974), who explains choice making outside any economic consideration, which at that date was not covered by the neo-classical economics, while he primarily focuses on family economics, human capital, and intra-household analysis. Although Robert Putnam's (1993) work also falls into this category, his contribution is rather integrated into transaction cost economics, as it helps to explain how to reduce uncertainty within transactions (Kherallah & Kirsten 2002). However, "social capital refers to social connections or networks, norms and trust, all of which

can facilitate co-operation in society and ultimately have effects on economic performance" (Kirsten 2002, p. 19, according to Putnam 1993).

Public choice and political economy analyse political decision-making and systems (Buchanan & Tullock, (1962). However, Bates (1981) delves further into rent-seeking behaviour and the dynamics of interest groups in order to point out that certain economic outcomes are less economically efficient, especially in agriculture. In addition, he could show why especially developing countries in Africa are suffering from a bias against certain business sectors, such as the agricultural sector, for instance. He concludes that groups of farmers in developing economies (in Africa) are generally too heterogeneous dispersed, and large, and therefore are less able to influence policy in contrast to the urban population. Besides the already named contributors to public choice and political economy, there has been a considerable addition to the literature in recent decades from other sources, especially linking the subject to the field of agriculture and political interventions (Kherallah & Kirsten 2002).

Another major branch of NIE is new economic history, which was formalised by North (1990), who has been recognised as a pioneer in this particular field of research. He has analysed how economies evolve and develop over time, and has revealed how institutional changes define economic performance and the related environment. As a result, he was able to illustrate that certain institutions are not necessarily efficient in terms of fostering national economies, but rather hinder growth. North (1990), states that there are two major forces catalysing institutional change, namely technological development and changes in relative prices. However, these two aspects can be argued differently. Historically seen, changes in relative prices were triggered by changes in global population, while technological development or innovation and a reduction in the cost of information were the foundation for institutional change in recent decades and centuries (Kherallah & Kirsten 2002).

The subject of economics of information, which is highly linked to transaction cost economics, is dealt with by economists like Akerlof (1970), Stigler (1961) and Stiglitz (1985). Stigler, for instance, focused on the aspect that searching

for market access and information does not come without any costs. "This may explain why a divergence of prices between efficient markets is possible, and why capital markets are imperfect" (Kherallah & Kirsten 2002, p. 117). Furthermore, Akerlof (1970), has highlighted the importance of reputation, trust, and quality guarantees, which are seen as meaningful tools in order to assure the production of quality goods and the development and implementation of a good reputation. In addition, Stiglitz took a deeper look at analysis of moral hazards, adverse selection, and imperfect information within companies and markets (Kherallah & Kirsten 2002).

To explain the development of certain key economic institutions, imperfect information theory was used, especially where these institutions are seen as a substitute for a lack of credit facilities and insurance markets, where risk is omnipresent, as well as asymmetric information and high transaction costs (Bhardan 1989). Given the circumstances of the agricultural environment as a prime example in terms of missing markets and information boundaries, agrarian institutions such as interlocked contracts between labour, credit and financing facilities, and sharecropping, "[…] may be serving a real economic function" (Kherallah & Kirsten 2002, p. 117). Because of this, the abolishment of these institutions would harm (agricultural) production quite substantially.

One of the branches of NIE that is by far the most discussed is property rights (Coase, 1960). Coase states that, in the absence of transaction costs where property rights are well established and protected, externalities can be internalised among two parties through bargaining and negotiation. However, with the existence of transaction costs, property rights become essential, as they define economical productivity and efficiency throughout all industries (Coase 1960). Furthermore, Grossmann and Hart (1986) and Hart and Moore (1999) pioneered incomplete contract theory, which also incorporates property rights and linked issues. "The incomplete contracts economic theory of the firm combines the insights of transaction cost economies regarding bounded rationality and contracting costs with the rigor of agency theory" (Kherallah and Kirsten 2002, p. 118). This new theory focuses on the method various organisational structures define property rights to resolve the issues that arise with incomplete contracts. Thereby, it is possible to point out certain

institutional structures by looking at ownership and the control of key assets (Grossman & Hart 1986; Hart & Moore 1999).

2.3 Defining NIE Within Economic Development

In order to fully understand the nature of NIE, we have to analyse it in its historical and development context, as this allows us to identify the single components forming the body of NIE. Our economic systems are a reflection of our social development, because they represent and shape our understanding of and needs for a working economic environment.

As figure 2: economics of institutions illustrates, there are four levels/phases of economic development, which incorporate the development of NIE on levels two and three. The first level, containing informal institutions, establishes the foundation on which the further steps of development take place. Although social aspects like culture, religion, norms and customs change very slowly over time (100 to 1 000 years), they do have a huge impact on the further development of the second level. Furthermore, these informal institutions undergo a process of selection, after which only the strongest remain – whether they are strong in terms of economic means or highly linked to cultural roots (Williamson 2000).

The second level and therefore the first stage of NIE is marked by the introduction of formal institutions, which obviously consist of informal rules (culture, customs etc.) as well as formal rules like the law, constitutions and property rights (North 1991). Moreover, they contain "[…] the executive, legislative, judicial, and bureaucratic functions of government as well as the distribution of power across different levels of government" (Williamson 2000, p. 598). Especially the handling and definition of property rights and laws are among the most essential ones, as they define economic productivity. However, their progress in development is even harder to manage (Levy and Spiller 1996; North 1994). Overall, this stage of development can be recognised as "first order economizing" while the formal rules of the economic systems are set (Williamson 2000, p. 598). As already stated, the matter of property rights becomes very vital, especially in this phase of development. Due to the introduction and enforcement of property rights, private companies

can operate properly in terms of allocating the resources to their highest value defined by the open market (Coase 1959).

Nevertheless, it should be obvious that the application of property rights, for instance, does not come without any costs due to the difficulties of defining and enforcing such rights by the legal system, as many transactions do not qualify (Coase 1960). Therefore, we step up to level three, where the governance becomes the most important aspect of development. The introduction of governance should be recognised as an attempt to foster order among the large number of transactions, which are the smallest unit of economic activity. Moreover, governance should thereby ensure that conflicts are settled and mutual gains are realised (Williamson 2000).

What we experience with the step into governance is a change in the way in which we engage with the problems arising from transactions. Because we acknowledge the imperfection of complex contracts, governance structures automatically alter incentives. After having mainly focused on ex-ante, we now change our perspective to ex-post, where governance tries to cope with contracting issues. Williamson (2000, p. 599) considers this to be "second-order economizing".

The last phase, or third-order economising, is the allocation of resources and employment, which only take place after a set of institutions exist and are in a working condition. This final development defines the productivity of an economy, based on the earlier phases/levels. Thus, the competitive advantage of an industry sector or country is a product of the previous three stages of economic and social development embedded in NIE.

Level	Frequency (years)	Purpose

	Embeddedness: informal institutions, customs, traditions, norms religion	10^2 to 10^3	Often noncalculative; spontaneous (caveat: see discussion in text)
L1			

	Institutional environment: formal rules of the game—esp. property (polity, judiciary, bureaucracy)	10 to 10^2	Get the institutional environment right. 1st order economizing
L2			

	Governance: play of the game —esp. contract (aligning governance structures with transactions)	1 to 10	Get the governance structures right. 2nd order economizing
L3			

	Resource allocation and employment (prices and quantities; incentive alignment)	continuous	Get the marginal conditions right. 3rd order economizing
L4			

L1: social theory
L2: economics of property rights/positive political theory
L3: transaction cost economics
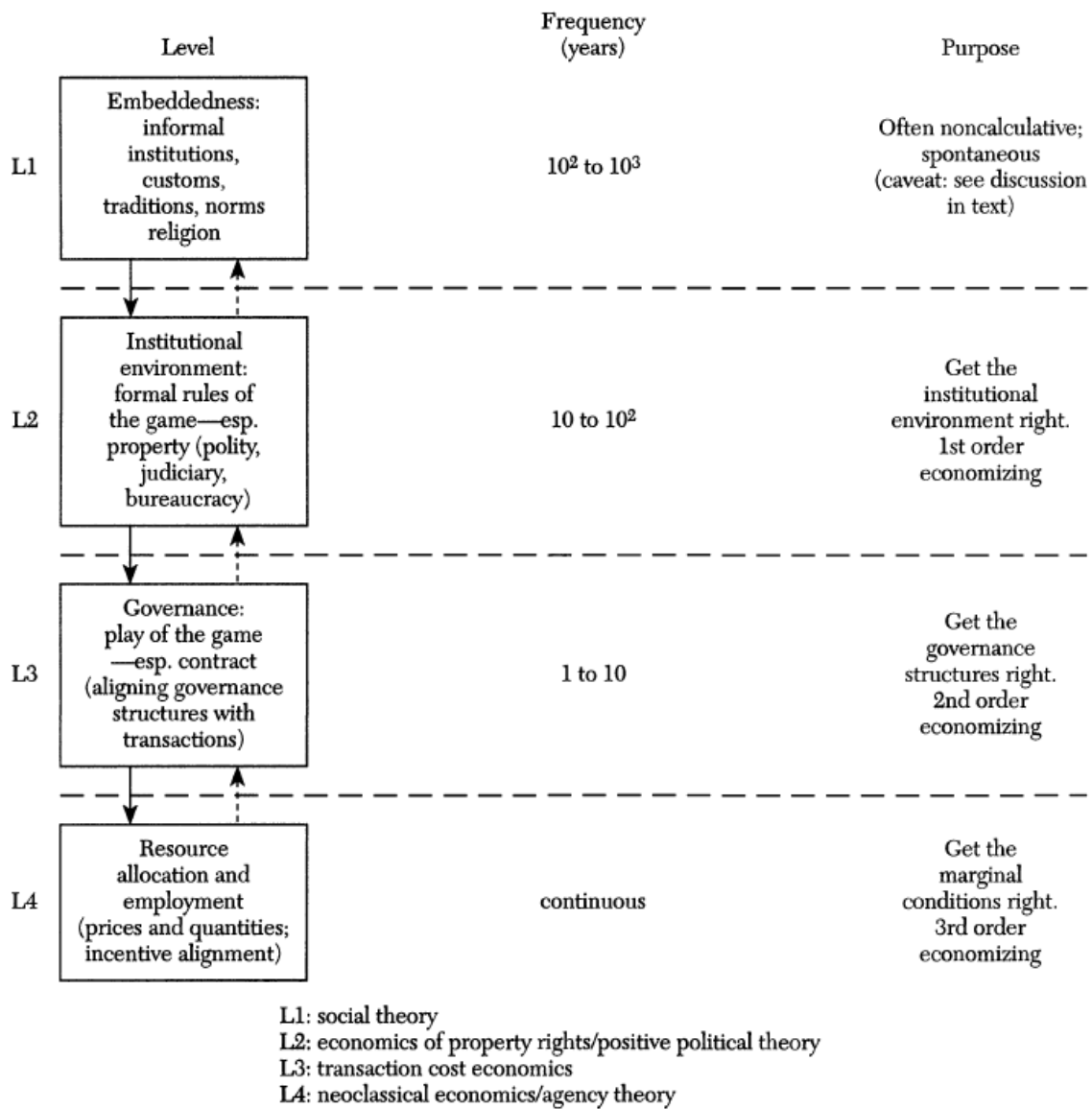L4: neoclassical economics/agency theory

Figure 2: Economics of institutions

Source: Williamson 2000, p. 597

2.4 Legal Systems and Property Rights as a Foundation for Economic Development

In order to determine the essential institutional aspects giving shape to economic development, we firstly have to define what a legal system is about. In this regard, we follow Paul H. Rubin's ideas. The modern legal system is founded on many different institutions that supply different services to the state, no matter whether they are run privately or by the state itself. They cover all aspects, from the creation of rules and law, to their enforcement by the executive, legislative and judicial powers. Moreover, other institutions organise the production and distribution of services, which also comprise health and educational systems, while others, like credit agencies, provide information for banks, which again the record transactions and ownership of their clients, and so forth and so on. In order to run these often interrelated institutions, they must be non-corrupt, competent and honest (Rubin 2005).

Furthermore, we have to accept that similar structures could be found in different countries, but they might differ in terms of what they are based on, as already explained by Williamson (2000). With the collapse of the Soviet Union and the downfall of socialistic regimes, many countries, especially Eastern European countries, found themselves in the process of transitioning from one system to another. According to Rapaczynski (1996) and Rubin (1994), a lot has been learned in these decades of economic transformation, especially regarding the subject of property rights. Meanwhile, these authors also point out that it is impossible "[…] to simply craft a set of rules onto an existing society", because a legal system must grow simultaneously with the economy and its structures (Rubin 2005, p. 207). Moreover, the legal system must be embedded within the single economic systems (Rubin 2005).

Within the legal system, property rights are by far one of the most important aspects, as already explained. Because of this, a clear definition of these rights is essential in order to determine ownership and the rights linked to it. Moreover, the final allocation of property rights should lie with the person to allocate the right to its highest values (Rubin 2005).

Therefore, the allocation of property rights itself is a key point in economic development. Consequently, the transaction costs for the new transaction or the allocation of property rights have to be conducted at the most efficient rate possible in order to correct misallocation. If transaction costs are high(er) than "[…] the increase in value from moving the resource to the efficient owner, there will be no corrective mechanism" (Rubin 2005, p. 208).

