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Property Rights as a Determinant of Foreign Direct Investments

- A qualitative and quantitative study

Author:
Kerstin Olsson

Supervisor:
Therese Nilsson

Abstract

This study has its starting point in the fact that not all developing countries are equally successful in attracting foreign direct investments (FDI). Consequently, this study examines the determinants of FDI in a developing country. In previous research, there has been a recent shift of focus to the institutional environment of the host countries as a determinant of FDI. In line with this development, this study further examines property rights as a determinant of FDI. To meet this objective, both a qualitative and a quantitative study is conducted. The result of the qualitative study provides evidence of the importance of market size, natural resources, human capital, infrastructure, investment climate, and property rights as determinants of FDI in the cut flower industry in Kenya. Based on interviews with investors and stakeholders, the result highlights the importance of property rights protection to land, and identifies both market and non-market transaction costs in FDI. In order to draw general conclusions on the determinants of FDI in a developing country, the qualitative result is put in relation to the result of the quantitative study. The quantitative study is performed through a regression analysis of 55 developing countries over the time period 1980-2010. The quantitative result confirms the positive effect of property rights protection, market size, human capital, and openness to trade on FDI. The consistency of the qualitative result of the Kenyan cut flower industry, and the quantitative regression result of FDI across industries, developing countries and over time, provide overall the results of this study with robustness.

Keywords: Kenya, Foreign Direct Investment, FDI, Property rights, Instrumental variable approach

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Any errors remain my own responsibility.

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Abbreviations

EAC	East African Community
EPZA	Export Processing Zones Authority
FDI	Foreign Direct Investment
HCDA	Horticultural Crop Development Agency
KFC	Kenya Flower Council
KIA	Kenya Investment Authority
MoA	Ministry of Agriculture
OLS	Ordinary Least Squares
TSLS	Two-Stage Least Squares

1. Introduction

Over the past two decades there has been an increase in economic policies in developing countries focusing on attracting foreign direct investments (FDI) (Mathur & Singh 2011, Biglaiser & Staats 2010). The list of potential advantages of attracting FDI can be made long. For instance, FDI contributes to the creation of economic growth, by providing a stable way for developing countries to increase capital flows and capital formation. FDI also functions as a vehicle for technological progress, and a way to increase national competitiveness and trade in a global economy (UNCTAD 2004, Tejinder & Newhouse 1995, Bénassy-Quéré et al 2007).

In spite of this development, the results in attracting FDI differ among developing countries. An important related question to this development is: *which are the key determinants of FDI in a developing country?* The macroeconomic determinants of FDI in developing countries have been analysed to a considerable extent by previous research, and a multiple of different determinants are found to affect FDI. Some common ground is identifiable in terms of the effect of some of the most fundamental determinants, such as the positive impact of the host country market size, human capital, and macroeconomic stability (see e.g. Mathur & Singh 2011, Biglaiser & Straat 2010, Gwenhamo 2011, Resnick 2001, Morisset 2001).

There has been a recent shift of focus to the role of the host country's institutional environment as a determinant of FDI, e.g. through studies of the effect of the host country's property rights protection on FDI (see e.g. Gwenhamo 2011, Resnick & Li 2003, Biglaiser & Straat 2010, Bénassy-Quéré et al 2007). Most of the previous research of property rights as a determinant of FDI is based on institutional theory (see e.g. Gwenhamo 2011, Biglaiser & Straat 2010, Bénassy-Quéré et al 2007). Institutional theory suggests that well-defined property rights increase FDI by reducing transaction costs and risks in economic exchanges (Gwenhamo 2011). Hence, according to institutional theory, foreign investors value host countries that guarantee property rights (Mathur & Signh 2011). Thus, this study aims to examine: *what importance do property rights have as determinant of FDI in a developing country?*

To meet this objective, both a qualitative and quantitative study is conducted. For the qualitative study, the Kenyan cut flower industry presents an interesting case for examining property rights as a determinant of FDI in a developing country. The production of flowers requires access to land that is suitable for growing. In an industry where land is a key factor of production it is essential that property rights to land are clearly identified over the time period required for the investment. Hence, property rights specify the level of access, the legitimate usage, and the right to claim benefits or an income stream from the land (World Bank 2003:22, 25-27).

During the recent decade, the Kenyan cut flower industry has grown rapidly. During the same period of time, the Kenyan government has implemented various policy strategies to promote private sector investment and FDI (UNCTAD 2012). However, Kenya is still ranked as an underperformer in world-wide rankings of host countries by their performance and potential in attracting FDI (Njoroge & Okech 2011, UNCTAD 2007). Thus, the question arises: *what determines the inflow of FDI to the cut flower industry in Kenya? What importance do property rights have as a determinant of FDI in the Kenyan cut flower industry?*

For the quantitative study, the aim is to examine the determinants of FDI in low to middle-low income developing countries. This is done by performing a regression analysis on a sample of 55 developing countries over the time period 1980-2010. The results contribute to the existing literature on the determinants of FDI in developing countries by examining the presence of reversed causality between FDI and property rights. In addition, following the reasoning of Biglaiser & Straat (2010), the quantitative results also provide a benchmark for testing the validity and universality of the results of the qualitative study. Consequently, the regression analysis provides the opportunity to generalise the results.

Most previous researchers use large data sets to arrive at their conclusions on the determinants of FDI. Therefore, they are unable to go deeply into the determinants of FDI. Missing from these studies is the expertise from the actual decision makers, i.e. the foreign investors themselves. In line with the reasoning of Biglaiser & Straat (2010), this study aims to address this missing feature by querying investors and stakeholders which factors they consider as important determinants of FDI. The method of the qualitative study consists of semi-structured, in person, interviews with both investors and stakeholders. The advantage of this method is that it allows for open ended questions, based on an interview guide, where the respondents may elaborate freely in their answers (Bernard 2006:210, 212). The analyses of the results of both the qualitative and quantitative study are based on previous research and institutional theory.

This study provides evidence of the importance of market size, human capital, infrastructure, and investment climate as determinants of FDI in the Kenyan cut flower industry. Based on interviews with investors and stakeholders, the result highlights the importance of property rights protection to land, and identifies both market and non-market transaction costs in FDI. The regression result of the quantitative study confirms the positive effect of property rights protection, market size, human capital, and openness to trade on FDI. The consistency of the qualitative result found for the Kenyan cut flower industry, and the quantitative regression result for FDI across industries, developing countries and over time, provide the overall results of this study with robustness.

The rest of the paper is organised as follows. Part I provides a theoretical framework underlying the rest of the study. Part II consists of a qualitative study on the determinants of FDI in the Kenyan cut flower industry. Part III contains a quantitative regression analysis on the determinants of FDI in 55 developing countries. The study is concluded with a discussion of the main findings.

Part I: Theoretical Framework

This section provides a definition of FDI, a summary of the main motives and determinants of FDI as considered in previous research, and the institutional theoretical framework. The purpose of this section is to provide a theoretical basis underlying the rest of the study.

2. Foreign Direct Investments

Definition

Foreign direct investment (FDI) is defined as a cross-border investment, involving a long-term relationship and lasting interest of an investor in another economy (OECD 2013, UNCTAD 2014a). It consists of private or state owned capital flows, which provide the investor, or parent enterprise, with at least 10% control over an enterprise outside the home country (Biglaiser & Straat 2010, UNCTAD 2014a). Kenyan law states that a foreign investor is a natural person, partnership, company or other corporate body which is not, or is not owned by, a citizen of Kenya. The term investment refers to the contribution of local or foreign capital by an investor, which includes the creation, purchase of business assets, or expansion, restructuring, and improvement of a business enterprise (IPA 2004).

Motivations of FDI

Apart from the importance of property rights, previous research considers a number of additional factors as important determinants of FDI. These are summarised in Table 1. The first column of the table shows a categorization of the main motivations of FDI. These categories are based on the findings of UNCTAD (1998), where the key determinants of FDI are divided into three broad categories: *FDI policy*, *business facilitation and economic determinants.* The economic determinants are in turn divided into four sub-categories. These are: *market-, resource-, efficiency-seeking* and *competitiveness-enhancing* motivations of FDI. In addition to the categories considered in UNCTAD (1998), a category reflecting the *institutional environment* is included. This category reflects the institutional features considered as important determinants of FDI by recent research.

The second column shows the institutional and policy related determinants considered important by previous research. In the category FDI policy, the factors listed are economic and political stability, and openness to trade. The fifth column lists previous research that considers each category of determinants as important. The third and fourth column summarise the key economic determinants considered by previous research.

The third column lists the economic determinants traditionally considered by previous research. These are market size, human capital, physical infrastructure, capital, and input cost and productivity. According to reasoning in UNCTAD (1998), the recent globalisation of the world economy has given rise to changes in the relative importance of some traditionally considered determinants. For instance, the relative importance of the domestic market size for market-seeking FDI is believed to have shifted. In a global world economy, market-seeking FDI is believed to mainly be motivated by the access to international markets, rather than to primarily serve the domestic market of the host country (UNCTAD 1998).

Table 1

Determinant / Category	Institutions/ Policy	Economic		Previous research
		Traditional	Globalised	
FDI Policy[i]	Stability - Economic - Politic			Gwenhamo (2011), Asiedu (2006), Mottaleba & Kalirajanb (2011), Resnick (2001), Biglaiser & Straat (2010)
	Openness to trade			Resnick (2001), Mathur & Sign (2011), Morisset (2001), Gwenhamo (2011), Biglaiser & Straat (2010), Tejinder & Newhouse (1995), Mottaleba & Kalirajanb (2011)
Business facilitation[i]	Promotion & incentives - Low tax			Mathur & Singh (2011)
Institutional environment	Property rights			Bénassy-Quéré et al (2007), Tejinder & Newhouse (1995), Asiedu (2006), Knutsen et al (2011)
	Corruption			Bénassy-Quéré et al (2007), Asiedu (2006), Knutsen et al (2011), Resnick & Li (2003)
	Democracy			Resnick (2001), Resnick & Li (2003), Jensen (2003)
Economic: Market-seeking[i]		Market size - GDP level - GDP growth	Market size - International markets	Bénassy-Quéré et al (2007), Biglaiser & Straat (2010), Gwenhamo (2011), Resnick (2001), Ali et al (2001), Mottaleba & Kalirajanb (2011), Knutsen et al (2011),
Resource-seeking[i]		Human capital - Cheap and unskilled - Size of labour force Natural resources - Total stocks - Fuel, minerals -Energy production Physical infrastructure - Phone lines - Internet users Capital - Intensity - Flows	Human capital - Skilled and reliable supply - Literacy rate - Secondary education - Value added - Tertiary enrolment	Resnick & Li (2003), Asiedu (2006), Morisset (2001) Gwenhamo (2011), Mottaleba & Kalirajanb (2011) Biglaiser & Straat (2010), Asiedu (2006), Mathur & Singh (2011), Resnick & Li (2003), Knutsen et al (2011), Morisset (2001) Mathur & Singh (2011), Morisset (2001), Mottaleba & Kalirajanb (2011) Gwenhamo (2011), Biglaiser & Straat (2006), Tejinder & Newhouse (1995)
Efficiency-seeking[i]		Input cost and productivity	FDI policy - Business facilitation - Investment policy	Tejinder & Newhouse (1995), Mottaleba & Kalirajanb (2011), Asiedu (2006), Bénassy-Quéré et al (2007)
Competitiveness-enhancing[i]			Created assets -Agglomeration economies - Broad range of resources - Infrastructure facilities	*

[i] Categories based on UNCTAD (1998)
* Not commonly considered in previous research

The fourth column explains how these traditionally considered determinants are altered by increased competitive pressure in a globalised world economy. The determinants added to the traditional ones are skilled labour force, FDI policy and created assets. Created assets are assets generated by the host country with the aim of providing the investors with a competitive edge. One such example is infrastructure facilities, i.e. the provision of a reliable transport system. Additional created asset are agglomeration economies and the availability of a broad range of resources. Agglomeration economies are spatial clusters of related activates and specialized services. The clusters are often focused towards upgrading the competitive advantage of the participating investors (UNCTAD 1998).