The former Soviet Union provides us with a good example, as courts were either unable to clearly define property rights or to protect them. Furthermore, this confusion gave rise to inefficiency, as owners were not able to sell and those in positions of control could not gain any proceeds or surplus. In such an environment, the Coase theorem, as discussed earlier, will not work. Thus, a correction and/or definition of property rights is essential (Rubin 1994). Moreover, one of the main goals of property rights is to keep property away from the state. This is because property in the hands of the state, in Rubin's (2005) view, is the embodiment of the failure to uphold and sustain property rights and thus undermines economic development and incentives.

As we look into the development of property rights, we assert that, in the "state of nature" at the beginning of civilisation, before any formal state or government, property rights were defined best (Bailey 1992). While the right to hunt was available to everyone, one could only harvest the crop that one had planted and cared for, which indicates that, even then, society tried to define property rights in the most primitive ways. Moreover, while they always faced the danger of predation, these rights were protected. From this demand for protection, some kind of government arose – whether it was a group, band, tribe, kingdom, or now modern nations (Mozelle & Polack 2001).

There are generally four effects on income and wealth if property rights are not effectively protected. Firstly, the investment rate will decrease due to the uncertainty of the expected returns. Secondly, unproductive activities will increase, as people will start stealing or turning into corrupt bureaucrats. All potential activity in production, manufacturing and services will be lost to the economy. Thirdly, people have to spend time and efforts protecting their property rights and the related revenues from predators, which entails keeping

tax revenues from corrupt tax collectors and hiding resources from thieves. Finally, people turn their investments into resources that might be easier to protect. While doing so, other economies, which might be more efficient and promising in terms of revenues, are lost (Rubin 2005).

2.5 Institutions and Development

Although developing countries have received billions of dollars in order to enhance and foster their economic growth and social stability, they always lacked in terms of sustainability. "Increasingly research has shown that weak, missing, or perverse institutions are the roots of underdevelopment" (Shirley 2005, p. 611).

Most developing countries, for instance, are in need of an overall institutional framework that is able to set the foundation for a promising market economy. Moreover, this foundation has to contain two major sets of institutions. The first ones exist to decrease transaction costs and thereby promote market exchanges and trade. Meanwhile, they also enhance trust in the system. On the other hand, other institutions are needed to protect and defend property rights. Consequently, in countries where transaction costs are increasingly high and the role of property rights has not yet been defined, investors will narrow their investment to activities with fast returns, while resources will be diverted for bribes or security measures. Furthermore, investments in production, learning and research will be neglected. In addition, it becomes increasingly difficult for developing countries to catch up with the rest of the world. As conditions become even worse in terms of installing institutions that support an open market, developing countries have to compete with already developed countries (North 1994).

It is a common phenomenon in most developing countries that either the state or government is too weak to protect property rights and to reduce transaction costs, or too strong, so that the government/state/dictator threatens the existence of private property rights all by himself. Either way, economic growth will stagnate, as there are few or no incentives to invest due to the uncertainty

of gaining returns on investments. It is only in countries that have institutions that increase the certainty that property is protected and that contracts are honoured that investment will take place, and transactions will be more complex, knowledge will be increased and shared, and specialisation of production will occur (North 1990).

Further, we must ask ourselves if it is possible to leapfrog stages of institutional development in order to more or less level all countries in terms of institutional quantity as well as quality (Shirley 2005).

Today, the most developed countries have two things in common. On the one hand, they are able to provide enforcement of law and contracts, protect property rights, and assure stability. On the other hand, they are also able to limit the state's power through back-up mechanisms such as parliaments or independent judges, etc. This then gives rise to the question why certain countries are obviously not able to follow these golden rules, even though they seem so logical and understandable?

A lot of research has been conducted to investigate these urgent questions, and different explanations have been the result, providing several approaches.

North (1990) assumes that countries' colonial heritage defines the present institutional situation, as often poor institutions were inherited from their former masters. Furthermore, La Porta et al. (1997, 1998, 1999) identified common and civil law, which was introduced by the former powers, as one of the main elements of institutional differences. Acemoglu et al. (2001) adds the assumption that the existence of certain resources gave rise to the implementation of exploitive institutions by former colonial masters. Furthermore, North (2005) and Greif (1994) have highlighted religion, customs and norms as aspects that might be inhospitable to certain forms of markets or trust. Therefore, there were limited incentives to introduce institutions that foster trade and investment. Bates (2001), on the other hand, offers a different approach. He suggests that political conflicts are the driving force for development, while the absence of political competition over borders or between elites will lead to institutions that serve the ruler's selfish interests.

However, it seems to be an overwhelmingly hard task to clearly identifying the single institutions that are the driving force of property rights and, at the same time, of a reduction in transaction costs. Former cross-country regressions, for instance, missed the connection between a country's characteristics and complex institutions, although they highlighted the importance of institutions for development. Therefore, single institutions could never be identified in a way that would be applicable in general terms. On the other hand, case studies at least point out that democracy and federalism provide better institutions than autocratic systems, for instance. Nevertheless, a main question still remains: How do we foster institutional change? (Shirley 2005).

Until now, the literature on NIE has not really come up with an idea how institutions might change over time. The only overall consensus is that this is hard to achieve. As most institutional bases or frameworks are deeply rooted in solid traditions, changes can only be realised at marginal rates. The only exception is the overthrowing by revolution or any other form of force, whether it is external or internal. "This stability is the product of path dependency" (Shirley, 2005, p. 629). Moreover, two aspects are linked to this assumption. The first is that policy makers usually are directly connected to the very institutional framework that they created or uphold, thus see no objection to altering their position to keep them in power. Second, societal customs, beliefs and norms are highly decelerating aspects, which might even resist any form of institutional change (North 1990).

"Path dependency and the stickiness of beliefs and norms explain why underdevelopment cannot be overcome by simply importing institutions that were successful in other countries" (Shirley 2005, p. 629).

Therefore, Levy and Spiller (1996) suggest that "goodness of fit" is the core of any economic as well as institutional development. They argue that innovations, beliefs and norms have to match a country's institutional landscape.

No matter how we are trying to approach the subject of institutional changes, we have to admit that, due to the short period that NIE has been in existence, there is a certain gap in the literature. At this moment, the gap cannot provide

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us with a fully explanatory result or statement exposing the fine mechanisms within an ongoing change in institutions (Shirley 2005).

2.6 FDI and Motivation

As we previously focused on the role of institutions within economic structures, we will now highlight the role of foreign direct investment (FDI) in terms of economic development and performance. Before we step into the argument on whether FDI promotes economic development, we will first highlight the incentives behind FDI schemes, providing a base for the following paragraphs.

Driffield and Love (2007), for instance, step away from the general argument about whether or not FDI promotes economic growth and rather focus on the reasons and motivation behind FDI flows. They argue that it is especially the different motivations behind investors' choices that lead to a certain degree of economic boost, or even the opposite. However, as in much of the literature, they identify technology transfer as the key driver of FDI.

In contrast to earlier publications, Driffield and Love (2007) distinguish between two reasons for FDI, namely *technology exploiting* and *technology sourcing*. The exploitation of technology stems from "the classic 'ownership' advantage [that] involves some form of technology superiority" (Driffield and Love 2007, p. 3). In this context, companies only invest in a certain economy or country if they can take advantage of their own technological lead in an industry. Furthermore, this scheme will likely take place in countries where property rights in terms of licensing to another company are insufficient. Therefore, direct FDI is preferred by investing companies. Moreover, the technology exploitation scheme is further characterised by the combination of research and development (R&D) advantages, in combination with economies of scale (Driffield & Love 2007). Griffith and Simpson (2001) further state that it is specially the introduction of new technology, paired with the quality of capital stock, that is the main driver of the given FDI schemes in this context.

In other publications, the 'dominance' of the exploitation of technology is questioned, as it seems unrealistic that companies only invest in a certain area to play on their competitive advantage, such as in technology. Therefore, scientists like Fosfuri and Motta (1999) promote the idea that technology sourcing also provides a very strong motivation to investing companies. They argue that companies seek spillover effects, which may be generated by geographical proximity to other companies in the same industry in a region. Technology transfer is not only a one-way road from the most to least developed, but is rather a matrix that develops along a network of touchpoints and gateways. Moreover, technology sourcing does not imply that any investing company willing to move to a certain region or area (where is seeks to find spillover effects) is necessarily in some way underdeveloped. It is rather "simply the recognition that knowledge can be acquired by targeting it in locations which are at least as technologically strong as the investor" (Driffield and Love 2007, p. 4). This idea is further backed by various other researchers who describe this motivation in different terms, such as 'home base augmenting' (Kuemmerle 1999), 'diversity sourcing' (Chung & Yeaple 2004), or as 'strategic asset seeking' (Dunning & Narula 1995).

2.7 FDI and Economic Growth Through Technology Transfer

The economic impact of foreign direct investment on recipient countries has been investigated in several papers, highlighting the importance of FDI not only for developing economies, but also for any economy worldwide.

However, one of the most urgent questions regarding FDI is still a very generic one: Under which circumstances does FDI promote economic growth and what is the role of the recipient as well as donor country in this context?

Many papers have been published and still will be published in an attempt to answer this basic question. The current history of publications provides very different and contradicting answers. Haskel et al. (2002), for instance, suggest that there is little positive effect or spillover generated from FDI in a host country, while others, like Blomström and Kokko (1998) and Liu et al. (2000),

present large, positive effects. Meanwhile, scientists like De Mello (1999) state the exact opposite and suggest that FDI will lead to large negative effects for the hosting economy.

A lot of confusion arises from the different approaches that researchers might use to underlie their assumptions. The wide use of panel data analysis and cross-country regressions that are often preferred do not really give further clearance on the different biases of this topic.

Although there seems to be confusion regarding the right methods to evaluate the impact of FDI on local economies, there is at least a final consensus among researchers that FDI might spark an economic boost in one way or another, depending on the circumstances.

Earlier publications (on the topic of FDI), for instance by Findlay (1978), have already highlighted the idea of FDI acting as a vital stimulus for exposed economies. Most papers covering this topic, however, stress the significance of technology transfer in this context, although earlier publications argue that FDI is simply a transfer of capital across national borders as a matter of investment, with no recognition of technology transfer (MacDougall 1960). Meanwhile, another viewpoint, such as that of Hymer (1960), shows that technology was already part of FDI and thereby extended former neoclassic considerations.

From the company's point of view, the transfer of technology could take place through different channels. Importing high-technology products and human capital, as well as acquiring foreign technology itself, can be seen as some of the many ways of technology diffusion (Borenszteina et al. 1998)

Like Findlay (1978) and Borenszteina et al. (1998), several other researchers have argued on the importance of technology transfer by international corporations from one country to another. "The diffusion of new technology" is therefore one of the key elements linked to FDI (Findlay 1978, p. 1).

Meyer and Sinani (2008), for instance, further developed ideas based on their analysis of Borenszteina et al. (1998) and conclude that there are three ways in which technology transfer can take place:

First there is the *demonstration effect*, which simply lets local companies observe and note new technology used by a newly introduced competitor (embodied through FDI). Local companies then recognise the advantage that the newly introduced technology holds and eventually try to imitate these very technologies to cope with the changed market situation (Kokko 1992).

Secondly, *labour mobility* drives technology transfer or diffusion in industries that are rather more advanced in terms of technology development (high-tech industries). Their labour mobility is therefore based on the formation of human capital within a region and naturally follows the movement of highly trained and educated employees between companies (Spencer 2008).

Thirdly, the overall agglomeration of companies in proximity to each other will further inevitably generate a common *market for specialised inputs*. Not only does a common labour market drive technology transfer, powered by labour mobility – as already stated above, but a common input market will "provide local firms with better procurement options" (Meyer & Sinani 2008, p. 6). Common markets will not only further attract more companies operating in the same field, but will also facilitate technology diffusion by offering additional space for interconnection and transfer.

The eventual benefits gained from these three ways of technology transfer, however, depend on the magnitude of the initial technology gap.

Moreover, the relative disparity between countries in terms of technology determines the pace of a minor-advanced country's process of catching up in relation to the more advanced country. "The greater the relative disparity in development levels between a country […] and the […] industrialized part of the world, the faster the rate at which the backward country can catch up" (Findlay 1978, p. 2).

However, this catch-up effect is limited to the absolute disparity between the countries. Economies or countries that are too different with regard to social, institutional or economic structures will naturally face the danger of disintegration or social disruptions.

Moreover, the eventual economic growth through FDI is not necessarily gained. The magnitude of FDI functioning as an economic stimulus is further defined by the donor country. According to Amighini and Sanflippo (2014), the origin of FDI does matter for economic development in hosting countries, and is of especial importance for developing economies, and in particular for Africa in terms of export basket upgrade. Furthermore, FDI flows among developing economies can have a bigger economic effect, as the technology gap is narrower than to fully developed countries. Compared to North-South investment, South-South investments are relatively more diversified. Across several different industries, FDI from and to emerging economies is more suited to uplift industry export capacity and quality, especially when economies are semi-developed in terms of industry diversification. The manufacturing sector, in particular, is more likely to benefit from South-South investment flows compared to those from the North or other developed economies.

2.8 The Role of Formal and Informal Institutions for Technology Transfer and FDI

Since technical diffusion seems to be the backbone of modern FDI, it is therefore crucial to reveal the 'rules of the game' – not only for technical diffusion, but also particularly for FDI in general to understand international flows of FDI over time.

Arrow (1969) stresses the importance of social contacts as a main driver for technical diffusion. The coping with or adaption of foreign technology is only highly effective when personal contact between the receiver and the donor is ensured. Giving the example of Southern European countries in the 15th and 16th century, Cipolla (1972) points out how institutions such as the church and policy makers were able to slow down technical diffusion by banning scientists and their new ideas. In contrast, more liberal countries were able to gain a substantial economic advantage by inviting and adapting these new ideas. As just stated, individuals were responsible for the transfer of knowledge and the spread of new technologies into new countries in the past. Nowadays,

however, as government, state, market and economic structures are much more advanced, social contact is shaped by the pool of multiple institutions, which basically can be divided into two blocks: formal and informal.

2.8.1 Informal Institutions and Ethnic Identities

The example given above brings us back to section 2.3 and the different sets of institutions. While the church as an institution itself can be regarded as a formal one, it cannot be denied that the actual faith or belief on which it is based is rather an informal relation. However, North (1990, p. 4) states that institutions "include any form of constraint that human beings devise to shape human interaction".

We usually tend to associate the term institution as something having a formal background within the legislative, judicative or executive of a country, although "institutions (itself) as a term is one of the loosest ones in the social-science lexicon" (Bratton 2007, p. 97).

However, we must not forget that these very (formal) institutions were initially founded on earlier, informal institutions, as explained above and stressed by Williamson (2000).

As already discussed in section 2.3, Williamson (2000) states that customs, culture and religion, for instance (as defined as informal institutions), have a substantial influence on the formation of formal institutions. Consequently, modern formal institutions and the extent of their influence on technology transfer rely directly on deeply rooted informal institutions. This does not seem to be overwhelmingly new information. Nevertheless, people tend to forget why different countries operate different legal and economic systems. It is thereby crucial to point out that decisions taken on actions that foster or hinder technology transfer (and thereby FDI as well) are not primarily the result of a formal institution, but rather the representation of the cultural background that shaped this very institution.

Developing societies and emerging economies that only recently turned to a democratic system, for instance, often encounter the problem of an imbalance of formal and informal institutions. In these countries, the ethic of "constitutionalism" often is not necessarily lived and "the legal limits in state power are usually novel and untested"; moreover, they are "often weakly developed or sometimes ignored with impunity, usually in deference to personal or communal ties" (Bratton 2007, p. 97). These circumstances deeply cripple formal institutions.

Emerging or developing economies provide good examples not only of how informal institutions form formal ones, but also how formal institutions, in turn, influence social dynamics. Researchers like Horowitz (1991), Posner (2005) and Reynolds (1999) focus on the topic of how formal institutions interact with informal or societal institutions. Horowitz (1991), for instance, suggests that federal constitutions lower the risks of political conflict in societies with an extremely low level of social cohesion. More striking, however, are Daniel Posner's (2005) findings in the book, "Institutions and Ethnic Politics in Africa". Posner, giving the example of developing African countries, suggests that there is a certain and vital link between the country's formal institutional setup and its interaction with informal institutions.

In the following paragraph, we will try to break down some of the most important informal institutions in developing economies to highlight their relevance for institutional development and engagement.

Ethnicity is by far one of the biggest informal institutions that influence individual choices, especially in developing economies. Ethnic affiliation often determines electoral outcomes, political stability, and thereby economic prosperity. Robert Bates (1983, p. 152) defines ethnic groups as a "coalition which have been formed as a part of rational efforts to secure benefits created by the forces of modernization". By this we understand that grouping on the basis of ethnic or racial background makes sense in terms of profit maximisation for the individual. This concept seems to be straightforward, but is jeopardised if one does not only have a single but a multi-ethnic identity. In case these identities give a base for the formulation of a pressure group, the

single individual will face a difficult decision in determining which one will best secure access to the sought resources. The potential partition along state, tribal, clan, family, religion, language or even caste lines will lead to "electoral competition, the most useful identity to mobilize will be [...] the one that puts the person in a winning coalition" (Posner 2005, p. 4). Although there are a wide variety of ethnic definitions and determinations, it should be clear that the number of potential group affiliations is not infinite. An ethnic group needs to be "potentially politically salient" to be defined as such in the institutional context (Posner 2005, p. 6).

The concept of ethnic cleavage is further explained by one of the earlier models of "identity categories "and "category sets", as introduced by Harvey Sack (1992) and further employed by Posner (2005). These researchers introduced a fundamental model that provides insight into the development of ethnic cleavage.

According to their argumentation, the term ethnic cleavage or (according to Harvey Sack) category sets can be described as a combination of various ethnic attributes, as in L = language; R = race; and F (faith) = religion. Together they form the LRF model, according to which, for instance, an ethnic group in an urban district or country can be characterised as follows:

L= $\{l_1; l_2; l_3; l_n\}$, where l_1 could be English-speaking; l_2 = Spanish-speaking; l_3 = French-speaking

R= $\{r_1; r_2; r_3; r_n\}$, where r_1 = white; r_2 = black; r_3 = Asian

F= $\{f_1; f_2; f_n\}$, where f_1 = Catholic; f_2 = Protestant, for instance

Posner (2005, p. 17) describes this as the "different dimensions of ethnic cleavage". Therefore, ethnic groups contain a set of identity categories, in this example $l_1; l_2; l_3; r_1; r_2; r_3; f_1; f_2$. Furthermore, the magnitude or number of racial dimensions (cleavage dimensions, as just described), in combination with the sheer size of these very ethnic groups, forms the overall ethnic cleavage structure.

These eventual ethnic cleavage structures are flexible, however, as the usefulness of a certain or several group "memberships" may vary over time

regarding (formal) political institutional competition, which Posner (2005) describes as the "arena". He further concludes that strategic choice making in this context relies heavily on the sought resources or position gained from a formal institution.

Giving the example of the outcomes of electoral campaigns in Zambia under a single-party and a multi-party election, Posner (2005) reveals the hidden dependencies. During the time of a single-party system, "at both elite and mass levels tribal identities were more effective in campaigning discourse and voter choice" (Kasfir 2006, p. 331). However, during the period of a multi-party election, language identity proved to be the successful argument. Posner concludes that the foundation for these dynamics is a very simple one. In any attempt to maximise personal utility, coalition building is key. The identification through cleavage structures is thereby the tool to maximise the identification base in order to maximise personal utility.

So far, we have revealed the potential underlying dependencies and dynamics of ethnic formations that form and shape institutions and vice versa. But what does this mean for FDI flows worldwide?

If ethnic formations, as stated by Posner (2005), do eventually target the maximisation of personal utility through coalition building, does this logic hold for FDI? It is undoubtable that FDI only takes place if a company or country believes it can generate profits from its investment. Irrefutably, profit maximisation, or the maximisation of utility, is a goal shared by both the investing companies and ethnic group formation in the targeted economy.

According to Tong (2005, p. 563), FDI is in need of a "much deeper level (of commonalities) between the parties concerned", since "ethnic networks would play a more important role assisting bilateral FDI than encouraging trade". Furthermore, ethnic ties, at a macrolevel, are regarded as the pacemaker that facilitates information provision and improves trusted relationships (Huang et al. 2013).

Thus, we must understand what the role of ethnicity is for the receiver as well as for the FDI donor. While discussing the role of institutional quality and FDI, most publications focus only on the receiver side. However, it is vitally

important to put the spotlight on both parties to understand the true dynamics behind international investment choices in the context of institutions. The informal institutional connection between both these parties has often been neglected in publications on FDI and institutional quality. However, the common finding of investment partners might also be linked to the matching of informal institutions (as in language, ethnicity, etc.). This does not mean that the donor and receiver of FDI necessarily share the same informal institutions, but rather that their institutions are compatible.

With that being said, the duo-racial partnership of FDI flows should be further examined, as it would make it possible to estimate the influence of racial compatibility on actual FDI flows. Unfortunately, at present there are a very limited number of publications and very little data focusing on the racial profile ties of partnering countries in the 20th and 21st century in the context of FDI research.

Researchers like Huang et al. (2013) and Tong (2005) have deepened the research for ethnic ties linked to FDI flows. They focused primarily on Chinese investment and only investigated inter-ethnic (Chinese) FDI flows. As a result, the field of FDI flows founded on intra-ethnic coalition building (rooted in informal institutions) thereby is largely untouched. Nevertheless, there is strong evidence that suggests that family ties (with ethnic background) have always played an essential role in shaping FDI flows. Countries with a history of mass migration in previous decades, as in the case of the Indians and Chinese, proves that FDI is indeed often ethnically tied. This does not come as a surprise, as entrepreneurs try to mitigate risk while expanding into new markets by using international family networks (Gopalkrishnan & Shapiro 1999).

At present it is uncertain if the application of Posner's approach to identify ethnic cleavage correlations between two partnering ethnic groups involved in FDI flows (one as a donor and the other as a receiver of capital transfer) holds scientific criticism.

As a subject of New Social Economics and the Theory of Collective Action, ethnic fragmentation has been taken into broader consideration regarding

economic and institutional development, especially in the light of the various African countries that gained independence in the 1960s and 1970s.

Ethnic fragmentation often plays an essential role in daily politics and economy, especially in developing countries. Various examples from recent history provide evidence that the degree of ethnic fragmentation often set the benchmark for social instability and thereby leads to political and economic turmoil. However, it is rather difficult to state the overall positive as well as negative impact of racial or ethnic fragmentation or racial diversity on economic factors. Alesina and La Ferrara (2003), for instance, covered this topic in several publications, which demonstrates not only the politically explosive force but also the complexity that goes along with this topic. They provide various examples that describe the dynamics within multiracial societies and learnings from history.

One of the first researchers engaged in the issue of social identity and preferences was Henri Tajfel, who states the underlying assumption for intergroup behavioural patterns (Tajfel et al. 1971). One of the main findings in his publication, "Social categorization and intergroup behaviour", was the observation that group members first work to the favour/advantage of their own group, as well as against group outsiders. This is also observable despite the presence of an alternative (strategy) that would lead to the greatest common good, which "is clearly open to them at a relatively small cost of advantages that would accrue to members of the ingroup" (Tajfel et al. 1971, p. 172).

However, two further findings from the above paper are even more interesting. Firstly, Tajfel et al. (1971) revealed that groups tend to prefer behaviour that leads to situations in which their personal benefit is not affected in any way. Secondly, the overall maximum utilitarian advantage, as a result of collaboration between groups, is often sacrificed for the sheer aspect of winning over another group. Thereby, Tajfel et al. (1971) proved (not for the first time) that group behaviour, dynamics and interaction are often guided by other aspects than rationality.

Unfortunately, a vast number of papers covering this topic of intra-group behaviour and connecting it with economic performance and policymaking

often come up with Africa as a prime negative example. Among these authors are Alesina et al. (2002), Easterly and Levine (1995), Hung Mo (2001) and La Porta et al. (1999), to name just a few.

Easterly and Levine (1995) in particular made a considerable contribution to the literature with their cross-country regression, openly revealing not only the reasons for the weak economic performance of African countries, but also cross-border correlations in political patterns.

With that being said, it is rather difficult to prove the potential of multiracial societies, especially in regard to economic performance. However, other researchers have tried to provide evidence proving the contrast.

Lijphart (1977) is quoted as one of the first researchers to unveil the power of sharing within multi-ethnic groups. He lists the conditions under which plural societies are more likely to be sustained. According to him, it is essential that power and wealth are relatively equally distributed. Although this seems to be obvious, it is interesting to note that this condition is not necessarily important in the case of external threats. As soon as external factors form a threat to a multinational society, the truce covers all former inequality (Lijphart 1977). Because of this, dependencies between social stability and external threats in emerging or developing economies face certain difficulties. Africa, for instance, provides a good example: As the continent, which has been fully colonized as last due to its sheer size, the inhabitants were for long were not exposed to foreign/external threats or their impacts. Therefore, the "most threats to the State came from within" (Alesina & La Ferrara 2003, p. 29). Therefore, there is a strong connection between cultural cohesion and external threats. Societies that were exposed to wars as a result of external threats, as seen in the history of the European peoples, for instance, could prove that their eventual cultural cohesion is much higher than that of those which lived at the periphery and in peace (Draper et al. 2004). In addition, Spear (2002) reveals that equal power sharing in African multi-ethnic societies is often undermined by local traditions that hinders the process of development.

Overall, the issue of ethnic fragmentation is more striking than people usually would believe. Especially in the modern world, societal cohesion sets the

foundation for interaction on eye level and thereby provides the levers for social as well as political stability.

As already stated, foreign direct investment (FDI) usually favours a stable investment environment, which naturally puts the spotlight on ethnic fragmentation.

2.8.2 Formal Institutions

The previous section reveals how ethnic identity and inter/intragroup dynamics influence coalition building and social interactions. These coalitions/ interactions further determine the magnitude of trade and FDI flow based on social ties. This, however, represents only one aspect that determines the overall investments and trade flow. Most publications in the field of NIE focus on formal institutions and their impact on trade and FDI. As most of the relevant aspects (legal system, property rights, etc.) and their impact were introduced in sections 2.3 and 2.4 as part of the basics of NIE, we will further focus only on the neglected aspects of formal institutions in this field of research.

Sections 2.6 and 2.7 already showed that FDI and technology transfer are linked, and further determine economic growth. Formal institutions still influence the degree of effectiveness of international investment, as they shape the ratio of technology transfer.

Due to changed circumstances and the need for large teams and funding, research is mostly conducted in R&D departments of major (often multinational) companies (Findlay 1978).

Nevertheless, formal institutions still determine whether the transfer of technology is successful or not. Because of this, institutions have become even more important since the number of companies and transactions between people have skyrocketed since the 15th century. Therefore, institutions play a vital role where a foreign company invests and eventually sparks technical diffusion to a hosting country or economy.