3. Institutional Theory: *Why Do Property Rights Matter for FDI?*

In previous research the importance of property rights for FDI is often based on institutional theory (see e.g. Gwenhamo 2011, Biglaiser & Straat 2010, Bénassy-Quéré et al 2007). The theory states that well-defined property rights positively affect FDI, by reducing the transaction costs and risks in economic exchanges. Hence, property rights influence the allocation and utilization of resources (Gwenhamo 2011, Musole 2009).

Institutions are defined as humanly created constraints which govern social interaction (North 1991, Resnick & Li 2003). Furthermore, institutions are divided into levels of constraints, either formal (i.e. laws and constitutions) or informal (i.e. behavioural norms, conventions and codes of conduct), and enforcement characteristics which legitimise and maintain the formal constraints (North 1990:4, North 1991). Institutions affect the set of allowed actions, and the relative prices of choosing one action over the other. In this sense, institutions create structures of incentives that influence the behaviour of economic agents (Justesen & Kurrild-Klitgaard 2013, Tejinder & Newhouse 1995).

As an institution, property rights consist of social agreements, which are backed up by both informal and formal norms. Hence, property rights rely on both the consensus between people on how a certain resource is held, used and transferred, and on the administration and enforcement provided by the government (World Bank 2003:22-24, Resnick & Li 2003). Property rights and the way in which they are designed, together with efficient enforcement mechanisms, contribute to defining the incentive structures that influence the behaviour of economic agents (Justesen & Kurrild-Klitgaard 2013, Tejinder & Newhouse 1995).

Property rights specify the access to and legitimate uses of a resource. Access is determined through the duration of the rights, which span from perpetual, full ownership, to temporary user rights. The level of access affects the investment, since the duration of the rights need to match the investment. Property rights also allow individuals and firms to claim benefits or an income stream from that resource, and thus define costs and rewards of decisions made with regard to the use of the resource (Libecap 1986, Musole 2009).

In the literature, property rights are often defined as the right of individuals to govern their own labour supply and the goods and services they own (see e.g. North 1990:33, Justesen & Kurrild-Klitgaard 2013, Musole 2009). For the investor, property rights may be interpreted as the possibilities by which the investor can protect its resources and ideas (Gooroochurn & Hanley 2007). Property rights may also be interpreted in terms of exclusive rights over an asset, or the attributes of an asset (Milonakis & Meramveliotakis 2012).

Property rights are said to be secure when the government recognizes ownership through legal titles, and the ownership is protected from threats such as theft or intrusion. In addition, contracts are considered to be legally binding, and are enforceable by an independent court. On the opposite end, property rights are said to be insecure, or ill-defined, if they are violated e.g. through expropriation, breach of contracts or an inefficient rule of law (Biglaiser & Straat 2010, Resnick & Li 2003). In this sense, well-defined property rights reduce the risk of not getting the required return of the

investment, since the threats facing the investor, through violations of property rights, are reduced (Resnick & Li 2003, Knutsen et al 2011, Musole 2009).

Efficient protection of property rights enable the investor to plan ahead, provide incentives to invest and facilitate economic transactions, by reducing transaction costs (Justesen & Kurrild-Klitgaard 2013). Transaction costs arise in the process of an economic exchange, and their magnitude affect the way economic activity is organised and carried out. Specifically, transaction costs are defined as the costs of measuring the valuable attributes of the resource that is being exchanged, as well as the costs of negotiating, monitoring, and enforcing agreements and contracts (North 1990:61-62, Tejinder & Newhouse 1995).

The transaction costs may be categorised as market and non-market transaction costs. The market transaction costs arise on the market, and are e.g. legal fees and title insurance. The non-market transaction costs are e.g. the cost of the time that each party must devote to gathering the information necessary for an economic exchange, and the costs of undertaking economic activity in compliance with rules and regulations. The cost of time of gathering information is high if the information is not efficiently distributed, i.e. it is asymmetrically held by the parties of the exchange (North 1990:61-62, Musole 2009). Therefore, the transaction costs are related to the business climate and interaction between individuals. In summary, transaction costs are the costs necessary to enable production and exchange of goods, resources and services (Tejinder & Newhouse 1995).

If the transaction costs are too high, the theory states that no economic exchange occurs at all (North 1990:66). As a result, a country that has in place property rights institutions and a business culture that reduce transaction costs should thus have a competitive advantage in attracting FDI (Tejinder & Newhouse 1995).

Part II: A Qualitative Study of the Determinants of FDI in a Developing Country

Part II consists of a qualitative study of FDI in a developing country. The qualitative study is conducted as a field study in Kenya, examining the determinants of FDI in the Kenyan cut flower industry. Part II consists of an introduction to Kenya's economic development, an introduction to the cut flower industry, a description of qualitative method and presentation and analysis of the results.

4. Background

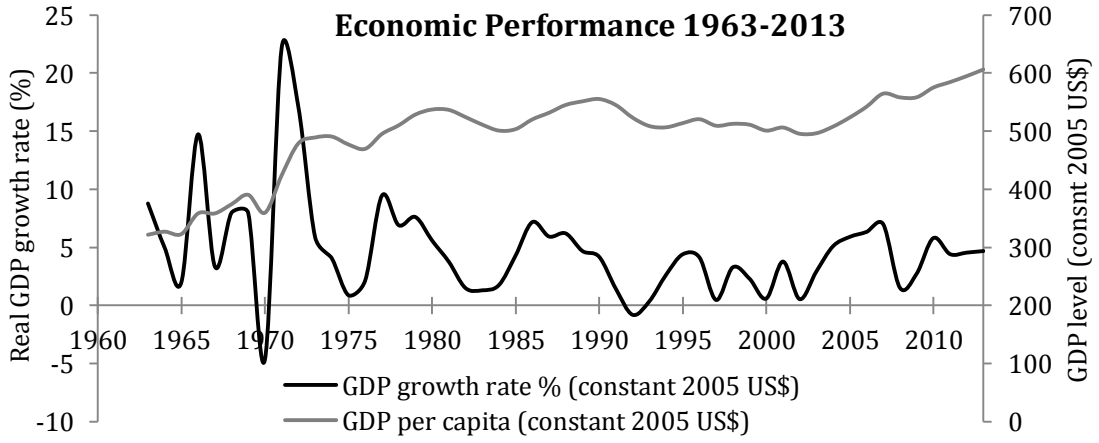
Kenya

Kenya lies across the equator in East Africa, bordering Somalia, Ethiopia, South Sudan, Uganda, and Tanzania. Kenya plays a central role in East Africa, functioning both as a regional and an international hub, and by being the largest economy in the region. Kenya's population is estimated to be 43.2 million (in 2013) (KPMG 2014a, World Bank 2014c).

Kenya's real GDP growth rate and level during the period 1963-2013, is shown in Graph 1. In 1963 Kenya gained independence, and became a multiparty democracy in 1992 (KPMG 2014b). During the first decade of independence, Kenya's economic performance was stronger than in most African countries with an average annual GDP growth rate of 6% (FRD 2007). However, the economic governance was hampered by corruption. Together with chronic budget deficits and inflationary pressure, it contributed to the following poor economic performance (KPMG 2014b, OECD 2002).

From the 1980's until the early 2000's, Kenya experienced a period of economic stagnation. After 1993 the government began to liberalise the economy. By the mid-2000's, the economy had recovered, with an annual growth rate of approximately 5%. The economic performance was slowed down by the impact of both a drought and the global recession in 2008, but began to recover again in 2009. The GDP growth rate in 2013 is estimated to be 5.1% (UNCTAD 2012).

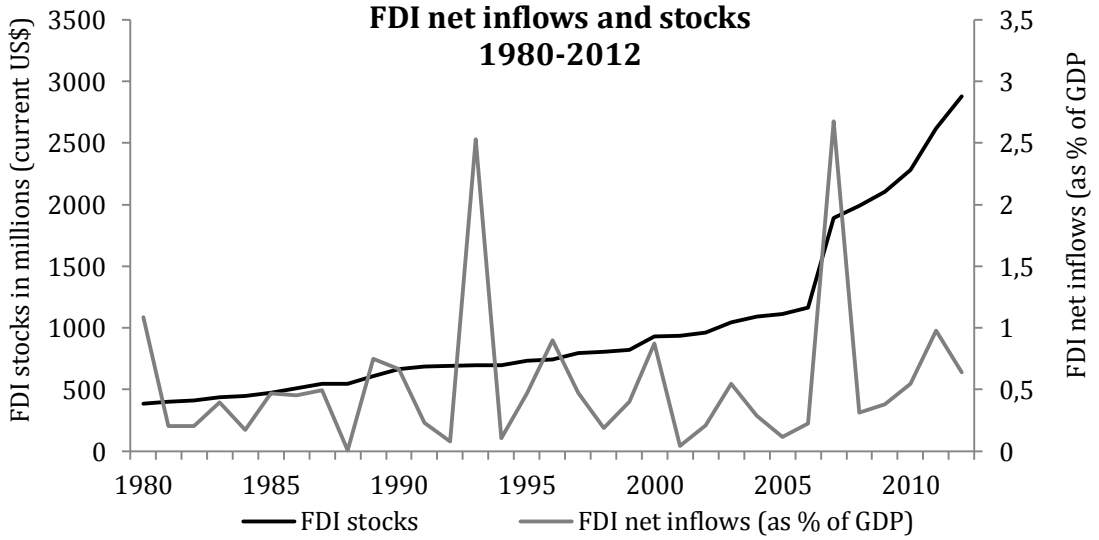
Graph 1



World Bank 2014a, 2014b

In terms of FDI, Kenya was a prime choice for foreign investors seeking to establish a presence in East Africa during the 1960's and 1970's. However, a combination of a period of economic stagnation, rising problems with corruption, crime and insecurity, and poor infrastructure generated a long period of low FDI inflows from the beginning of the 1980's until the mid-2000's (UNCTAD 2012, 2008). As shown in Graph 2, from 2006 to 2007, the net FDI inflows increased more than fourteen-fold. In 2008 the net FDI inflows dropped sharply, but began to recover again in recent years.

Graph 2



World Bank (2014e), UNCTAD (2014b)

The Kenyan economy is considered to be relatively diverse. The services sector accounts for more than half of nominal GDP, agriculture for more than a quarter, and the industrial sector is responsible for the remaining part. Agriculture is a very important sector of the economy, both due to its contribution to GDP, and because it employs roughly 75% of the country's labour force, either directly or indirectly (EPZA 2005, UNCTAD 2012). Out of these 75%, it is estimated that 2 million people are employed in the agricultural sub-sector called horticulture. The horticultural sector has grown more than 50% over the last 10 years (UNCTAD 2014a, 2012). Horticulture is Kenya's most important export sector, and includes the production of fruits, nuts, vegetables and cut flowers (EPZA 2005). In 2011, the cut flowers industry accounted for 18% of the horticultural exports (UNCTAD 2012).

The cut flower industry

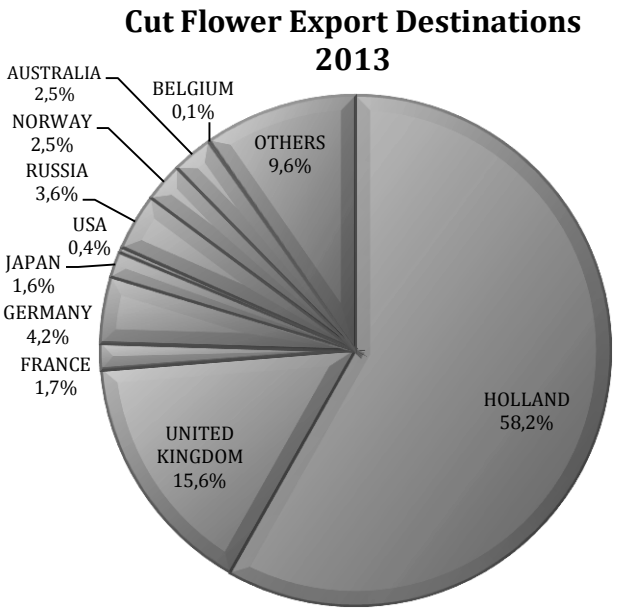
The world cut flower market is dominated by the Netherlands, which accounts for approximately 50% of total world exports (Hollandtrade 2013). The next four leading global flower exporters, in terms of export value, are Colombia, Ecuador, Kenya, and Ethiopia (Rikken 2011, WTEX 2014).

In 2013, HCDA estimated that 105 430 tons of flowers were exported from Kenya. Graph 3 shows the export volume in 2013, in terms of export destination as percentage share of total exports. As is shown in Graph 3, Europe is the main importer and accounted for more than 80% of Kenya's cut flower exports in 2013.

Producing flowers is a complex business. In order to match the changing demands of the consumers, R&D by flower breeders is needed. Apart from R&D, starting materials such as seeds, young plants and cuttings, and other important inputs such as pesticides, fertilisers, packaging material and water access are required (Ksoll et al 2009, World Bank 2006).

Thus, cut flower production is highly specialized, and places high requirements on both capital and labour intensity. In terms of capital, building greenhouses and other production facilities implies significant sunken assets for the investors (EPZA 2005).

Graph 3



HCDA 2014a

The flowers are picked in fields or greenhouses, then immediately transferred to cool storage rooms. The temperature is an important factor to preserve the quality of the flowers (Ksoll et al 2009, EPZA 2005). Finally, the flowers are flown to overseas markets in temperature controlled containers. Most of the flowers reach the sales shelf within 24-48 hours after being harvested (Ksoll et al 2009, World Bank 2006). The cut flower industry has existed in Kenya since the 1980's. During the 1990's it became a substantially more important industry, and production shifted towards higher-value greenhouse flowers, with roses dominating the production (UNCTAD 2012). The industry has grown rapidly during the last decade, and currently accounts for a significant part of Kenya's agricultural exports (WTEX 2014).

During the recent years, the sector has benefited from new FDI that have brought more technology and know-how to the industry (World Bank 2005). FDI in the Kenyan cut flower industry mainly stems from the major global competing flower producing countries such as the Netherlands and the UK (EPZA 2005). The largest concentration of flower growers is found in the areas surrounding Lake Naivasha, but investors are present in a number of other areas as well, e.g. the western parts of Kenya, around Rift Valley, Mount Kenya, and Nairobi and its international airport (Ksoll et al 2009, KFC 2014b).

5. Qualitative Method

Data availability

The collection of data on FDI in Kenya is incomplete, and there is no clear mandate by any agency to collect comprehensive data on FDI (KPMG 2014b). The Kenya Flower Council (KFC) collects data based on membership, which is voluntary for growers (Githiga 13/06/14). In April 2014, the KFC consisted of 74 registered members. The KFC estimates that their members are responsible 70% of the flowers exported from Kenya (KFC 2014a, 2014c). The Kenyan Investment Authority (KIA) collects data on registered investors. However, it is not mandatory for investors to register with KIA, and there is no estimate available on the extent to which investors choose to register with KIA (Nyamweya 19/05/14).

The Kenya Bureau of Statistics (KNBS) collects information on a sectorial basis only, i.e. the horticultural sector, and not the cut flowers industry separately (Nderitu 13/06/14). The Horticultural Crop Development Agency (HCDA) collects data on export volumes and destination of the exported cut flowers. However, no data is available on the number of FDIs currently operating in the cut flower industry in Kenya, or their country of origin (Ng'ayu 13/06/14). Previous research estimates the number of growers exporting cut flowers to be around 120 (in 2009) (see Ksoll et al 2009). The industry is estimated to employ over 50 000 people in Kenya (in 2009) (Finlays 2009), which implies an average of 400[1] employees per farm.

The sample

Due to the lack of a comprehensive statistical overview of the industry, the sampling frame[2] is based on the main industry characteristics of the Kenyan cut flower industry. These characteristics aim to match and summarise the main findings of previous research on the industry (see e.g. EPZA 2005, UNCTAD 2012, Ksoll et al 2009, Njoroge & Okech 2011), as presented in chapter four.

Industry characteristics:

I. *FDI in the Kenyan cut flower industry mainly stems from countries such as the Netherlands and the UK (EPZA 2005)*

II. *The number of growers exporting cut flowers was estimated to be around 120 in 2009 (Ksoll et al 2009). The industry was estimated to employ over 50 000 people in Kenya in 2009 (Finlays 2009), which would imply an average of around 400 employees per grower*

III. *The cut flower industry has existed in Kenya since the 1980s, and during the 1990s it became a substantially more important industry (UNCTAD 2012)*

IV. *In 2013 Kenya exported about 105 430 tons of flowers, and Europe was the main importer accounting for more than 80% (HCDA 2014a)*

The sample consists of four growers and one breeder. The characteristics of the sampled investors are shown in Table 2. The first column corresponds to the first industry characteristic, and presents the investors' country of origin. The second column corresponds to the second industry characteristic, and shows the number of employees

[1] Based on the number of growers (both foreign and local) estimated by Ksoll et. al (2009).

[2] A sampling frame is defined as a list of units of analysis from which one takes a sample and to which one generalises (Bernard 2006:147). For a detailed presentation see e.g. Bernard (2006).

of each farm. The aim of the sample is to include the views of both major, medium sized and small investors. The third column corresponds to the third investment characteristic, and shows how many years the investors have been operating in the Kenyan cut flower industry. The aim is to include the views of both the relatively experienced and new investors. The fourth and fifth columns together correspond to the fourth industry characteristic, and show each investor's percentage of total export volume in 2013 and export destinations.

Table 2

Country of origin	**Number of employees**	**Years in Kenya**	**% of total Export volume (2013)[i]**	**Export destinations (2013)**
Netherlands	700	Established partner for 20 years, became independent grower 11 years ago	2.3%	Netherlands (100%)
Netherlands	620	13 years	1.4%	Netherlands (90%) Europe (9%) Japan (1%)
United Kingdom	8 000	Established partner for 15 years, became independent 7 years ago	9.5%	United Kingdom (82.5%) Germany Netherlands
Netherlands	60	1 year	- *	-
Netherlands	78	5 years	- **	-

* No exports in 2013, ** No export (breeder)

[i] Percentage share of total export volumes of cut flowers in Kenya in 2013, based on the 2013 export volume of each the grower

In addition, four stakeholders are included in the sample. Three of these are government bodies, working with industry support and policy formulation. These three are the Ministry of Agriculture (MoA), HCDA and KIA. MoA works with facilitation and promotion of food and agricultural production (MoA 2014). HCDA is the government's regulatory agency in the horticultural sub-sector (HCDA 2014b). KIA is responsible for investment promotion and facilitation (KenInvest 2014a). The fourth stakeholder is KFC, an independent organisation working on industry development, with the aim of fostering responsible and safe production (KFC 2014d).

6. Interview Results

This section presents the main arguments made by the investors and stakeholders during the interviews. The main questions outlined in the interview guide, and the corresponding discussion points, are presented in Appendix 1.

6.1. *What determines FDI in the cut flower industry in Kenya?*

During the interviews, the sampled investors and stakeholders were asked which factors they consider as important determinants of FDI in the Kenyan cut flower industry. All factors mentioned during the interviews are sorted according to five broad categories, as shown in Table 3. These five categories are market size, natural resources, human capital, infrastructure, and investment climate. The first column of Table 3 lists the determinants mentioned by the sampled investors. The second column lists the determinants mentioned by the sampled stakeholders.

Table 3

Investors	**Stakeholders**
Natural resources - Favourable climate - Water availability	**Natural resources** - Favourable climate - Water availability - Land availability
Human capital - Skilled labour force - Size of labour force	**Human capital** - Skilled labour force - Continuity in availability
Infrastructure Transportation - Roads, air - Cold chains	**Infrastructure** Transportation - Roads, air, water
Industry size - Supply availability - Strategic location in East Africa	Industry size - Strategic location in East Africa - Market position: one of the top 5 exporting countries - Technological development
Market size - Hub in the East African region - Number of growers and potential buyers	**Market size** - Hub in the East African region - Number of growers and potential buyers
	Investment climate - Laws and regulations favourable for investment - Regional body signatory (EAC)

Market size

In terms of multinational firms geographically diversifying, and applying their model of investment to other parts of the world, investors may want to seize the opportunity to get a foothold in potential markets (Mwirigi 14/06/14). Indeed, with regard to the Kenyan cut flower industry, it is believed that the domestic market for cut flowers is slowly increasing (Masaku 02/05/14). Kenya is also part of the East African Community[3], which implies access to big potential markets for investors to sell their products (Nyamweya 19/05/14).