Several publications are dedicated to the topic of how institutions determine FDI in a region. Moreover, the literature has become increasingly specific, as it also tries to distinguish between different institutions attracting certain FDIs.

In addition, the literature even differentiates between single business sectors and the magnitude of influence coming from institutions.

Generally speaking, the most relevant publications identify institutions as a constant robust factor in FDI flows. However, FDI flows respond differently to institutional quality across industrial sectors.

According to Ali et al. (2008) and Root and Ahmed (1979), formal institutional quality does not really affect FDI flows into the primary sector. However, they do for the influx of FDI into the manufacturing sector, and have an even bigger effect on FDI going into the services sector. As a result, institutional reforms will likely attract FDI to the manufacturing and service sectors, while FDI flows into the primary sector will remain mostly unchanged. Furthermore, Kolstad and Villanger (2004) suggest that FDI flows into the services sector are positively correlated with FDI flows into manufacturing and trade openness.

The points of view of Ali et al. (2008) and Root and Ahmed (1979) are further supported by several other researchers. Asiedu (2002), for instance, while focusing on FDI in Sub-Saharan Africa, points out that FDI in sectors like the mining and oil industry is less reliant on institutional quality. In cases like these, where FDI seeks resources, the quality and presence of adequate infrastructure, as well as the availability of resources combined with the overall level of taxation, are the main determinants of foreign investment. Other determinants, such as the accessibility and openness of markets, are less important in this context (Dunning and Lundan 2008). In addition, Busse (2004) suggests that the secondary (manufacturing) and tertiary (service) sectors are more dependent on a stable institutional environment.

So far, we can summarise the previous paragraphs as follows: We acknowledge FDI as an economic stimulus, which is motivated by technology transfer. Furthermore, technology transfer can take place through different ways, as in the demonstration effect, labour mobility and the creation of a common market for specialised inputs. Technology transfer, in turn, is leveraged by institutions in a number of ways. The importance of institutions, however, depends on the different industry sectors.

Chapter 3: The Role of FDI in Developing Economies

The preceding paragraphs have revealed the importance of institutions as mediators between foreign direct investment and economic growth across different industry sectors. We now take a step back and focus not only on single industries, but on entire economies. This section provides insight into the impact of FDI on emerging economies, as most publications (in the past) have focused mainly on the main destination of FDI, namely fully developed, 'westernised' economies (te Velde 2006).

Developing economies, such as in Africa, are particularly interesting, as they represent a very special case for FDI and economic development. Most of the developing countries in Africa rely heavily on international FDI, as it is one of their main sources of capital, with an increasing trend. The lack of domestic savings and low-income levels increase this financial dependency. Overall, a large number of African economies therefore only have two sources of foreign finance: Firstly, multinational organisations such as the World Bank and, secondly and more importantly, FDI, which has become even more dominant since the lending to this particular part of the world partially declined (Asiedu 2002; World Bank 2017c).

The rapid process of globalisation has fostered an increase in overall global FDI flows, while it has not left developing countries untouched. In 2006, the United Nations Center for Trade and Development (UNCTAD 2006b) concluded that the increased FDI flows across national borders were indeed the biggest sign of globalisation in the past 20 years. Furthermore, Kok and Ersoy (2009, p. 106) state that "FDI is a key ingredient for successful economic growth in developing countries, because the very essence of economic development is the rapid and efficient transfer and adoption of the best practice across borders".

Several publications argue that FDI is the one and only way to promote developing economies and foster prosperity in these regions. However, the overall consensus (for the moment) softens this statement and rather suggests that there is a "positive association" between FDI and economic development,

"provided that receiving countries have reached a minimum level of education, technological and/or infrastructure development" (Hansen & Rand 2006, p. 21). Furthermore, according to the OECD (2002) and Hansen and Rand (2006, p. 23), 11 out of 14 publications state that FDI "contributes positively to income growth and factor productivity". However, as stated above, this development again depends on the country's state of development in terms of infrastructure and educational standards (Mello 1999).

As seen in section 2.7, technology transfer, along with the associated spillover effects, still represents the backbone of FDI motivation. Researchers such as Findlay (1978) argue that the greater the technology gap between the investing country and the receiving country, the greater the potential spillover effects. However, Girma et al. (2001) and Taki (2005) limit this assumption and argue that potential spillovers cannot be gained at any size of the technology gap. According to them, technology gaps between countries or enterprises could be too big to overcome and use technology and practices too remote from the host economies. Therefore, inter-developing country FDI could be more successful and sustainable than FDI sourced from developed economies (Gammeltoft 2008).

As stated above, several publications have tried to highlight the preconditions under which the influx of FDI into a developing country will spark economic development. Chakrabarti (2001, p. 89) states that "the relation between FDI and many of the controversial variables (namely tax, wages, openness, exchange rate, tariffs, growth and trade balance) are highly sensitive to small alterations in the conditioning information set". Therefore, FDI flows into developing economies have to be considered as part of a very fragile system that is the umbilical cord for developing economies. A disruption therefore would have a devastating economic effect.

Borenszteina et al. (1998) have indeed proven that FDI from developed countries such as the OECD countries is one of the main drivers of economic growth in developing countries. Moreover, they stress the importance of human capital for the success of foreign investment schemes.

Borenszteina et al. (1998) furthermore postulate that the effect of FDI is negative in the case that a host country's human capital is relatively low. Therefore, they conclude that "the interaction between human capital and investment is a particular characteristic of FDI" (in developing economies) (Borenszteina et al. 1998, p. 131). In addition, domestic investment (in developing countries) is also partly triggered by the influx of foreign investment. According to their results, however, it seems that FDI targets different industry sectors to those targeted by domestic investments. While FDI is highly connected to human capital, domestic investment is not. As a result, it is suggested that domestic investment schemes target more traditional sectors than FDI does. This, however, seems natural, as FDI is considered a process of technology transfer (as already argued above), therefore FDI is highly likely to aim at a high(er)-tech industry where a competitive advantage is expected by the foreign enterprises, thus outrunning domestic companies.

Graham and Krugman (1991) provide another explanation. Because domestic companies obviously have a better inside view and knowledge of their market than outsiders, foreign companies must compensate for this lack of knowledge with better management skills and technology. Despite all the efforts of foreign companies competing in a new market, such as introducing new technology, policy makers can jeopardise and interfere with these efforts through protective policies towards their domestic companies, thereby also affecting the diffusion of technology.

As shown above, FDI in developing economies comprises very different aspects. Asiedu (2002, p. 108), for instance, characterises FDI in developing countries/economies in terms of three "stylized facts".

First, (as already argued), FDI has become the number one source of finance for developing countries, and especially for Sub-Saharan African countries. During the 1990s, official payments (from the World Bank, etc.) were reduced by up to 24% (from 1990 to 1999), while FDI was able to reach 180%. In 1999, FDI represented up to 27% of total foreign investment (Asiedu 2002; World Bank 2000).

Second, FDI in African countries generated above average rates of return. In fact, it partially generated the highest rates in the world. From 1991 to 1996, the rate of return (in Africa) on US investments was 30% on average, while other developing countries only showed 16%. At the same time, Africa outperformed Asia and the Pacific (21%) and Latin America (14%) (United Nations Center for Trade and Development 1999).

Third, Sub-Saharan African countries did not necessarily benefit from the steady increase in FDI in their economies. Although the total amount of FDI in the region increased from the mid-1980s to the late 1990s, by up to almost 500%, it lagged behind the average for the developing economies, of 1 630%. The share of FDI for Sub-Saharan African countries dropped from almost 37% in the 1970s to 3% in 1999. Nonetheless, some countries, especially in Southern Africa, were able to sustain and even increase their share of FDI (World Bank 2000).

In conclusion, we know that FDI is the primary source of foreign capital for developing countries and that it can have positive effects, although the role and amount of FDI in these economies might vary dramatically over decades. Globalisation might be one of the drivers for modern FDI flows into emerging economies. However, a certain level of development, such as in infrastructure, education and markets, seems necessary to attract FDI in order to spark economic development.

Chapter 4: Shifting Trends in Global FDI Development

The following paragraph highlight the variation in foreign direct investment over the years and try to differentiate between the host countries and the source of FDI to draw a complete picture of current developments.

4.1 General FDI Trends and Developments

Since the start of the recording of global FDI flows in the early 1970s, it has become clear that these flows are able to reflect a country's political, economic, socio-economic and institutional development.

From a historical perspective, FDI flows are also able to retrace the relations between countries and reflect their economic connection. Several sources provide evidence of the importance of FDI flows, as they give hints of global shifts in economic and political power. Twomey (2000), for instance, worked with FDI in a more historical context, showing the magnitude and informative value of FDI especially in Third World countries. He explored FDI from the 1870s onwards and revealed several aspects especially relating to colonial and post-colonial FDI flows. He points out that there were basically three phases of FDI between the late 19th century and the 1980s. Due to investment in infrastructure (such as railways) in their colonies, European colonial powers were the primary source of FDI in the Third World until the early 20th century. After that, the flow of money from Europe, Japan and North America declined dramatically as a result of the great depression of the 1930s and the Second World War. Only in the late 1930s was a slight increase of FDI in colonial areas and Third World countries noticeable due to economic and strategic interests regarding the upcoming war. After the Second World War, North American investment was dominant across the globe (Giannetti 2002; te Velde 2006). The overall FDI declined after the war until the 1980s, although Europe and Japan experienced a steady increase in FDI in their economies. FDI in Third World countries, in contrast, dropped significantly. This process was accelerated by the fact that a lot of former colonies, and now independent

states, had nationalised foreign assets in the 1960s and thereby lost trust and access to foreign investors (Twomey 2000). The investments that took place, despite all the negative trends, were mostly characterised by an attempt to uphold former infrastructure networks in order to secure access to natural resources (Gammeltoft 2008).

Only after the 1980s did FDI from economic powerhouses slowly increase again, and this turned around the negative trend for the following decades. However, until the mid-1990s, the amount of global FDI did not exceed the amount of money that was invested in the early 20th century (te Velde 2006).

Since the mid-1990s, FDI has increased dramatically, exceeding a global FDI of 1.5 trillion USD in 2000 and 1.9 trillion in 2007, amounts that are recognised as the main peaks in the world's FDI flows (see Figure 3). According to the World Bank (2017a), at every point in time the high-income economies (as defined by the World Bank) contributed by far the biggest part of the world's FDI. However, these contributions were also volatile and, at the same time, very dependent on the overall economic situation in the world. It is interesting to note that it is especially the upper-middle-income economies that are in the process of slowly catching up with the First World countries, followed by the low-income economies. Low-income economies, however, remain mostly unchanged and thereby insignificant in this regard. Moreover, the FDI inflows of the upper-middle-income economies seem to be growing continuously and to be partly resistant to global economic crises. Nevertheless, it is noticeable that once they reach a certain amount of investment, they tend to respond to global economic challenges according to the same dynamics that higher-income economies do (see Figure 3).
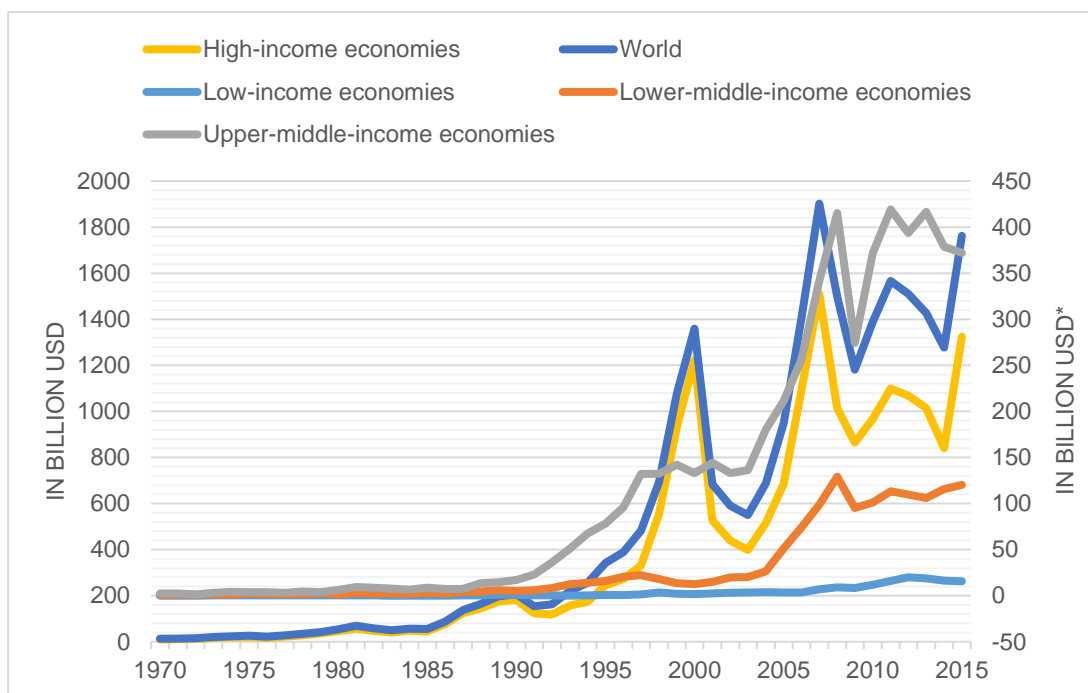
Figure 3: Development of FDI inflow from 1970 to 2015