However, the production of cut flowers in Kenya is mainly export oriented (Ksoll et al 2009). Yet, the size of domestic and regional market is an important determinant for flower breeders. The breeders work with the development of new flower varieties and sell plants to the growers, who in turn grow and export the flowers. Kenya has quite a large number of flowers growers, and functions as a hub for the wider East African market of growers (Beresford 14/05/14).

Natural resources

Kenya is located at the equator, and offers favourable climate for growing high quality horticultural products. Some of the factors considered important for flower productions are a consistent climate, suitable average altitude and temperature, access to water, and 12 hours of sunlight per day all year. The warm climate also contributes to lowering energy costs, since the greenhouses do not need be heated to ensure a temperature suitable for growing flowers (Githiga 13/06/14, Zuurbier 14/05/14, Kneppers 16/05/14, Ng'ayu 13/06/14, Nyamwwya 19/05/14).

The availability of land is an important prerequisite for the FDI in the Kenyan cut flower industry. However, land in high potential growing areas especially attractive to investors, such as around Lake Naivasha, is becoming increasingly scarce (Masaku 02/05/14, Ng'ayu 13/06/14, Githiga 13/06/14).

Human capital

The production of cut flowers is labour intensive, and thus labour availability is an important determinant (Zuurbier 14/05/14, Louwerse 16/05/14, Kneppers 16/05/14, Masaku 02/05/14, Githiga 13/06/14, Nyamweya 19/05/14, Ng'ayu 13/06/14). The Kenyan labour force is considered to have the necessary know-how and technical capacity for growing flowers (Ng'ayu 13/06/14, Nyamweya 19/05/14). In addition, some of the investors consider it to be easier to find skilled labour in Kenya, compared to the neighbouring countries Ethiopia, Uganda and Tanzania. However, labour costs are higher in Kenya, than in the neighbouring countries (Louwerse 16/05/14, Mwirigi 14/06/14). Nevertheless, the labour costs are much lower than in the investors' countries of origin, and labour is still considered to be affordable in Kenya (Louwerse 16/05/14, Zuurbier 14/05/14).

[3] The East African Community (EAC) is the regional inter-governmental organisation of the Republics of Burundi, Kenya, Rwanda, the United Republic of Tanzania, and the Republic of Uganda, headquartered in Tanzania. For a detail presentation see EAC (2011).

Infrastructure

A well-developed transportation network is considered to be an important determinant (Mwirigi 14/06/14, Nyamweya 19/05/14, Kneppers 16/05/14, Githiga 13/06/14). For the flowers to remain of good quality, they need to be stored and transported in a cool temperature, and reach their destinations fast (Masaku 02/05/14). Twenty years ago, neither the quality of the cut flowers nor the infrastructure was considered to be good in Kenya. But the infrastructure improved, the transportation time decreased and the cold chains improved, which allowed the quality of the flowers to improve as well (Kneppers 16/05/14). Compared with the neighbouring countries, Kenya is also considered to have the advantage of offering the investors an established infrastructure (Mwirigi 14/06/14).

The internal infrastructure of the cut flower industry in Kenya is considered to be well-developed. The whole horticultural sector is big in Kenya, which contributes to good availability of the supplies necessary for both growing and breeding flowers, such as fertilisers, chemicals, irrigation systems and greenhouse spare parts (Louwerse 16/05/14, Zuurbier 14/05/14).

Investment climate

Compared to the neighbouring countries, Kenya is considered to have more know-how on investments, and a market that is more open towards investments. These factors are believed to be largely driven by the fact that Kenya has been politically and economically stable for a longer period of time (Mwirigi 14/06/14, Ng'ayu 13/06/14, Nyamweya 19/05/14). In addition, government facilitation, industry involvement and support to the industry, are considered by the stakeholders to be important determinants of FDI. The government also provides incentives to the investors, such as tax holidays[4] and export processing zones[5] (Nyamweya 19/05/14, Githiga 13/06/14).

On the other hand, the investment climate is adversely affected by corruption. The investors state that it may be hard to set-up and establish a business in Kenya, as a consequence of government corruption (Mwirigi 14/06/14).

[4] Tax holiday refers to a time period when the investor is not obligated to pay tax, e.g. the ten first years from the investment. For detailed presentation see KenInvest (2014b).

[5] Export Processing Zones, which are an investment service, allow for certain incentives for investors to produce to export. Such incentives are duty and VAT free import of inputs for production of export products within specified zones. For detailed presentation see EPZA (2014).

6.2. *Are property rights an important determinant of FDI in the cut flower industry in Kenya?*

The sampled investors and stakeholders were asked if they consider property rights protection as an important determinant of FDI in the Kenyan cut flower industry. Due to the importance of access to land in the industry, property rights protection is operationalised by discussing the importance of property rights to land. The statements and arguments made by the investors and stakeholders are sorted and categorised according to two broad categories: land registration and contracts, and land dispute settlements.

In the same vein, transaction costs are operationalised by discussing the access to information necessary for the investment, and compliance with government rules and regulations. The main arguments brought forward during the interviews are sorted into two categories: accessing information and compliance with rules and regulations.

Land registration and contracts

In describing why ownership is important, one of the investors explains that ownership of property functions as a long run collateral. As one of the investors puts it: *"If you own the property, you at least have the value of the property, which is a proper backbone for your investment" (Kneppers 16/05/14).* Most of the investors state that property rights protection is important for their investment. In addition, most of the investors have so far not experienced any issues with property rights protection of the land of their farms (Zuurbier 14/05/14, Mwirigi 14/06/14).

Kenya is generally considered to be an economically and politically stable country (Mwirigi 14/06/14). In terms of policy, it is important for the investors to be confident that the terms and condition of their investment do not suddenly change. As an example, the Kenyan constitution which came into force in 2010, restated the maximum length of land lease terms available to foreigners. The maximum length changed from 999 years to 99 years. A lease of 99 years is still considered by the investors to be a long enough period of time. But the change also shows how terms and conditions can be altered without negotiation with the contract holders. It also highlights the possibility of future changes, which induces uncertainty for the investors (Zuurbier 14/05/14).

In spite of the changed lease terms, it is generally held among the investors that the situation in Kenya is favourable to that of the neighbouring East African countries. Compared to Ethiopia, Kenya is described by some of the investors as a generally freer country. The Kenyan government is considered to be more trustworthy than the Ethiopian. Some of the investors state that the Ethiopian government offer the investors access to land free of charge. But the land contracts are considered to be uncertain, as they might be changed or completely dissolved in the future (Louwerse 16/05/14). Consequently, Ethiopia is considered to be an unreliable investment choice. In a comparison with the situation in Kenya, one of the investors comments: *"If they decide you are going to leave the country, then you are leaving the country. Of course, that could happen here as well, but the likelihood of that happening is very small" (Kneppers 16/05/14).*

A recurrent statement among the stakeholders is that property rights to land is a merit of Kenya, since it is one of the most regulated matters in Kenya. Thus, the Kenyan law is

considered to be clear on property rights protection (Githiga 13/06/14, Masaku 02/05/14, Nyamweya 19/05/14, Mwirigi 14/06/14). Once the ownership of the land or the contract to lease the land is registered, no one has the legal right to take it away from the land contract holder (Mwirigi 14/06/14). The government body responsible for the registration of land, contract enforcement and dispute settlement in Kenya is the Ministry of Land. The Ministry of Land is the central government body, and the county based equivalent is called the Land Board (Nyamweya 19/05/14).

The main regard of the Land Board is to protect the land contract holders, both local and foreign. The registration of land is described to be a legally based process, in which the Land Board approves the land registration and administers the documentation (Githiga 13/06/14). Most of the stakeholders state that once the land registration process is approved, the land contract provides the investor with a guarantee, from both the government and the law. Therefore, the stakeholders consider that the investors should be able to work comfortably with that contract, without having their business disrupted (Nyamweya 19/05/14, Githiga 13/06/14).

However, the presence of government corruption complicates both the process of registering the land and the subsequent protection of the contracts. Most of the investors are confident with their current land contracts. Yet, the investors say that the only thing the investor can do, is to find a reliable party and set up a land contract. Or as one of the investors puts it: *"We think we did OK. But in 20 years I can tell you if I did" (Louwerse 16/05/14).* On the other hand, some of the investors argue that the corruption of the government does not erode the legitimacy of the land contracts. One of the investors states that: *"Bribery, short-cuts and illegal transfers of land rights are problems. These issues are all related to the corruption of the government, and have nothing to do with the legitimacy of land" (Mwirigi 14/06/14).*

Land dispute settlements

A recurrent statement made by the investors is that there are a lot of land disputes in Kenya. The land disputes are described to typically consist of a situation where one party is making claims of ownership on a plot of land that is not theirs, or cases with two land titles and two different claimants to the land. The history of the land needs to be carefully investigated to ensure that there is no dispute over the land. The importance of checking the history of the land, and legally registering before the investment, is highlighted by most of the investors (Louwerse 16/05/14, Zuurbier 14/05/14, Kneppers 16/05/14).

In case of a land dispute, the Land Board aims to resolve the dispute. The stakeholders explain that in case of a land dispute, a settlement is found through a legal process (Githiga 13/06/14, Nyamweya 19/05/14). Yet, most of the investors describe the enforcement mechanisms to be expensive and time consuming. More importantly, once the investment is set up on the land, the investor is considered to have very low bargaining power. It is stated that the only position the investor has to negotiate from, is to withdraw from the investment and take everything off the land (Kneppers 16/05/14, Louwerse 16/05/14).

The issue of land disputes implies additional risk for the investor. Most of the investors state that they would not invest on land that is disputed (Kneppers 16/05/14, Louwerse 16/05/14, Zuurbier 14/05/14). Or, as one of the investors puts it: *"If you come across*

land with disputes, stay away" (Kneppers 16/05/14). Hence, to attract foreign investment, it is considered to be favourable to have a situation where land titles are easily identifiable (Zuurbier 14/05/14).

Accessing information

The government body responsible for investment facilitation and promotion is KIA (Githiga 13/06/14, Nyamweya 19/05/14). A representative of KIA describes the work of KIA: *"Once the investor has decided to come and invest in Kenya, we literally hold their hand" (Nyamweya 19/05/14).* The aim of KIA's work is to provide the investors with the information necessary for the investment, assist the investors in the challenges they might be facing, and thus enable them to operate comfortably in Kenya. KIA's role extends from helping the investors to set up in Kenya, i.e. acquire licenses and permits and the necessary registration, to providing aftercare services for established investors, e.g. through regularly visits to the investors. But the investors need to seek the assistance of KIA themselves, since it is not mandatory for the investors to register with KIA (Nyamweya 19/05/14).