*Low-income economies & Upper-middle-income economies
Source: World Bank 2017a

4.2 FDI from Emerging Economies

As already stated and as is noticeable in Figure 3, the high-income economies were and still are dominant in providing the lion's share of the world's total FDI in- and outwards flows. However, this draws an incomplete picture of the current situation. Figure 4 illustrates the changes in FDI inflows as a percentage of national GDPs. The figure thereby highlights the changes that occurred during the last decades. Although high-income economies previously provided the lion's share of FDI inflows, followed by the upper-middle-income economies, their share of FDI according to their GDP has declined slightly over the past two decades. Especially lower-middle-income and particularly lower-income economies received, relative to their GDP, the biggest share of FDI in the past two decades. The observations are even more dramatic when calculating the average FDI flow as a percentage of GDP in the period from 2005 to 2015. While the world's average was at 2.57 percent (FDI inflow of GDP), which was shared equally by the high-income economies, upper-

middle-income economies reached 2.61 percent. Lower-middle-income countries, however, received 2.66 percent, while low-income economies reported up to 4.27 percent (World Bank 2017a). This creates the impression that it is especially underdeveloped and developing countries that have been targeted by foreign investors in recent years.
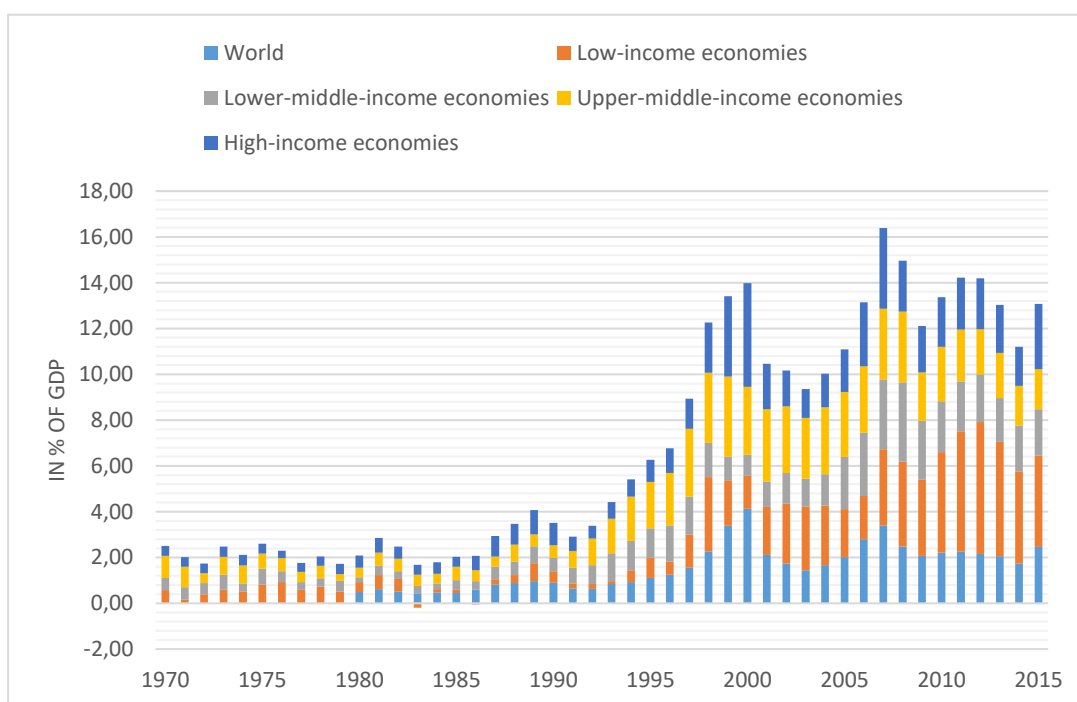

Figure 4: Development of FDI inflow in % of GDP from 1970 to 2015

Source: World Bank 2017a

Moreover, the question arises whether there have been any changes in the sourcing of FDI, as the recent literature suggests. According to data collected by UNCTAD (2017) and published in its yearly investment report, there have been significant shifts in the sourcing of FDI in general.
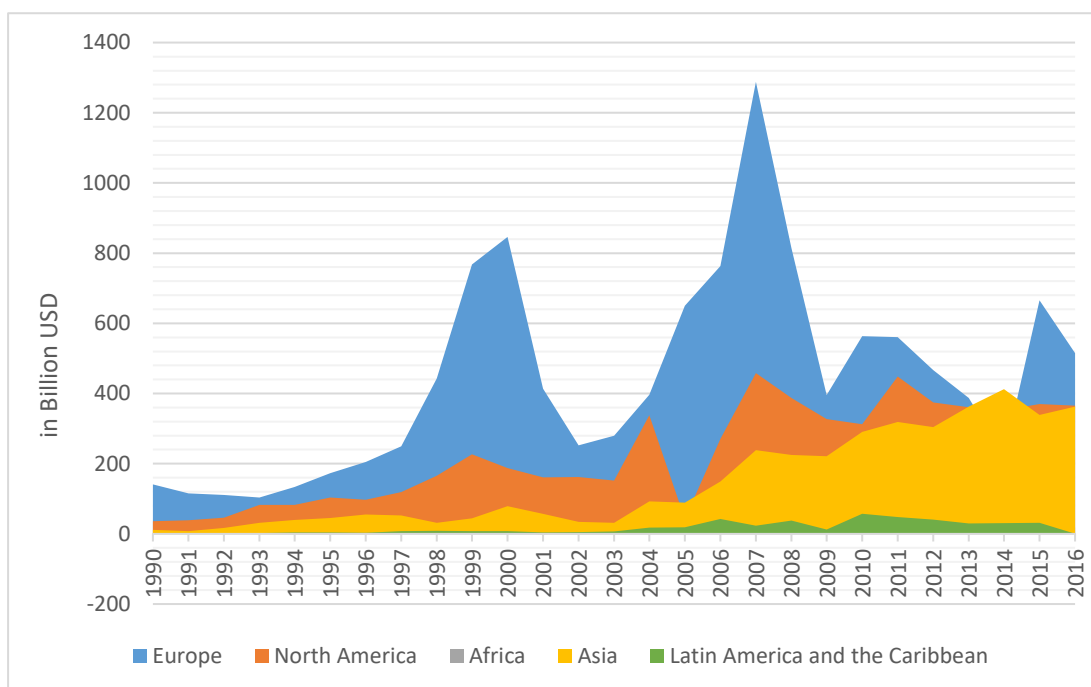
Figure 5: FDI outflow per region from 1990 to 2016

Source: UNCTAD 2017

As indicated in Figure 5 and shown by the World Bank (2017a), the European contribution to the world's FDI flows was unchallenged (although very volatile) up until the mid-/late-2000s. During the past decade, however, this changed. The proportion of FDI being sourced from North America stayed relatively stable, while the European share declined dramatically, especially after the wold financial crisis of 2007/2008. In contrast to the European development, FDI from Asian countries grew continuously and almost equalled the North American share in 2017, at around 400 billion USD. To this day, however, Latin America, Africa and Oceania are still not dominant sources of FDI. Nonetheless, it should be mentioned that African economies, as well as the Latin American countries, could increase their share and thereby start becoming FDI sources for the world economy.

Looking at the development of FDI outflows originating from developing countries, mainly three different waves are observable.

During the first wave, from the 1960s to the mid-1980s, FDI outflow from emerging economies was mostly driven by South American countries like Brazil, Argentina, Venezuela, Columbia and Mexico. However, Asian countries

like Singapore, Malaysia, Hong Kong, India and South Korea were also beginning to increase their outward investment from the 1970s onwards. During this time, FDI from these developing economies targeted primarily the primary sector, as well as small-scale manufacturing in mostly neighbouring countries, or at least economies situated in the same region (Aykut & Ratha 2004).

Mainly driven by access to additional markets, and resource- and efficiency-seeking, investors chose hosting countries according to "short psychic distance (geographic, cultural, ethnic, institutional)" and to further avoid bureaucratic restrictions in their home countries (Gammeltoft 2008, p. 3). At this time, companies from developing economies rather expanded their business horizontally into their neighbouring countries to gain the advantages of low labour and input costs. It was especially Latin American countries that used the same business model and technology to access other, developing neighbouring markets with similar demand structures after their own domestic markets seemed satisfied (Andreff 2003; Gammeltoft 2008).

The second wave (mid-1980s to 1990s) of FDI outflow from this particular peer group was mainly represented by Asian countries. Countries like Singapore, Taiwan, South Korea, Hong Kong and shortly thereafter China, India, the Philippines and Thailand were the most predominant FDI sources among the emerging economies. These mostly export-orientated economies invested in fast-growing markets as well as in other developing countries with a lower degree of overall development to secure access to cheap labour. Moreover, FDI schemes still targeted the primary, as well as the finance and infrastructure sectors. Moreover, Asian multinational companies also focused on developed countries to compete in mature and cost-competitive markets such as IT, the automotive industry and electronics. Therefore, the second wave of FDI from the emerging economies was further characterised by the expansion of FDI schemes from horizontal to vertical (Gammeltoft 2008). In the following decade, Asian companies were able to successfully compete in developed markets and eventually became FDI net exporters (a position that was formerly reserved for already developed economies) as their home country developed further (Andreff 2003).

The third FDI wave, lasting from the 1990s to the 2000s, originated from a more diverse number of countries. Scientist like Andreff (2003) and Chudnovsky and López (2000) argue that Latin American countries were the predominate source of FDI (from developing economies) in this period, after they recovered from economic and political backlashes. In contrast, Gammeltoft (2008) suggests that the BRICS nations contributed the most, since the literature provided by the abovementioned sources is rather narrowly focused on the Latin American development topic. According to data from UNCTAD (UNCTAD 2006a, 2005), FDI outflows from the BRICS countries temporarily represented more than half (61% in 2004) of the entire FDI outward investment from the community of developing economies at the beginning of the 21st century, with an increasing trend.

Chapter 5: Institutional Pairing and Investment Schemes among Developing and Developed Economies

The previous paragraph highlighted two important aspects in recent FDI flow trends. First, although largely sourced from developed countries, FDI has increasingly been sourced from emerging economies in recent times. Secondly, these very economies managed not only to represent hosting countries, but in turn became FDI donor countries themselves. Moreover, FDI flows among developing countries gained recognition, with an increasing trend, while the developed countries' role as prime FDI source diminished.

The success story of FDI outward flows from developing economies has been studied by a vast number of economists who have tried to examine the local determinants for prosperous economic development.

Sinha (2005), for instance, argues that companies that are used to operate in a difficult and often hostile economic environment might develop a competitive advantage. Companies operating in underdeveloped countries are exposed to more price-sensitive consumers, disrupted supply chains, a volatile market and a constantly changing political environment. Moreover, their market approaches, equipment and techniques might be not state of the art, although they might be more suited for the relevant market.

This should give hope to the economic community, since developing countries have stepped onto the world economic stage and become integrated into world trade, thereby distributing wealth more equally and igniting an economic boost in neglected parts of the world.

Nevertheless, it should not be not forgotten that FDI not only follows political and economic interests, but also influences and shapes institutions in the hosting countries.

Recent literature shows that FDI flows per se are not necessarily contributing to 'healthy' institutional development. With the increasing trend of FDI flows between developing economies (also known as South-South), economists are taking a greater interest in examining the institutional changes among the two

partnering developing economies. Naturally, this field is highly controversial, as recent developments in Africa and Asia in particular have brought up new economic powerhouses and stakeholders that formerly went unnoticed by the prevailing North American and European pressure groups.

As already stated, the scientific landscape regarding this topic is highly divided. The literature does not only debate the impact of FDI among developing economies, but also argues about the composition of partner countries in the context of institutional changes. Recent literature contains a benefit comparison between North-South and South-South FDI flows (Amighini & Sanflippo 2014).

Recent findings from researchers like Demir (2016, p. 342), for instance, suggest that FDI flows among developing economies "have a significantly negative effect on host country institutions". These concerns become even bigger if a host economy is rich in terms of natural resources. FDI flows from developed countries to developing economies (and vice versa) in the same scenario do not give rise to the same negative effects on institutional quality. It therefore, not surprisingly, appears that fragile economies (in terms of institutions) with a high proximity and/or economic reliance on natural resources are more likely to be susceptible to external influences.

The latest 'phenomena' of South-South investments, paired with the retention of developed countries to invest in less-developed economies, inevitably creates a new pool of partnerships. These newly formed partnerships remain mostly unnoticed and rather interact outside the world economic focus. As developing countries by their nature are also home to developing institutions, the level of positive institutional enrichment (from one developing economy to another) is thereby rather limited and acts only in the boundaries shaped by the partners' institutions.

For instance, a country that is not renowned for the protection of property rights reflects this either in the prevailing institutional landscape (be it formal or informal) or in the absence of the institutions that would normally uphold them. If this country decides to invest in another (maybe even less developed) emerging economy, a 'struggle for compatibility' (as described in the previous

paragraph) among the formal and informal institutions of the two partnering countries will be initiated. Naturally, if the institutions find an acceptable degree of compatibility, the two economies step into partnership for trade and investment. It therefore is important to highlight the fact that the degree of compatibility will only start with the lowest common denominator on an institutional level.

As a result, the lowest common denominator will only be found (as mentioned above) within the boundaries of the institutional landscape of both economies, and not outside. The stimulus for an increase in institutional quality is thereby rather limited or non-existent (Demir 2016).

Because of this, investment partnerships among developing economies are often viewed and commented on critically by Western developed countries. On the other hand, investment partnerships between fully developed countries and lesser developed economies tend to improve the institutional quality of the developing country. In these cases, the same principles apply as seen in partnerships between developing economies. Again, the lowest common denominator sets the foundation in institutional partnering. However, the spectrum of positive and stable institutional variables is much greater.

Pairing schemes among developing and developed economies normally follow certain lines:

The less-developed economy pairs its own institutional landscape with that of the developed economy. Driven by the enhanced and enlarged 'assortment' of institutions to pair with (offered by the developed country), the developing country's institutional landscape has the option to adjust to that of the more developed one, and then develops and thereby improves itself. Because of this, economists favour the economic relationship between developing countries and fully developed countries over partnerships among developing economies (Demir 2016). It should be noted that the institutional adjustment of the developing economy is not necessarily forced by the superior partner in terms of institutional quality. It can also be the result of the absence of other matching institutions and the prevailing economic incentives to change or not to change.

For instance, developing African countries have, for most of the time since claiming independence, been in constant contact with Western or European powerhouses. The prevailing economic and political structures that were introduced by their former colonial powers naturally increased the likelihood of each former colony remaining bonded to these very powers. The 'forced' compatibility of former African colonies' institutions (with their former masters' institutions) disqualified other nations or societies from stepping into any kind of trade or investment relationship for a long period of time.

The eruption of several civil wars in the now independent nations across Africa, and the accompanying decrease in primarily formal institutions, led to the fact that (formal) institutions were no longer able to support a certain degree of compatibility with the former colonial power. Figure 7 illustrates a country's institutional landscape which determines the degree of compatibility. The sliding of institutional quality in African countries after independence did not only break ties with former investment sources, but in turn created a new market for matching partners (Head et al. 2011). Figure 6 illustrates this development of institutional pairing, which creates new partnerships in investment and trade. Former relationships, primarily based on formal institutions, tend to have lost significance and created a vacuum, which was later filled by partnerships based on other overlapping institutions.
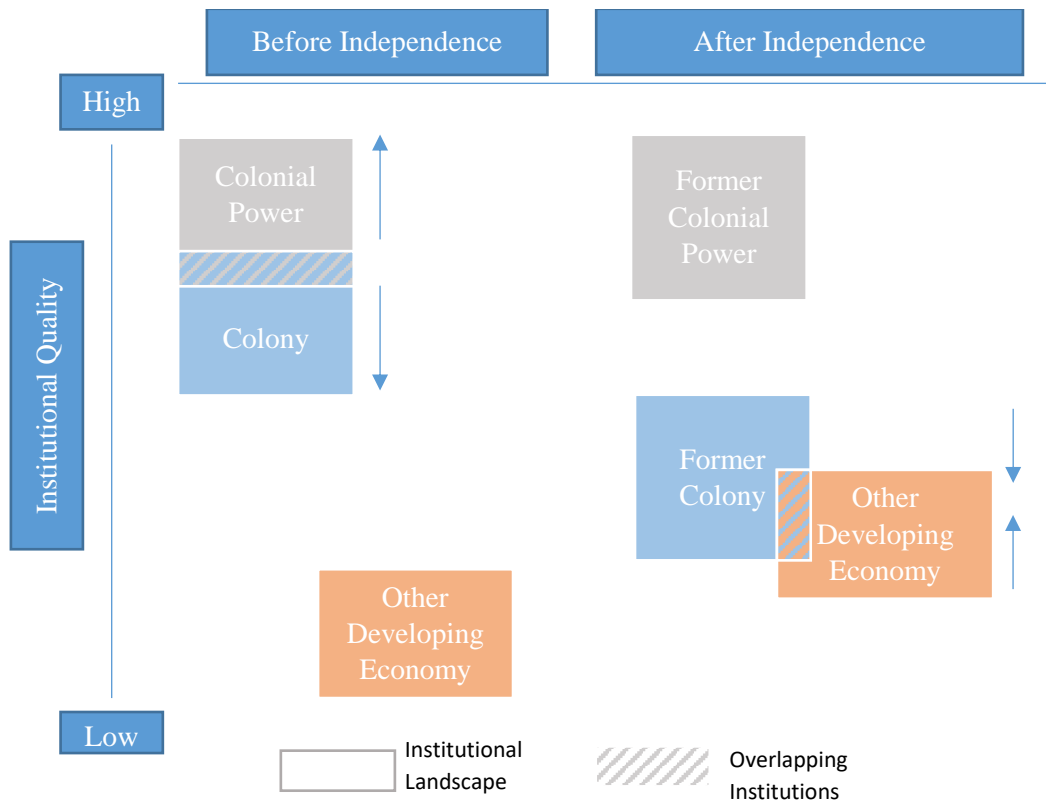
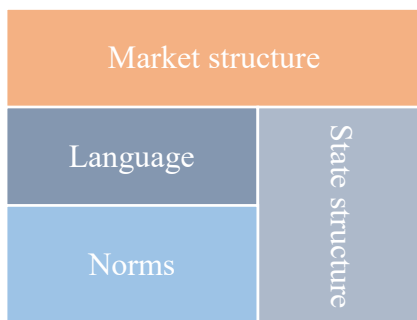*Figure 6: Institutional pairing before and after independence*

Source: Own design

Figure 7: Breakdown of institutional landscape

Source: Own design

Chapter 6: The Empirical Model

6.1 Econometric Model

Many previous studies that have tried to reveal the determinants of FDI flows between nations used linear regressions in order to identify the weighting of each and every factor (Amighini & Sanflippo 2014; Demir 2016). Over the years, researchers made use of the same pool of variables in various combinations and research questions. Although often using the same methodology and comparable models, researchers often found contradicting results especially in the field of formal and informal institutions, and depending on the data structure.

Therefore, this thesis makes use of another approach. By using a binominal probit model, we are able to identify the weighting of determinants in investment decision-making in African countries.

Decision-making can be modelled as a binary choice (no = 0, yes = 1) by using a probit or logit model, which is commonly used in attitude surveys (Aldrich and Nelson 1984). Thereby it is possible to generate a function of the probability of a FDI investment decision regarding several determinants (independent variables).

The literature provides no clear guideline on whether to use a logit or probit model, since both applications provide very similar results and lead to the same conclusions because of the strong similarities regarding their marginal effects (Dill et al. 2015; Gill 2006). According to Verbeek (2008), we can therefore assume a standard normal distribution of the error term ε_i.

Applying the probit model, this thesis analyses the determinants for FDI investment choices in Africa, using the following specifications:

$$y_i{}^* = \beta'x + \varepsilon_i, \ \varepsilon \sim N[0,1]$$

y_{i*} represents the proxy for the choice taken to invest [0, 1] by the partner economy i, whereas 0 equals the choice not to invest and 1 the choice to invest

in one of the African countries. The vector x represents partner and host country specifications regarding formal and informal institutions, as well as market-related structures that influence the decision-making on foreign direct investments. Furthermore, β indicates the magnitude of change in the likelihood of a foreign investor to invest in one of the tested African countries, for a unit change in the respective explanatory variables. The model at hand presumes a normal error term according to Verbeek (2008), which is ensured by εi. The proxy supports an error term that is normally distributed, with a mean value of zero and a variance value of one. Furthermore, specification tests are conducted to ensure the fit of the model according to the data.

6.2 Data

For the purpose of this thesis, panel data for the top 15 African countries were selected according to the Human Development Index (Seychelles, Mauritius, Algeria, Tunisia, Libya, Botswana, Gabon, Egypt, South Africa, Cape Verde, Morocco, Namibia, Congo, Equatorial Guinea, Zambia) (UNDP 2017). The selection of these countries provides not only a significant geographical coverage of Africa, but also ensures a high degree of diverse cultures and country histories across the continent. The diverse country backgrounds are of particular importance, as they allow cross-cultural and cross-institutional research. Moreover, the selected countries provide an acceptable degree of detailed FDI statistics, as well as multi-trade and investment schemes. Each country was examined on the basis of its bilateral FDI inward flows from partner economies with an annual frequency over the period of 2001 to 2013, which represents the dependent variable. In total, this thesis considers 364 single country pairs with the top 15 African countries as the host economy for FDI flows. Based on the country pairs and the time period, the survey covers 3 331 FDI inward-flow observations between single-partner economies.

The bilateral FDI data (in million USD) was obtained from the United Nations Conference on Trade and Development (2014) and is the latest available data on bilateral FDI flows. Independent variables such as geographical distance in kilometres between FDI partner countries, former colony of partner country,

and common official language are based on Mayer and Zignago (2011). The dummy variable takes the value 1 in the case that the FDI-reviewing economy had a former colonial relationship with its partner country, which is identified as the source on FDI inflow into the host economy; the value 0 indicates no colonial relationship whatsoever. Moreover, the host economy in Africa might hold several 1 values for different European economies, as colonial ownership might have changed over the decades. The same principle applies for the variable common official language. A country like Equatorial Guinea, for instance, holds several 1 values due to its past with links with French, Spanish and Portuguese settlers. The usage of these variables are based on the consideration of the economic gravity model introduced by Tinbergen (1962).

Furthermore, ethnic fragmentation indexes for the interacting economies were generated by Fearon (2003) and are at present the only existing indexes that reflect societal cohesion in a diverse and differentiated manner across the globe. The indexes take values of 0 or 1, where 0 indicates a fully homogenous society in terms of ethnic/culture and 1 indicates a full degree of diversification. Theses indexes allow a more realistic approach to identify social groupings within an economy. This is important, as most African states/countries do not have a leading culture, but in fact are home to a multicultural society, whereas most Western countries are more homogenous in terms of culture, language and ethnicity. These circumstances cannot only be described by the term *tribalism*, as it does not nearly cover the magnitude of the topic. Therefore, Fearon's (2003) work draws a more realistic map of the existing peer groups in Africa, and not of those forcefully formed by former colonial powers.

The GDP growth data for the host and partner country was obtained from the World Bank (2016), as well as the merchandise trade as percentage of GDP for the partner economy. The merchandise trade as percentage of a country's GDP serves as a reference for the degree of export orientation and dependence on foreign markets. Furthermore, the data on education – as the percentage of the population aged 25 and older that reached at least a secondary level of education – was firstly sourced from World Bank (2013), but is based on work by Barro and Lee (2013). This variable serves as a reference for educational quality across all African countries, as other data for

Table 1: Overview of indicators used

Indicator	Source
Country list according to HDI	UNDP 2017
FDI inward flow host economy	UNCTAD 2014
Distance (in km) between countries	Mayer and Zignago 2011
Former colony	Mayer and Zignago 2011
Common official language	Mayer and Zignago 2011
Ethnic fragmentation	Fearon 2003
GDP growth rate (%) host economy	World Bank 2016
GDP growth rate (%) partner economy	World Bank 2016
Education	Barro and Lee 2013
Population	IMF 2018
IPRI host economy	Property Rights Alliance 2017
IPRI partner economy	Property Rights Alliance 2017
Political stability host economy	World Bank 2017b
Political stability partner economy	World Bank 2017b

educational quality, especially for smaller African nations, proved to be absent. Data on the population of the FDI host countries (in millions) was generated though the database of the International Monetary Fund (2018) and serves as a proxy for market potential and market size. Furthermore, the international property rights index (IPRI) was obtained from the database of the Property Rights Alliance (2017). The score value spans from 0 to 10, in which 0 equals the lowest level of a country's property rights profile and 10 the highest. The index for political stability and absence of violence was extracted from the Worldwide Governance Indicators (WGI) published by the World Bank (2017b), which hold values from -2.5 (weak) to 2.5 (strong). Political stability and the absence of violence serve as a reference for an overall stable environment within the partner country. This thesis only uses one of the several WGIs, as the indicators have strong multicollinearity, which makes the use other specific WGIs dispensable.

6.3 Empirical Results

Using a binominal probit model, this thesis estimates the influence of determinants for decision-making for FDI flows into African countries among the host economy (HE) and the partner economy (PE). Based on 3 331 valid observations, this thesis further provides estimates of the likelihood of each variable to influence investment choice-making. Firstly, we reveal the influence and significance of each independent variable. Secondly, we go further by taking a deeper look at the single variables and their impact on investment schemes.

The variance inflation factors (VIF) used as a test of multicollinearity generates values from a minimum of 1.06 to a maximum of 2.91 (see table 2). According to Kutner et al. (2005), multicollinearity is high at a value of > 10, while Sheather (2008) argues that a VIF of > 5 indicates a high degree of multicollinearity. As the generated VIF are below both the thresholds, we can assume that multicollinearity very limited in the model at hand. Table 3 shows the estimated results of the probit model at hand. The dependent variables, with their estimated coefficients, standard errors, marginal effects and P-value, are displayed. The marginal effects of the independent variables as shown in column 4 reflect the alteration of each variable according to a discrete change (Williams 2018). The null hypothesis (all coefficients equal to zero) can be rejected, as the likelihood ratio test shows the significance of the model (P < 0.001).

The model generates a pseudo-R² value of 0.2021, which, according to Urban (1993), indicates an acceptable degree of fit. The Pearson and Hosmer-Lemeshow tests that were further conducted show no significance. Thereby it can be assumed that the model is specific (P > 0.1) (Hosmer and Lemeshow 2000).