The investors describe the access to information and providence of guidance in a different manner. The investors describe a system hampered by corruption, where the investor cannot expect to get assistance from the government (Louwerse 16/05/14). One of the investors explains: "*The government is not going to take you by the hand and guide you through the process, you should find out for yourself" (Zuurbier 14/05/14)*. Instead, a recurrent statement among the investors is that previous experience and a contract network are important measures to gather the information necessary to the investment (Louwerse 16/05/14, Zuurbier 14/05/14, Kneppers 16/05/14).

Most of the investors state that new investors are in for a challenge if they do not have previous experience and an established contact network in the country (Louwerse 16/05/14, Zuurbier 14/05/14, Kneppers 16/05/14). One of the investors describes: *"For the new investor, the list of relevant information can be very long" (Louwerse 16/05/14).* Some examples mentioned by the investors are the need to know how to deal with the local government, how to get building permits, where to get materials, and which contractors to work with (Louwerse 16/05/14).

In addition, some of the investors highlight the fact that, without access to the information necessary, the risk of making losses increases. Nevertheless, most of the investors agree that once experience is gained, and the necessary contacts have been made, gaining accessing information is simple (Kneppers 16/05/14, Mwirigi 14/06/14).

Compliance with rules and regulations

The investors also highlight the importance of previous experience of dealing with government officials. The investors state that to avoid corruption, the best strategy is to stay professional and make sure of complying with all the rules and regulations set by the government (Zuurbier 14/05/14, Louwerse 16/05/14). However, the government's rules and regulations are often described as complex. As one of the investors puts it: *"There are so many rules and regulations here, and things that can restrict you" (Louwerse 16/05/14).*

In the same vein as with the access to information, most of the investors state that new investors are in for a challenge, if they do not have previous experience in country. As a

consequence, it may be especially difficult for new investors to comply with rules and regulations (Zuurbier 14/05/14). The investors may feel pressured to pay bribes, especially when the future of the investment is under threat. As one of the investors puts it*: "In the beginning they try what they can and cannot get from you, and it may be difficult to stay professional" (Louwerse 16/05/14).*

However, most of the investors agree that established investors are less exposed to corruption. Indeed, it is considered to be less prevalent, and easier to tackle, with more experience and an established contact network (Louwerse 16/05/14, Kneppers 16/05/14).

7. Analysis of the Qualitative Results

7.1. Analysis based previous research

This section provides an analysis of the results presented in section 6.1. The aim is to examine the economic motivations of FDI in the Kenyan cut flower industry on basis of previous research, as summarized in Table 1.

Market-seeking

Some of the investors and stakeholders state that the market size is an important motivation for the investor to get a foothold in potential and growing markets. On the other hand, the Kenyan cut flower industry is mainly export oriented and does not primarily aim to serve the domestic market. This indicates that the domestic market size is not as important as it is traditionally considered to be for market-seeking FDI. Rather, FDI in the Kenyan cut flower industry is motivated by the access to and size of international markets. This result corresponds to the changed importance of the domestic market size, relative to the international market size, shown in the third column of Table 1.

Resource-seeking

Human capital

In terms of resources, human capital, infrastructure and natural resources are identified as important determinants of FDI in the Kenyan cut flower industry. The Kenyan labour force is described by both investors and stakeholders as being skilled, with the necessary know-how and technological capacity necessary for production in the cut flower industry. Consequently, with regard to human capital, resource-seeking FDI in the Kenyan cut flower industry is mainly motivated by the access to skilled labour.

Infrastructure

Based on both the interview results and previous research on Kenya, it is possible to identify created assets in the Kenyan cut flower industry. One such created asset is infrastructure facilities, which is identified as an important motivation for resource-seeking and competitiveness-enhancing FDI.

Both the investors and stakeholders emphasise the importance of physical infrastructure as a determinant of FDI in the Kenyan cut flower industry. The quality of the end product when it reaches the consumer, is highly dependent on the efficiency and quality of the transportation network. The investors state that the infrastructure has improved over the last two decades, which has allowed the quality of the flowers to improve as well.

According to previous research, KFC and the Kenyan government are continually working with improvements of the infrastructure, both to increase its efficiency and to meet international safety requirements. For instance, these efforts have enabled direct flight access to the major European markets (Njoroge & Okech 2011).

Natural resources

The interviews indicate that a broad range of natural resources are required to enable investment and production in the cut flower industry. One of the natural resources mentioned is the availability of land that is suitable for growing. The stakeholders argue that the availability of land poses a challenge for future FDI. For flower growers it is not

only the access land that is important; the land must also meet certain quality requirements. It must have access to water to ensure that the flowers produced are of high quality.

The stakeholders explain that the government aims to raise the attraction of land in low potential areas, to meet the challenge of limited supply of land suitable for growing. Access to water raises the attraction of the land in low potential areas. Therefore, the government is building dams in these areas to increase the attraction of the land (Githiga 13/06/14). Access to a broad range of natural resources is categorized by previous research as a motivation for resource-seeking FDI, and as a created asset. Hence, FDI in the Kenyan cut flower industry correspond to the motivation of both resource-seeking FDI and competitiveness-enhancing FDI.

Competitiveness-enhancing

The investors state that both the cut flower industry and the whole horticultural sector are well-developed in Kenya. Consequently, all necessary supplies and related services are easily accessible in Kenya. The size of the industry and well-developed internal infrastructure are considered to be advantages of investing in Kenya. In addition, the growers are densely located in clusters around the areas of Lake Naivasha and Mount Kenya (Ksoll 2009). In Naivasha, there is even a Flower Business Park for flower growers and breeders. In these areas the FDI benefits from agglomeration economies. As a result, it is possible to identify agglomeration economies as a created asset in the Kenyan cut flower industry.

Efficiency-seeking

One of the main reasons stated by the investors in explaining why many investors consider investing abroad is to lower the cost of production. Africa is considered to be low cost based, since the costs of production are generally lower than in many other parts of the world (Mwirigi 14/06/14). Some of the investors state that, as the costs of production increased in Europe at the end of the 1990's, growers started to seek different ways and locations to grow flowers (Zuurbier 14/05/14, Kneppers 16/05/14).

As an example of how the production costs are lowered, the investors mention labour costs. Some the investors state that labour is more expensive in Kenya, than in the neighbouring countries. Labour costs are considerably lower than in the countries of origin of the investors, which makes investments in Kenya advantageous. Thus, FDI in the Kenyan cut flower industry is efficiency-seeking in the sense that lowering of the costs of production is an important motivation to stay competitive on the global market.

In terms of the investment climate, the stakeholders highlight that Kenya has a market open for investment, and that the Kenyan government is active in investment facilitation. According to previous research, the Kenyan government has implemented various policy strategies during the recent ten years, to support export industries[6] and to promote and launch further private sector investments and FDI[7] (UNCTAD 2012).With regards to the cut flower industry, these reforms resulted in the provision of investment incentives, such as reduced duties and taxes on imported inputs such as greenhouses and refrigeration equipment (Njoroge & Okech 2011).

[6] Industrialization strategy 2020. For detailed presentation see Angatia (1996).
[7] Private sector development strategy of 2005. For detailed presentation see GoK (2006).

The statements of the stakeholders, together with the recent policy changes in Kenya, indicate that the FDI policy framework is a motivation of efficiency-seeking FDI in the cut flower industry. On the other hand, the presence of corruption hampers the investment climate. The investors argue that the corruption makes it harder for investors to set up business in Kenya. This provides the opposite indication, i.e. in the Kenyan cut flower industry the FDI policy framework is not a motivation of efficiency-seeking FDI.

7.2. Analysis based on institutional theory

This section provides an analysis of the results presented in section 6.2, on the basis of the institutional theory presented in chapter 3. The aim of this analysis is to examine how property rights protection in the Kenyan cut flower industry relates to the key features of the institutional theory. This is done by analysing the interviews on the basis of the three main features of the institutional theoretical framework: definition, security of property rights and the role of transaction costs.

Defining property rights

The institutional theoretical framework defines property rights to land by the level of access to the land. In consequence, property rights to land define the duration of the land contracts, the ability of the land contract to match the time period required by the investment, and the investors' ability to protect the land. The implication of the definition of property rights is that it specifies the legitimate uses of the land, and the right to claim benefits or an income stream of the land. As a result, property rights define the costs and rewards of the decision to use land, and create incentive structures for investors (World Bank 2003:22, 25-27, Musole 2009).

The level of access to agricultural land in Kenya is constrained by law. Foreigners are prohibited from owning land for agricultural purposes (UNCTAD 2012). Consequently, perpetual user rights are not possible. The investors are precluded from the exclusive right to the land, and its function as long-run collateral. The duration of the land contracts varies among the investors, but the maximum lease term possible is 99 years. The investors consider the maximum lease term to be sufficient, since it more than matches the required length for any investment. For the cut flower industry, the right to claim an income stream of the land is crucial, since the production of flowers is dependent on access to land. None of the investors have so far experienced any issues with their land contracts. Therefore, the right to claim the benefits of the land plots is not an issue among the sampled investors.

Are property rights well-defined?

The theoretical framework stipulates that property rights to land are well-defined, or secure, if the government recognizes and protects land titles and the access to the land. If the access, the duration of the access, or the boundaries of the land, are not clearly identifiable, the property rights to land are not well-defined (Biglaiser & Straat 2010, Resnick & Li 2003).

The views of the investors and the stakeholders deviate, on the matter of the process towards the government recognizing and protecting land titles. The stakeholders argue that the legal side of both the land registration process and the land contracts provide the investor with a guarantee for the investment. Most of the investors highlight that the presence of corruption complicates the process. Thus, based on the theoretical

stipulation of secure property rights, it is not possible to argue that property rights are well-defined in Kenya.

An additional point made by the investors is that to ensure the level of access to the land, the investor needs to set up a registered land contract with a reliable party. One of the investors also argues that the government corruption does not erode the legitimacy of the land contracts. Together, these views imply that once the land is legally registered and a contract is set up, the law actually provides a guarantee for the investment, and the property rights to land are well-defined.

Although, the extent to which property rights to land are well-defined is not universally extended to all land plots. In the case of land disputes, it is clear that property rights are not well-defined. Land disputes imply that titles are not protected, since the disputes often correspond to a situation where several parties claim ownership of the same piece of land.

Transaction costs

The theoretical framework defines transaction costs as the costs of measuring the attributes of a valuable resource, as well as the costs of negotiating, monitoring, and enforcing contracts (North 1990:61-62, Musole 2009). The stakeholders argue that the government aims to provide the necessary information and guidance to the investors. Under these circumstances both market and non-market transaction costs should be minimized.