Table 2: Variance inflation factor for independent variables

Variable	VIF
Political stability (HE)	2.91
IPRI (PE)	2.26
Political stability (PE)	2.16
Population (HE)	2.13
Education (HE)	1.98
IPRI (HE)	1.56
Ethnic fragmentation (HE)	1.46
distance	1.45
GDP growth (PE)	1.2
Common official language	1.17
Merchandise trade as % of GDP (PE)	1.17
GDP growth (HE)	1.12
Former colony	1.06

Source: Own calculation and illustration

The results as displayed in table 3 provide a differentiated picture of FDI decision-making. Nine of the tested variables show a positive effect, while four out of the 13 tested variables show a negative effect on the decision to invest in the selected African economies. Furthermore, eight of the variables are highly significant. The marginal effects spread from a minimum of 0.000000888 (distance between host and partner economy) to a maximum of 0.338192 (former colony). Below we focus on the most important aspects of the variable pool.

Table 3: Estimated results of the probit model (n = 3 331)

Variable	Coefficient	Standard error	Marginal effect	P > |z|
Common official language	0.6554942	0.059192 (#)	0.245269	0.000***
Former colony	1.073.778	0.153212 (#)	0.338192	0.000***
Ethnic fragmentation (HE)	-0.5897756	0.101951	-0.23252	0.000***
GDP growth (HE)	0.0267742	0.005741	0.010556	0.000***
GDP growth (PE)	0.0076984	0.006507	0.003035	0.237
Distance	2.25E-06	7.76E-06	8.88E-07	0.772
Merchandise trade as % of GDP (PE)	-0.0052583	0.000586	-0.00207	0.000***
Education (HE)	0.0033342	0.00212	0.001315	0.116
Population (HE)	0.0050965	0.001448	0.002009	0.000***
IPRI (HE)	0.0024148	0.002201	0.000952	0.272
IPRI (PE)	0.0093511	0.001547	0.003687	0.000***
Political stability (HE)	-0.2089848	0.055812	-0.08239	0.000***
Political stability (PE)	0.0631387	0.042403	0.024892	0.136

Level of significance $P < 0.1^*$, $P < 0.05^{**}$ and $P < 0.01^{***}$; (#) Marginal effects for a discrete change in the dummy variable from 0 to 1;

Source: Own calculation and illustration

Common official language and former colony

The common official language variable is one of the strongest in the entire model. Not only is it highly significant (P < 0.01), but in terms of marginal effects it changes the decision-making quite drastically. The fact that a host economy does share the same official language (dummy variable = 1) as its partner economy will increase the likelihood of the partner economy to invest in this very economy by about 24.5% (see table 3). Moreover, the status of a host economy as a former colony of the partner economy (P < 0.01) will increase its probability to be picked as a potential destination for FDI by more than a third (33.8%).

Ethnic fragmentation

As stated above, the ethnic fragmentation index takes values between 0 to 1. Zero equals a totally homogenous society, and 1 a total diversified population. Thus, an increase in one unit in the index will decrease the likelihood for a host economy to receive FDI from its partner economy. Hence, the fact that a country is totally diversified in terms of ethnicity will cut the probability to be chosen as a destination for FDI by ~23.3% in comparison to a totally homogenous society. In order to test the stability of the results, a second probit regression was conducted, replacing the data on ethnic fragmentation with the index on cultural fragmentation sourced from Fearon (2003). Both probit regressions generated similar results.

GDP growth, distance, merchandise trade as percentage of GDP, population and education

The above-mentioned market-related variables all show very different results. GDP growth in the host economy, merchandise trade as a percentage of the GDP and host country population are statistically highly significant (P < 0.01). In this context, population is therefore very important. As population in this model is measured in millions, the growth of a country's population by one million would increase the probability of investment by 0.2%. This effect could therefore multiply itself through a dramatic increase in total population in the host economy. Moreover, it is interesting to note that the distance between economies does not seems to be that important any more, as often argued in

trade gravity models (Porojan 2001), as distance is the least significant of all the variables. Furthermore, the GDP growth rate of the partner economy does not seem to be as important as the growth rate of the host economy. This assumption is backed by the fact that a marginal increase in the percentage of merchandise trade (for PE) contributes negatively to decision-making in favour of investing in the African countries. Regarding the decision-making on FDI, it can be stated that the choice to invest rather depends on the host country's market characteristics than on the partner's market characteristics. The variable education shows an expected positive impact in choices on FDI. However, the impact of a 0.13% increase in the percentage of the specified groups (population aged 25 and older who reached at least a secondary level of education) is limited.

Political stability and the international property rights index

The political stability index for the host and partner countries provides very contradictory results. The index for the host economy contributes negatively, while the partner economy's index contributes positively to the investment decision. According to the findings, the host economy's index is highly significant (P < 0.01) and decreases the likelihood of investing with a marginal improvement in political stability of ~8.2%. In contrast, an increase in the political stability index for the partner economy by one unit would increase the effect by ~2.5%. However, the results for the partner economy are not significant (P = 0.136). As the political stability index takes values from -2.5 (weak) to 2.5 (strong), an increase of one index unit thereby represents a great upward push in the overall stability range. Furthermore, the model shows different result regarding the IPRI, which takes values from 0 to 10. It is noticeable that the coefficient has a negative impact that is also highly significant (P < 0.01). Thus, a marginal rise in the index (by one unit) would lead to a decreased likelihood of investment by 8.2%. On the other hand, the model generates quite opposite results for the partner economy. Political stability of the partner economy has a positive influence. Moreover, the marginal effect reveals that a marginal positive change would increase the probability to invest by 2.5%. However, the P-value (P = 0.136) indicates that these results are not significant.

6.4 Discussion

In the following paragraph we recall the generated results, put them into theoretical perspective, and critically examine them in the context of formal and informal institutions and their impact of investment decisions.

The model at hand provides a deeper view of present FDI decision-making and thereby updates the former theories. The large positive effect of the use of a common official language (+24.5%) on choice for FDI does not come as a surprise and is line with most publications revealing the connection of trade and the use of language. The use of a common language is one of the basic requirements for international trade and therefore for FDI. It increases the ease of communication and decreases transaction costs (Melitz & Toubal 2012). Because of this, language should be regarded as one of the lowest common but most important denominators, as introduced in Chapter 5. However, the issue concerning language goes much deeper and involves not only obvious aspects such as communication. It is also a vector that carries fundamentals such as identity and overall structures like state and cultural patterns. The existence or absence of words or terms shape not only the perception of people, but also provides evidence of their own cognition.

The forced implementation of European languages as a means of communication brought European structures (formal and informal) to Africa and widely ignored the former predominating cultural and societal frameworks. In the context of modern trade and globalisation, a common language provides the foundation to interact with international partners. However, the introduction of different official languages (e.g. English, French, Portuguese, etc.) not only cut through long-lasting ethnic groups in Africa, but also discouraged other potential partners from investing. Thereby, official languages, especially in the African context, create 'category dependencies'. For instance, countries like Mozambique and Angola use Portuguese as an official language due to their colonial heritage. These countries have a relatively limited pool of investors because of their geographical origin, due to the fact that Portuguese (in a global context) in less widespread than English or French. Countries like South Africa, on the other hand, have a very diverse pool of investors, as English is

widely spoken, while the presence of 11 official languages increases the potential likelihood to find investment partners in surrounding or neighbouring countries (UNCTAD 2014, 2017).

In future research, category dependencies must be examined further in order to reveal the underlying economic advantages of a certain language.

Furthermore, the results suggest that ties between former colonies and former masters are still present in terms of economic interests. The increased likelihood of 33.8% to invest in a country that was formerly ruled by the investing nation indicates the institutional footprint left by the former masters. Therefore, North's (1990) observations regarding colonial heritage and its influence on modern institutions still holds true in the 21st century (see section 2.5). However, these mechanisms must be examined further in the future, as the logit model only provides coefficients for choices taken (to invest) but further conceals the underlying structures that secure the status quo for the former colonies, and nowadays host economies of FDI. Formerly installed institutional structures, continued linkages, and relationships between nations still heavily determine present economic interactions. This, in turn, can lead to two different conclusions. First, up to this day, former colonised nations have not been able to 'shake off' their implemented 'institutional head collars', while most of their state-owned institutions remain untouched after claiming independence (North 1990; La Porta et al. 1997, 1998, 1999). Second, it might even appear that these countries did not find the economic or social need to change their institutional setup just for the sake of convenience. The long-lasting and still present economic dominance of former colonial masters, paired with the lack (and forced limitation) of other interested parties, created an institutional halt. However, these results are only applicable to the status quo as of now. Recent developments in African countries like Ethiopia, Mozambique and Zambia, where new Asian investors set foot, call for a frequent 'overhauling' of this conclusion (Jansson & Kiala 2009; Kragelund 2009).

The results of ethnic fragmentation again give cause for a controversial debate on the economic impact of ethnic diversity. However, the results clearly

suggest that an increasing degree of ethnic fragmentation or racial diversification has a substantial negative effect (-23%) on choices to invest in African economies. Alesina & La Ferrara (2003) argue that the root of social and political instability in these countries lies in the impossibility of equal power-sharing among the groups involved. Furthermore, Lijphart (1977) states that societies with a high degree of diversification can only be sustained for as long as the existence of the external threat that secures the inner truce (see section 2.8.1). Table 4 and Table 5 support Lijphart's observations. Table 4 shows the top ten countries with the highest ethnic fragmentation index for 2003, with the associated WGI data on political stability/no violence. Nine out of the ten countries suffer from a serious lack of political steadiness and general security, while eight of these countries are African economies. In contrast, the top ten countries according to the lowest ethnic fragmentation index, as illustrated in table 5, show that all, except for Yemen, have a relatively good position regarding political stability/no violence. Furthermore, tribalism and religious polarisation can also be argued to be main drivers for social and political instability and outweigh linguistic differences (Reynal-Querol 2002). Furthermore, ethnic fragmentation does not only hinder national unity (and thereby political stability), but also increases the complexity for the investor, as he has to adapt not to one foreign culture, including norms, beliefs and language, but to multiple cultures at the same time. However, it seems quite difficult to distinguish ethnicities along tribal, religious or linguistic lines (Fearon 2003). Therefore, ethnicity must be handled very carefully in such a context, as the term itself only holds very arguable definitions. Consequently, results based on these definitions can only be unsatisfactory and demand further research to identify and qualify valuable aspects.

Table 4: Top 10 countries with the highest ethnic fragmentation index, 2003

Country	Ethnic fragmentation index	WGI – political stability, no violence*
Papua New Guinea	1	-0.56
United Rep. of Tanzania	0.953	-0.85
Democratic Rep. of Congo	0.933	-2.03
Uganda	0.93	-1.56
Liberia	0.899	-2.16
Cameroon	0.887	-0.43
Togo	0.883	-0.19
South Africa	0.88	-0.31
Congo	0.878	-1.17
Madagascar	0.861	0.62

*data for 2003
Source: own design on the basis of Fearon 2003; World Bank 2017b

Table 5: Top 10 countries with the lowest ethnic fragmentation index, 2003

Country	Ethnic fragmentation index	WGI – political stability, no violence*
Korea, Republic of	0.002	0.22
South Korea	0.004	0.25
Japan	0.012	1.03
Tunisia	0.039	0.32
Portugal	0.04	1.29
Italy	0.04	0.43
Poland	0.047	0.58
Greece	0.059	0.48
Netherlands	0.077	1.16
Yemen	0.078	-1.48

*data for 2003
Source: own design on the basis of Fearon 2003; World Bank 2017b

The model further provides a deeper insight into market-related variables. The results suggest that GDP growth (for the HE and PE) per se does not have an overall strong influence on decision-making on whether or not to invest in an African country. These results can best be explained in combination with the outcome for merchandise trade as a percentage of GDP (PE) (see table 3). It seems obvious that the stronger the growth in a domestic economy, fuelled by a strong foreign demand, the less the necessity and effort for an economy to physically invest in foreign markets. This becomes clearer when observing exporting economies. Regarding export-orientated economies like Germany, Japan and China, it is interesting to note that, with a decreasing growth rate of GDP per capita, the FDI net outflow seems to increase (see Table 7 and 8 in appendix. Thus, a strong economy with a high, stable and unchallenged degree of exports and merchandise trade will not necessarily be interested in physical investment in other parts of the world if it can work foreign markets from home. When these economies experience domestic economic pressure, as in a lack of natural resources and/or human capital, decreasing domestic demand or shrinking market shares and market access, FDI outward flows will rise. Therefore, in this context, FDI outward flows partially act as a stress indicator for domestic economies in a globalised world.

The literature provides reasons that equate international trade and FDI in terms of their preconditions. This model partially identifies similar determinants for FDI (common language, former colony, etc.), just as the literature does for international trade. Thus, a certain degree of communalities between these two are undeniable. Regarding trade, Leamer (2007, p. 110) states that "distance […] is possibly the only finding that has fully withstood the scrutiny of time and the onslaught of econometric technique". However, the model proves that the impact of distance on FDI and trade differs and follows different norms. The P-value ($P = 0.772$) suggests that distance in the context of FDI does not play a major role in investment decisions. This could be based on the following considerations: Trade obviously includes the transportation of physical goods and commodities from one destination to another. Furthermore, trade only takes place if the commodity's additional value is higher than the involved transportation costs. Therefore, increasing distance

will reduce the additional value of goods/commodities for the trading partners, and is thence a crucial determining factor.

However, FDI does not necessarily entail a physical transportation of goods over long distances, although it might encounter similar taxation schemes when imported. FDI is therefore much more mobile and faster, as the physical activation (purchase of land, construction, acquisition of shares, etc.) of the initial investment can be done in almost every part of the world, as long as the activation (of FDI) itself is not locally restricted.

Nevertheless, a functional financial sector is a precondition for capital mobility, and this was strengthened over the past decades in African economies and eased investments (Kelly & Mavrotas 2003; Adedeji & Thornton 2006).

The model further suggests that education, like GDP growth (PE), is not necessarily a strong determinant persuading an investor to choose African countries as location. Although it has a positive influence on decision-making, education per see is not significant. This is particularly interesting, as it leads to scrutiny of the often repeated 'dogma' that education is the key to attracting foreign investors to African economies. According to the TIMSS International Mathematics Reports, African countries constantly perform far under the international benchmark (Mullis et al. 2004; Mullis et al. 2016). The thesis that it is primarily education that attracts investors to African countries is thus rather questionable, especially under the given fact that FDI in African countries has steadily increased in the past decades (see Chapter 4), even while education levels dropped in some African countries (Mullis et al. 2016). Moreover, many of the selected countries rely on the exploitation of natural resources. African economies lack a substantial degree of manufacturing, which degraded the host economies for a long time, as they became only suppliers of raw materials and resources (Bigsten & Söderbom 2005). There is no question that knowledge and education determine the possible degree of manufacturing. However, is seems that investor choices (as of now) to invest were not hindered by the lack of educational quality in the host economy. Due to this, FDI in this context aims at technology exploitation (see section 2.6). Therefore, it is rather plausible that investors adapted to the economic circumstances,

bypassing the shortcomings of the African host economies. This impression is backed by the marginal effects of IPRI for the host economy. Although an increase in the overall protection of property rights does have a positive effect on decision-making, the overall impact of an increased IPRI is limited. The results on political stability in this context are therefore worrying, as they indicate that current investors are indisposed by the higher degree of political stability. This can be explained by current developments in Africa, where single countries step forward, invest substantial sums in the construction of infrastructure, while securing their access to natural resources across the continent (Muekalia 2004; van de Looy 2006; Bach 2011). The access to these natural deposits could be hindered by a higher degree of bureaucracy and national unity, which would not allow investors to play local stakeholders off against each other to gain substantial bargaining power. Moreover, partner economies are more likely to invest in a region if (through whatever means) the host is able to grant an exclusive right to resources to the partner. In the past, these grants in the African context often were linked to a non-transparent history of agreements that dispense with any liberal democratic and market rules (Asiedu 2006).

6.5 Policy Recommendations

The results generated in this study should make the leaders of African countries sit up and take notice. Although most economies publicly pride themselves on measures promoting a healthy institutional environment, many foreign investors in Africa do not seem to be influenced by that.

This, in turn, should raise concerns, as the institutional paring, be it formal or informal, might be beneficial for the host economy in order to gain FDI in the short run, but might lead to negative shifts/developments in formal institutions triggered by a limited institutional framework in the long run (see Chapter 5).

Therefore, the question, "How should countries react to this?", remains.

First, African economies should clearly identify their investor pool (of partner economies) with the according investment intentions. Second, the approach of

the potential investor should be carefully considered and examined, with a focus on the institutional framework and economic circumstances of the partner economy. The finding of the lowest common denominator among the two parties in terms of institutions only provides the base on which FDI can take place. However, it makes no provision for whether the flow of FDI, the institutional landscape involved, or the overall partnerships will be sustainable. The matching of institutions can also result in a downward spiral. As already illustrated in Chapter 5, certain combinations of countries with different institutional landscapes do in fact reduce the potential for institutional improvement due to the lack of positive incentives, although at first sight they seem to be suited. Thus, African countries should develop an awareness of the institutional framework of their partner economies. The gain of FDI should not come at the cost of reduced institutional quality.

Moreover, African economies should aim at developing institutions that eventually attract economies aiming for technology sourcing instead of technology exploitation. This, of course, is a gradual and long-lasting development, but in this manner countries like China and India were able to turn from a FDI host economy to a donor economy. This development went along with a substantial economic boost and improved domestic welfare. The results regarding educational quality are rather disappointing, as investors are not primarily attracted by this determinant. This again should encourage African countries' efforts towards higher education standards to turn their economy from primarily supplying raw material to a centre of manufacturing. In this manner, African countries will become not only more independent, but would also qualify (in most cases) for FDI from more developed countries and enterprises that have higher standards of institutional quality. African countries therefore would enlarge their pool of potential investors and increase the possibility to improve their institutional setup.

The findings on the determinants *common language* and *former colony* should not necessarily be interpreted as enslaving institutions; rather, they should be seen as an advantageous base (lowest common denominator) that automatically qualifies countries for FDI. However, African countries should not rest on this advantage, but further develop educational standards that provide

more institutional overlapping with other potential FDI donors. To further attract qualified FDI sources, African countries should strengthen their democratic structures, division of powers, and the security of property rights. As the model generates results that suggest that investors are not necessarily discouraged by a lack in the abovementioned aspects, African countries should question this behaviour and investigate the potential benefits for the investor of operating in an unfavourable environment.

Finally, ethnic fragmentation still is a very determining factor for investors, and influences political as well as social stability and thereby FDI inward flows. Because of this, African countries should reduce the influence of ethnic groupings in government or any state body. The development of individual perceptions by national citizens should replace people's identification along ethnic and cultural lines. In order to overcome former disrupting colonial acts, like randomly formed borders cutting though social and ethnic groups, African nations should promote a national consciousness. This, of course, will come at the cost of an overall loss in cultural diversity, but will increase the inner national cohesion and thereby political stability.

Chapter 7: Conclusion

This thesis provides an alternative approach to identify determinants for decisions to investment in African countries. Moreover, this thesis has contributed to literature, as it has changed the common view of FDI-attracting measures. Most publications engage with this topic primarily from a country perspective, while this thesis, by using a probit model, takes an actual investor's point of view. Thereby, the model made it possible to go beyond common dogmas, theses and beliefs regarding development economics and to relativise the impact of FDI-attracting determinants. The thesis found similarities with other publications regarding institutional structures and their impact on FDI inflows, but also refuted some of them. Moreover, the model extends the focus of FDI-attracting determinants by introducing variables for informal institutions by viewing them from a more realistic investor's perspective. The results furthermore reveal differences in determinants for international trade and FDI. Although both follow similar principals, the actual factors can differ in praxis.

Moreover, the thesis generated surprising as well as worrying results, which should extend and fuel a more critical public discussion regarding FDI in African economies. Results that suggest that underperforming education systems, a lack of local property rights, and insufficient political stability do not turn down investors' ambitions should not undermine the efforts of countries in these fields, but should, to some extent, question the investors' incentives. Furthermore, the results reveal that old ties between African and mostly European countries are still present and are particularly important for investment. However, with the arrival of new investors (from Asia, for instance) the *rules of the game* for FDI have changed considerably. Thus, the model used provides a snapshot of the current situation, in which two investment schemes struggle to prevail. This struggle is noticeable in the contradictory findings of the model for some observers, which seems logical as we might stand at a turning point for FDI in developing economies.

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Appendix

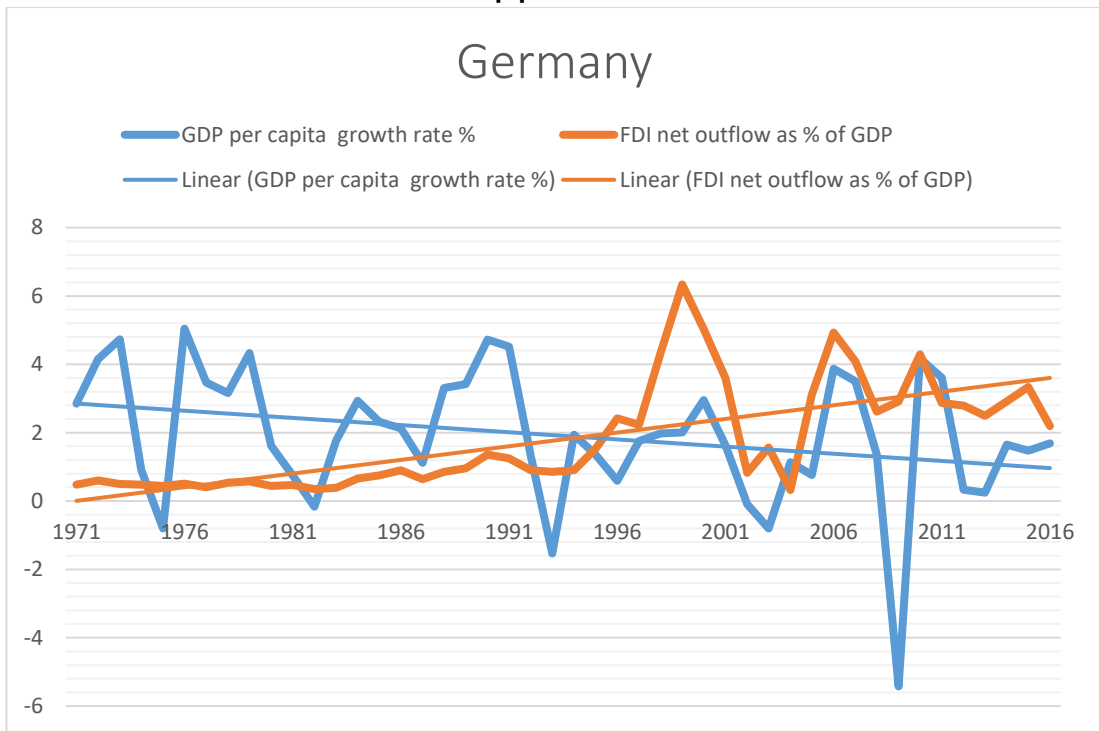*Figure 8: Relation GDP growth and FDI outflow for Germany*
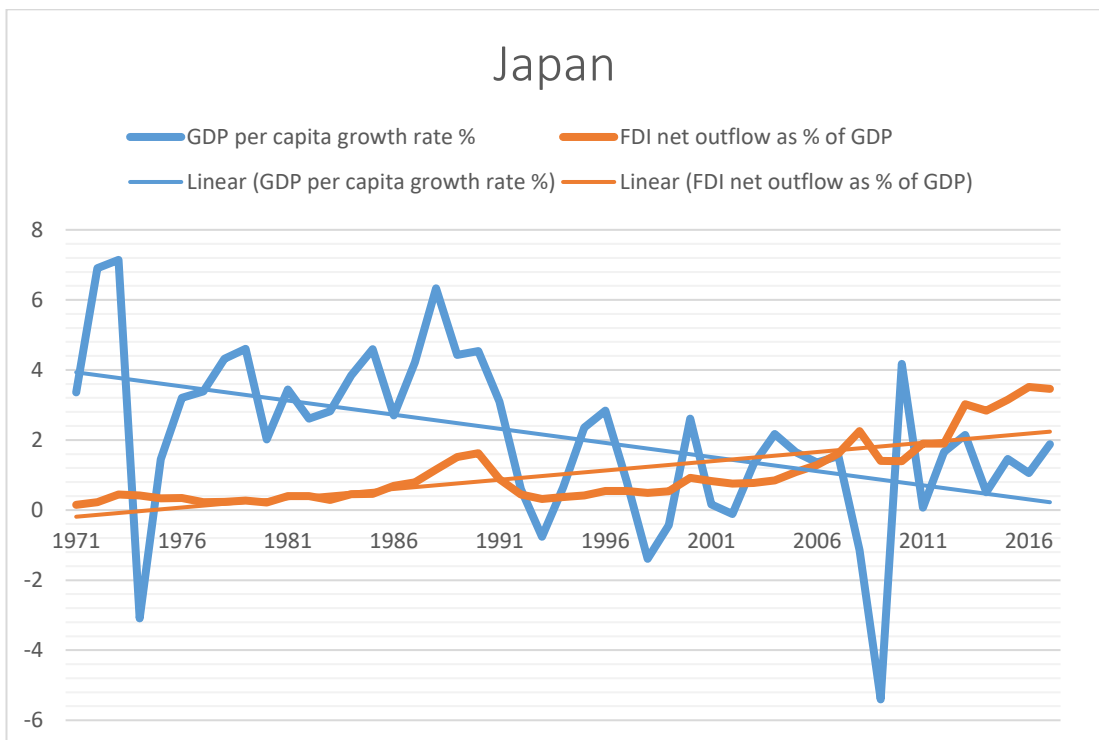
Source: World Bank 2017c

Figure 9: Relation GDP growth and FDI outflow for Japan

Source: World Bank 2017c

Table 6: Summary of data pool used

Variable	Number of Observations	Mean	Std. Dev.	Min	Max
Common official language	4177	0.289921	0.4537798	0	1
Former colony	4177	0.0462054	0.2099548	0	1
Ethnic fragmentation (HE)	4025	0 .4651568	0.2687841	0.039	0.88
GDP growth (HE)	4176	4.66495	5.701843	-62.07592	63.37988
GDP growth (PE)	4105	3.24048	4.457512	-62.0759	63.37988
Distance	4165	5653.744	3655.833	396.8041	17139.16
Merchandise trade as % of GDP (PE)	4041	72.94591	52.23051	16.45136	398.4298
Education (HE)	4177	44.96296	14.62762	24.5	80.8
Population (HE)	4177	26.07527	23.104	0.081	82.4
IPRI (HE)	4177	40.80441	13.48199	10	75
IPRI (PE)	3994	65.57086	23.20651	5	95
Political stability (HE)	4177	-0.1865963	0.7069092	-1.753627	1.28206
Political stability (PE)	4049	0.4266048	0.8186024	-3.180798	1.760102

Source: Own calculation and illustration