However, there is a clear division in the views of the investors and the stakeholders on the access to information and provision of guidance. In terms of gathering information, the investors highlight the importance of previous experience and contacts. Hence, based on the statements of the investors, it is possible to identify market transaction costs, such as acquiring legal assistance to set-up, monitor and enforce the land contract. It is also possible to identify non-market transaction costs, by the importance of ensuring the land is not disputed. Further, it is possible to identify non-market transaction costs related to the compliance with rules and regulations. The rules and regulations are often described as complicated and difficult to follow. Further adding to the identified transaction costs, rent seeking government officials may also pressure the investors to pay bribes.

The theoretical framework states that if the transaction costs are too high, no economic exchange occurs. In the case of land disputes, the costs of negotiating, monitoring and enforcing contracts are high, since land titles are not well-defined. Hence, the associated costs and risk are considered to be high. In correspondence with the theoretical framework, most of the investors state that they would not invest on disputed land.

8. Conclusions from Part II

Based on the results of the interviews with investors and stakeholders, it is possible to identify a large number of important determinants of FDI in the Kenyan cut flower industry. The determinants mentioned by both the investors and stakeholders are natural resources, market size, human capital, and infrastructure. In addition, the stakeholders highlight the importance of the investment climate. From the factors mentioned above, it is clear that there are numerous prerequisites enabling investment and production in the cut flower industry.

Based on the findings of the analysis in chapter seven, FDI in the Kenyan cut flower industry corresponds to all the economic categories listed in Table 1, i.e. market-, resource-, efficiency-seeking, and competitiveness-enhancing. Consequently, when mapping the determinants of FDI in the Kenyan cut flower industry according to Table 1, it is evident that there is no single type of economic motivation driving FDI in the Kenyan cut flower industry. Rather, the analysis indicates that the different categories, and thus the identified determinants, overlap and interdependently motivate FDI.

In light of the industry's dependence on access to land, the examination of property rights as a determinant of FDI is operationalised by considering property rights to land. The results indicate that the investors consider property rights protection to be an important determinant of their investment. Foreigners are not allowed own land for agricultural purposes in Kenya. But the possibility to claim benefits, or an income stream, from the land is not an issue among the sampled investors. Based on the theoretical stipulation of secure property rights, it is not possible to conclude that property rights to land are well-defined in Kenya. However, once the land is legally registered and a land contract is set up, the law actually does provide a guarantee of the investment.

The results indicate that land disputes are commonly occurring in Kenya, and it is clear that property rights are not secure in the case of land disputes. The risk of losing sunken assets and costs, e.g. greenhouses and other production facilities on the land, is increased in case of land disputes. Furthermore, the investors state that they would not invest on disputed land. Based on institutional theory, this implies that the transaction costs of negotiating, monitoring and enforcing contacts are too high for an economic exchange to occur.

With regard to transaction costs, it is possible to identify both market and non-market transaction costs. Market transaction costs consist of e.g. the cost of acquiring legal assistance to set-up, monitor and enforce the land contract. In addition, it is possible to identify non-market transaction costs, e.g. generated from ensuring that there are no disputes on the land by scanning the history of the land. In terms of complying with rules and regulations, rent seeking government officials and complicated rules and regulation, are also contribute to increasing the non-market transaction costs.

Part III: A Quantitative Study of the Determinants of FDI in a Developing Country

Part III provides a description of and motivation for the data and variables, and a presentation of the regression model and results. The aim of this section is to quantitatively examine the determinants of FDI in 55 developing countries. The qualitative results provide evidence on the determinants of FDI in one developing country, based on the subjective opinions of a sample of decision makers. The quantitative study provides an opportunity to generalise these results. In addition, it allows for an investigation of the possible presence of reversed causality between FDI and property rights.

9. Descriptive Statistics

9.1. Data

The dataset considered is an unbalanced panel, including data on developing countries over the time period 1980-2010. A list of the countries included is provided in Appendix 2. The countries included in the sample are low-income and middle-low-income developing countries[8]. The low-income and middle-low-income countries that lack data on property rights protection are excluded from the sample. In total, the sample includes 55 developing countries.

Data on property rights protection is gathered from the Fraser Institute (Gwartney et al 2012a). The data consists of the index Legal Structure and Security of Property Rights. The index ranges from one to ten, with higher values implying better property rights protection. The index is available over the time period 1970-2012. Pre 2000 observations are available on five year basis only, while the index after 2000 is available on an annual basis (Teorell et al 2013a, Gwartney et al 2012b). Due to the limited data availability, five-year averages are calculated for all the data used in the study. The calculation is shown in Appendix 3.

The data on FDI (net inflows as percentage share of the host country's GDP) is collected from The World Bank (World Bank 2014e). Net FDI inflow is the sum of the host country's equity capital, reinvestment of earnings, and other long and short term capital as shown in the balance of payments (Teorell et al 2013a). The data on the control variables GDP per capita, GDP growth rate, secondary school enrolment and inflation rate is available on a yearly basis. Five-year averages are calculated for these variables as well, according to the calculation shown in Appendix 3.

The data on GDP per capita (constant, PPP adjusted based on 2005 prices), the GDP growth rate (annual percentage growth rate) and the rate of inflation (annual percentage change) is collected from the World Bank (World Bank 2014a, 2014b, 2014d). Data on trade openness (total trade as a percentage share of GDP) is collected from the Penn World Table (Heston et al 2012). Secondary school enrolment is collected from the UNESCO Institute for Statistics (UNESCO 2012). Total secondary school enrolment is

[8] In accordance with the World Bank (2014f) categorization. Low-income countries: with a GNI per capita that is 1,045 dollars or less. Middle-low-income: with a GNI per capita above 1,045 dollars but below or equal to 4,125 dollars.

defined as the number of students enrolled at the secondary level, measured as gross enrolment rate[9] (Teorell et al 2013a).

9.2. Variables

Dependent variable

The dependent variable is net FDI inflows. In previous research additional measures of FDI are used as well, such as total FDI stocks (see e.g. Gwenhamo 2011), or as percentage share of world FDI (see e.g. Resnick 2001). Net FDI inflow has the advantage of having relatively wide data coverage. Furthermore, it is a measure commonly used in previous research (see e.g. Biglaiser & Straat 2010, Jensen 2003, Biglaiser & DeRouen 2000).

Explanatory variables

The property rights variable is measured by the index Legal Structure and Security of Property Rights (Gwartney et al 2012b, Teorell et. al 2013a). The index provides insight into the host country adherence to rule of law, enforcement of property rights, and the efficiency of the court systems (Biglaiser & Straat 2010). In previous research, the effect of property rights on FDI is found to be positive (see e.g. Gwenhamo 2011, Bénassy-Quéré et al 2007, Mathur & Singh 2011, Resnick & Li 2003). Hence, previous research indicates that FDI is encouraged by better property rights protection. In this spirit, the effect of property rights variable is expected to be positive on FDI.

The choice of control variables is based on the determinants commonly identified as important by previous research (see e.g. Mathur & Singh 2011, Biglaiser & Straat 2010, Mottaleba & Kalirajanb 2010, Gwenhamo 2011, Asiedu 2006, Knutsen et. al 2011, Morisset 2001, Resnick 2001, Bénassy-Quéré et al 2007, Resnick & Li 2003). Previous research considers a multiple of factors as possible determinants of FDI. But it is possible to identify some agreement among previous studies on some of the most fundamental determinants of FDI. The aim of the chosen control variables is to represent these fundamental determinants.

In UNTAD (1998), the traditional economic determinants of FDI are categorized into three clusters, reflecting major motivations assumed to drive FDI: market-seeking, resource-seeking and efficiency-seeking (UNCTAC 1998). A brief summary of the key determinants of each category is shown in Table 1. Together with the findings of previous research, the main identified determinants of each cluster are combined to form a set of control variables.

The main listed economic determinants assumed to motivate market-seeking FDI are the host country market size and growth rate. In previous research it is generally accepted that market size and growth are crucial determinants of FDI (see e.g. Mathur & Singh 2011, Biglaiser & Straat 2010, Mottaleba & Kalirajanb 2010, Resnick & Li 2003). The market size and growth represent the firms need to remain competitive, by accessing large and growing markets (UNCTAD 1998, Mottaleba & Kalirajanb 2010, Morisset 2001). They are included in the regression model, and are represented by the

[9] Gross enrolment rate is defined as the number of pupils enrolled at a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education (Teorell et al 2013a).

variables GDP per capita and the annual GDP growth rate, respectively. Both the GDP growth rate and GDP per capita are expected positively affect FDI.

Yet, the size and growth of the domestic markets do not reflect the determinants of FDI aiming to serve global markets through export. Yet, access to global markets and openness to trade are important determinants of FDI (Mottaleba & Kalirajanb 2010, Resnick 2001). These factors are represented in the regression model by the variable openness to trade. Host countries that are well-linked and open to the global markets should attract more FDI. Accordingly, openness to trade is expected to have a positive effect on FDI.

The determinants of resource-seeking FDI are focused on the costs and productivity of the factors of production, such as human capital (UNCTAD 1998). In previous research human capital is a commonly considered determinant (see e.g. Gwenhamo 2011, Asiedu 2006, Knutsen et al 2011). The availability of cheap and skilled labour not only attracts FDI as a measure to cut costs and increase efficiency, but is thus also an important determinant of efficiency-seeking FDI (UNCTAD 1998, Mottaleba & Kalirajanb 2010). To capture the effect of human capital, the variable secondary school enrolment is included in the regression model. The effect of secondary school enrolment is expected to be positive on FDI.

In addition, a policy variable is included in the regression model to reflect the macroeconomic stability of the host country. Policy variables represent factors that policy makers alter through their actions and decisions. Policy variables often aim to reflect the economic, political and social stability of the host country (Asiedu 2006, UNCTAD 1998). In previous research the host county inflation rate is commonly used as a measure of macroeconomic stability (see e.g. Asiedu 2006, Mottaleba & Kalirajanb 2010). The inflation rate provides a signal of the health status of the host economy, and is thus expected to have a negative effect on FDI.

The descriptive data of all the variables is shown in Appendix 4. The variables are tested for the presence of non-stationarity, heteroskedasticity and autocorrelation. The results of the tests are presented in Appendix 5.

10. Quantitative Method

To empirically test the effect of property rights on FDI, a regression model is estimated using OLS and TSLS. The following variables are used: net FDI inflow (%) (FDI_{it}), property rights index (index value one to ten) ($Propr_{it}$), logged GDP per capita (level at constant prices 2005) ($GDPpc_{it}$), GDP growth rate (%) ($GDPgr_{it}$), openness to trade (%) ($Open_{it}$), secondary school enrolment (%) ($Enrol_{it}$) and inflation rate (%) ($Infl_{it}$). Using these variables the following regression model is estimated:

$$FDI_{it} = X_{it} + \beta_1 Propr_{it} + \varepsilon_{it},$$

$$X_{it} = \beta_2 \ln GDP\, pc_{it} + \beta_3 GDPgr_{it} + \beta_4 Open_{it} + \beta_5 Enrol_{it} + \beta_6 Infl_{it},$$

$$\varepsilon_{it} = \lambda_i + \mu_t + \nu_{it}, \quad (1)$$

$$\varepsilon_{it} = \nu_{it}, \quad (2)$$

where *i* indicates country i, and *t* time period t. The error term in (1) consists of a white noise component (ν_{it}) and two fixed effects components: a time independent cross-section fixed effect (λ_i), and a period fixed effect (μ_t). The cross-section fixed effect allows the sampled countries to have individual intercepts in the data, while the period fixed effect allows for time dependent effects common to all the sampled countries. The error term in (2) only consists of a white noise component (ν_{it}), and is considered in the pooled versions of the OLS and TSLS estimations (Verbeek 2012:377, 380).

The issue of reversed causality running from FDI to property rights is highlighted in some of the previous research (see e.g. Bénassy-Quéré et al 2007, Ali et. al 2011, Anghel 2005, Hussain & Kimuli 2012). Reversed causality implies that it is not only property rights that affect FDI. The competition for FDI inflows among the host countries also contributes to improving property rights protection (Ali et al. 2011). For the regression model, the presence of reversed causality implies that the OLS estimation is biased and inconsistent. The problem is tackled by including an instrumental variable. It is always difficult to find relevant and valid instruments. A valid instrument is correlated with the endogenous variable of the model, but not with the model's error term. Furthermore, the instrument should not have a direct effect on the explained variable (Ali et. al 2011, Verbeek 2012:137,149).

The choice of instrument is based on the findings of previous research. However, the use of country fixed effects in a panel data regression rules out the use of some commonly considered time-invariant instruments[10] (see e.g. Ali et. al 2011, La Porta et al. 1999, Levine 2005). In previous research this issue is handled by including internal instruments (Bénassy-Quéré 2007). In this spirit, a five year lagged value of the property rights variable is included as an instrument in the regression model. The key motivation for using the lagged property rights variable as an instrument is that current FDI inflows are unlikely to be determined by future values of property rights protection (see e.g. Verbeek 2012:376).

Commonly considered time-invariant instruments are settler mortality and variables representing religious, ethnic and linguistic fractionalisation (see e.g. Ali et. al 2011, La Porta et al. 1999, Levine 2005). To enable the inclusion of these instruments, and thus

[10] Fixed effects remove any time invariant components, i.e. constants in the data are removed. For a detailed presentation on fixed effects see e.g. Verbeek (2012) pages 377-381.

both extend the analysis to benefit from additional information, and to test the robustness of the results, a different method of estimation needs to be considered. Therefore, pooled versions of the regression model are considered. A pooled regression treats all observations, of all time periods, as a single sample. Hence, in a pooled regression the variables are assumed to be comprehensive enough to capture all relevant characteristics of the individual countries, and thus there are assumed to be no unobserved effects in the model (Dougherty 2011:518). The application of this assumption needs to be taken into account in analysing the results.

Settler mortality consists of the logged mortality rate faced by European settlers at the time of colonisation (Teorell et. al 2013b:45). The motivation for using settler mortality as an instrument for property rights is based on the idea that the colonisers brought with them, and created, institutions to define and enforce property rights. The colonisers did not settle in areas where disease and mortality rates were high. Accordingly, the settler mortality rate is assumed to be negatively correlated with FDI (Ali et. al 2011, Levine 2005). Data on settler mortality rate is collected from Acemoglu et al (2001).

The fractionalisation variables reflect the probability that two randomly selected people do not share a characteristic. The characteristics considered in each variable are religion, ethnicity, and language. The higher the value of the variable, the less is the probability that two people in a population share that characteristic (Teorell et. al 2013b). The key motivation for using fractionalisation variables as instruments for property rights is that high fractionalisation among people, imply higher social and political tension. Tension among people is believed to hamper the development of the institutional environment, resulting in poorer property rights protection (Ali et. al 2011). Data on the three variables is collected from Alesina et al (2003).

The validity of the instruments is examined by first testing if each of the instruments has a significant effect on the property rights variable. This is done by regressing each of the instruments together with the control variables on property rights. The instruments that show a significant effect on property rights are settler mortality, linguistic fractionalisation and the lagged property rights variable. Next, each of these three instruments is tested against the dependent variable, i.e. net FDI inflows. This is done by regressing each of the instruments together with the property rights variable and the control variables on FDI. The instruments show no direct effect on the dependent variable, since none of the three instruments have a significant effect on FDI.

The same testing procedure is conducted for the lagged property rights variable only, but with fixed effects included in the panel data estimation. Finally, a Sargan's test of over-identifying restrictions confirms the mutual validity of the instruments in the pooled estimation. Detailed testing procedure and results are shown in Appendix 6.

11. Regression Analysis

The regression results are shown in Table 4. The second column presents the results of the regression model estimated using a fixed effects OLS estimation, and the third column using fixed effects TSLS. The fourth column shows the results using a pooled OLS estimation, and the fifth column using pooled TSLS. The estimation results using TSLS address the potential problem of reversed causality by including instrumental variables, i.e. the lagged property rights variable in the fixed effects estimation and settler mortality, linguistic fractionalisation and the lagged property rights variable in the pooled estimation.

Table 4

Variable	OLS[i]	TSLS[i]	OLS[ii]	TSLS[ii]
Constant	-8.90**	-8.86**		
	(3.63)	(4.20)		
GDP per capita	0.85*	0.78	-0.54***	-0.59***
	(0.48)	(0.56)	(0.06)	(0.09)
GDP_{gr}	0.07**	0.11***	0.06	0.08**
	(0.03)	(0.04)	(0.05)	(0.04)
Openness	0.02**	0.02***	0.03***	0.03***
	(0.01)	(0.01)	(0.00)	(0.00)
Secondary school enrolment	0.02	0.24	0.34***	0.35***
	(0.35)	(0.36)	(0.13)	(0.08)
Inflation rate	0.00	0.00	0.00	0.00
	(0.01)	(0.00)	(0.00)	(0.00)
Property Rights	0.71*	0.26	0.52	0.77***
	(0.39)	(0.44)	(0.31)	(0.26)
adjusted R^2	0.62	0.64	0.31	0.35
Number of obs.	239	199	239	127

***Significant at 0.1% level, **Significant at 5% level, *Significant at 10% level
Standard errors shown in brackets
[i] Estimated using fixed effects.
[ii] Pooled regression. White's cross-section standard errors.

The estimated coefficients, obtained using a fixed effects OLS estimation, are shown in the second column of Table 4. The coefficients have the expected signs, indicating that the effect of GDP per capita, GDP growth rate, trade openness, secondary school enrolment and property rights on FDI is positive. The estimated effect of the inflation rate is very small, which is not in line with the expected negative effect. However, the estimated coefficient is not significant. The effects of GDP per capita, GDP growth, openness to trade and property rights are found to be significantly positive. Accordingly, the result provides a strong indication of the importance of market size, openness to trade and property rights protection as determinants of FDI. The size of the

estimated coefficient of property rights (0.71) indicates that the effect of a 1% increase in protection of property rights has a 0.71% effect on FDI.

The results of the pooled OLS estimation shown in the fourth column are largely in line with the results of the fixed effects OLS estimation. The effects of GDP growth rate, secondary schooling, openness to trade and property rights on FDI are positive, and in line with the expected result. The estimated effect of the inflation rate is small in the pooled OLS estimation as well. However, the estimated effect of GDP per capita on FDI is significantly negative, and not in line with the expected results. This result may be explained by the fact that the pooled estimation does not take individual country effects into consideration, and thus does not allow for individual intercepts in the data.

The third column shows the estimation results using fixed effects TSLS. The results are mainly consistent with those provided by the OLS estimations, shown in the second and fourth columns. The effects of GDP per capita, GDP growth rate, openness to trade, secondary school enrolment and property rights on FDI are positive, but now only significantly positive for the GDP growth rate and openness to trade. In terms of the size of the estimated effects, both the effects of GDP per capita and property rights on FDI are found to be smaller using the fixed effects TSLS, compared to the results obtained when using fixed effects OLS. However, the estimated coefficients are non-significant. The inflation rate has a non-significant and small estimated effect in this estimation as well. The estimated effect of openness to trade is of the same size as in the fixed effects OLS estimation, while the estimated effect of the GDP growth rate is slightly stronger.

The fifth column shows the results of the pooled TSLS estimation. The results are generally in line with those in column two to four. The estimated effects of the GDP growth rate, secondary school enrolment, openness to trade and property rights are all significantly positive. However, in line with the estimation result of the pooled OLS shown in the fourth column, the estimated effect of GDP per capita is significantly negative. Again, this may be explained by the existence of unobserved country individual effects. The size of the estimated coefficient of property rights (0.77) indicates that the effect of a 1% increase in protection of property rights has a 0.77% effect on FDI.

The overall consistency of the results using the different estimation techniques implies robustness of the results. The consistency of the results using OLS and TSLS indicates that reversed causality does not affect the results. A possible explanation is that institutions are sticky. The theoretical framework defines property rights, as an institution, consisting of social agreements backed by both informal and formal norms. Changing norms, both formal and informal, do take a considerable amount of time. Formal norms are set by the government, and may be more impressionable to increased FDI, and creating improved institutional environment and thus the property rights protection. Nevertheless, informal norms rely on consensus among people and evolve through human interaction. As a result, this component of the property rights might not be as impressionable, or sensitive, to increased FDI.

Overall, the results are largely in line with both previous research and the theoretical framework. Previous research often finds that the effect of the market size is positive on FDI (see e.g. Bénassy-Quéré et al 2007, Mathur & Singh 2011, Biglaiser & Straat 2010,

Gwenhamo 2011, Resnick 2001, Resnick & Li 2003, Asiedu 2006, Knutsen et al 2011, Morisset 2001, Mottaleba & Kalirajanb 2010). The effect of openness to trade on FDI is also often found to be positive (see e.g. Mathur & Singh 2011, Biglaiser & Straat 2010, Gwenhamo 2011, Resnick 2001, Tejinder & Newhouse 1995, Morisett 2001). In a similar vein, the effect of human capital on FDI is often found to be positive (see e.g. Mathur & Singh 2011, Gwenhamo 2011, Asiedu 2006, Mottaleba & Kalirajanb 2010, Knutsen et al 2011). However, the regression results show that the effect of the inflation rate on FDI is close to zero. Hence, the effect of the inflation rate indicates that macroeconomic instability affects FDI to a very small extent. This is neither in line with the expected result, nor with previous research. However, the estimates are not significant. In previous research the effect of the inflation rate on FDI is found to be small but negative (see e.g. Mottaleba & Kalirajanb 2010, Asiedu 2006).

The positive effect of property rights on FDI is in line with both the theoretical framework and previous research (see e.g. Bénassy-Quéré et al 2007, Mathur & Singh 2011, Gwenhamo 2011, Resnick & Li 2003). The theoretical framework suggests that an increase in property rights protection results in increased FDI, through a lowering of transaction costs and risks. Even though the regression analysis does not explicitly examine the transaction costs and risk reduction, it does confirm the link of improved property rights protection leading to increased net FDI inflows.

12. Conclusions from Part III

In answering what determines FDI in developing countries, the results show that the effects of market size, human capital, openness to trade and property rights on FDI is positive. The effect of property rights as a determinant of FDI in developing countries is thus found to be significantly positive. Overall, the results are in line with both previous research and the theoretical framework. The consistency of the results using the different estimation techniques implies robustness of the results.

The fixed effects estimations using OLS and TSLS are largely consistent. The effects of GDP per capita, GDP growth, openness to trade, secondary school enrolment and property rights is positive on FDI. The estimated positive effect of property rights on FDI is large and significant using OLS. The estimated effect of the inflation rate on FDI is found to be insignificant and close to zero using both of the estimations techniques.

The pooled estimations using OLS and TSLS confirm most of the results obtained from the fixed effects estimations. The effect of GDP growth, openness to trade, secondary school enrolment and property rights is positive on FDI. The estimated effect of the inflation rate is again close to zero. The estimated positive effect of property rights on FDI is large and significant using TSLS. The deviation in the results using pooled OLS and TSLS, is that the effect of GDP per capita is found to be significantly negative. This may be explained by the existence of unobserved country fixed effects.

An instrumental variable approach is used to handle the possible issue of reversed causality. It is always challenging to find relevant and valid instruments. The choice of instrument in this study is based on the findings of previous research. In the fixed effects estimation an internal instrument is included, i.e. the property rights variable lagged one period. The fixed effects estimation has the advantage of accounting for country and period fixed effects. But as a result, all time-invariant components in the data are removed.

In order to benefit from the time-invariant instruments commonly used in previous research, an alternative estimation is used. Hence, a pooled TSLS is used, where no country or period fixed effects are included in the error term. The instruments considered in the pooled regression are settler mortality, linguistic fractionalisation and the lagged property rights variable.

The estimations, using either a fixed effects or a pooled TSLS, indicate that reversed causality does not affect the results. A possible explanation is that it takes time for institutions to be changed. Thus, the link between FDI and property rights is found to not be subject to reversed causality.

13. Conclusion

This study has its starting point in the fact that not all developing countries are equally successful in attracting FDI. Consequently, this study aims to examine: *what are the key determinants of FDI in a developing country?* In previous research, there has been a recent shift of focus to the institutional environment of the host countries as a determinant of FDI. In line with this development, this study further aims to examine: *what is the importance of property rights as a determinant of FDI?*

To meet this objective, a study is conducted both qualitatively and a quantitatively. The qualitative study examines the determinants of FDI in the Kenyan cut flower industry, and is performed through interviews with investors and stakeholders in the industry. In its essence, the qualitative study provides evidence on the determinants of FDI in one developing country, based on subjective opinions of decision makers in the Kenyan cut flower industry.

In order to draw general conclusions on the determinants of FDI in a developing country, it is important to put the qualitative results in relation to findings from other countries and industries. In this sense, a quantitative study is performed to examine the determinants of FDI across industries, developing countries and time. This is done by performing a regression analysis on 55 developing countries, over the time period 1980-2010. The quantitative study provides a benchmark for testing the validity and universality of the qualitative results, and allows for an investigation of reversed causality between FDI and property rights.

The results of the qualitative study indicate that natural resources, market size, human capital, infrastructure, investment climate and property rights are important determinants of FDI in the Kenyan cut flower industry. In light of the industry's dependence on access to land, the examination of property rights as a determinant of FDI is operationalised by considering property rights to land. The results and the analysis of the results indicate that property rights to land provide an important guarantee of investments, and reduce transaction costs and risks related to the investments. However, the results also highlight that the extent of protection of property rights to land, is not universally extended to all plots of land.

The qualitative results indicate that land disputes are common in Kenya. Land titles, and thus property rights to land, are not easily identifiable in the case of land disputes. The disputes often involve multiple claimants of ownership to the same plot of land. In these cases, the results indicate that foreign investors are discouraged from investment. In accordance with institutional theory, this is interpreted as property rights protection being inefficient, and transaction costs too high for an economic exchange to occur. Accordingly, an important contribution of the qualitative study is that it provides insights into the intermediate steps in the process of well-defined property rights leading to increased FDI, i.e. by lowering transaction costs and risks.

The results of the quantitative study confirm that the effects of market size, human capital, openness to trade and property rights on FDI are positive. The results are fundamentally in line with the theoretical framework, and the findings of previous research. The results are consistent regardless of the estimation technique, indicating the robustness of the results.

The possible issue of reversed causality is highlighted in some of the previous research. Reversed causality implies that it is not only property rights that affect FDI. Increased FDI also contributes to the institutional development of improved property rights. Investigating this issue is of considerable importance, since the presence of reversed causality implies that the results of an OLS estimation are biased and inconsistent. In this spirit, this study contributes to the existing literature by means of two different sets of instruments. The results of the TSLS estimations suggest that reversed causality does not affect the results. Based on institutional theory, a possible explanation is that institutions are sticky, and are thus not affected by increased FDI.

Mapping the determinants of FDI according to the categorisations of previous research as shown in Table 1, it is evident that there is no single type of motivation driving FDI. Both the qualitative and quantitative studies find that FDI is market-, resource-, and efficiency-seeking, and motived by the institutional environment. In addition, the quantitative study considers the importance of FDI policy, in terms of macroeconomic stability and openness to trade. The results of the qualitative study indicate that FDI is competitiveness-enhancing, and motivated by various created assets. From these results it is evident that there is no single economic or institutional motivation driving FDI in developing countries. Rather, the results of both studies indicate that the different categories, and thus the identified determinants, overlap and interdependently affect FDI.

The determinants of FDI identified in the Kenyan cut flower industry correspond reasonably well to the variables considered in the quantitative study. However, the results of the qualitative and quantitative studies seem to highlight different aspects of the same determinants. For instance, the results found for the Kenyan cut flower industry emphasise size and access to international market, as important aspects of the market size. Conversely, the quantitative results consider the domestic market size and growth as important aspects of the market size. The same result seems to holds for human capital. The results for the Kenyan cut flower industry highlight industry know-how, while the quantitative study considers the positive impact of secondary education. These two aspects are quite different, but are both important indicators of human capital. In conclusion, these results indicate the complex nature of examining the determinants of FDI.

In other words, it is not only the case that there are several important determinants of FDI, but also that each of these determinants has a multiple of important features. Adding to the complexity of the subject, some of these features are difficult to measure and quantify. In terms of created assets, the qualitative results highlight agglomeration economies as a determinant of FDI. Agglomeration economies, along with some of the other important features of created assets, are indeed hard to measure and quantify. In this sense, qualitative studies provide important contributions to the subject. This study contributes to the existing literature by uncovering some of the important determinants that are hard to quantitatively examine. However, the results are by no means exhaustive, and hopefully this study will serve to inspire further research and qualitative studies on the subject.

Resources

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Oral resources

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Kenya Investment Authority, Investor Services Officer, Ms Sheila Nyamweya, 2014-05-19

Kenya National Bureau of Statistics, Senior Manager, Mr Robert K. Nderitu, 2014-06-13

Ministry of Agriculture, Senior Assistant Director of Agriculture, Ms Margaret Masaku, 2014-05-02

Bilashaka Flowers, Director, Mr Joost Zuurbier, 2014-05-14

Blooming Africa, Director, Mr Bert Louwerse, 2014-05-16

Finlays Group Kenya, Finance Director, Mr Dennis Mwirigi, 2014-06-14

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Appendices

Appendix 1: Interview Guide - Main Questions and Discussion Points

Which aspects do you consider as important determinants of FDI in the flower industry in Kenya?
- Advantages of Kenya
- Specific locational advantages

Do you consider the system for property rights protection as an important determinant for FDI in the cut flower industry in Kenya?
- Identification and protection of land plot boundaries
- Duration of land contract
- Perceived security of land contract
- Enforcement mechanisms
- System of settling possible disputes

Did you find it hard to gain access to the relevant information needed for your investment?
- Assistance or guidance in Kenya
- Time spent gathering information

Appendix 2: List of Countries

Countries	
Armenia	Malawi
Bangladesh	Mali
Benin	Mauritania
Bolivia	Moldova
Burkina Faso	Mongolia
Burundi	Morocco
Cambodia	Mozambique
Cameroon	Nepal
Central African Republic	Nicaragua
Chad	Niger
Congo, Dem. Rep.	Nigeria
Congo, Republic of	Pakistan
Cote d`Ivoire	Papua New Guinea
Egypt	Paraguay
El Salvador	Philippines
Ethiopia	Rwanda
Georgia	Senegal
Ghana	Sierra Leone
Guatemala	Sri Lanka
Guinea-Bissau	Syrian Arab Republic
Guyana	Tanzania
Haiti	Togo
Honduras	Uganda
India	Ukraine
Indonesia	Vietnam
Kenya	Zambia
Kyrgyzstan	Zimbabwe
Madagascar	

Appendix 3: Calculation of Averages

Year	**Averaged over period:**
1980	1978 – 1982
1985	1983 – 1987
1990	1988 – 1992
1995	1993 – 1997
2000	1998 – 2002
2005	2003 – 2007
2010	2008 – 2012

Appendix 4: Descriptive Data

	FDI flows	Ln GDP per capita	GDP_{gr}	Openness	Secondary school enrolment	Inflation rate	Property Rights
Mean	-0.20	7.31	3.14	59.46	3.34	81.97	1.36
Median	0.07	7.28	3.65	54.00	3.49	8.98	1.43
Maximum	3.15	8.80	15.01	156.51	4.61	5944.34	1.91
Minimum	-7.84	5.59	-44.90	9.04	0.83	-6.45	0.51
Std. Dev.	1.73	0.68	4.64	28.94	0.84	533.81	0.30
Obs.	357	359	365	371	318	352	316

Appendix 5: Econometric Tests

Tests				
Breusch-Pagan Test for heteroskedasticity	OLS[i]	TSLS[i]	OLS[ii]	TSLS[ii]
H_0: *homoskedastic errors*	Cannot reject	Cannot reject	Cannot reject	Cannot reject
Reject if: F-stat>F-critical	1.81<1.98	0.03<1.98	1.80<1.98	0.74<2.03
Df (F-distribution)	230, 8 (200, 8)	190, 8 (200, 8)	230, 8 (200, 8)	127,8 (100,3)
Breusch-Godfrey Test for Autocorrelation				
H_0: *No autocorrelation*	Cannot reject	Cannot reject	Cannot reject	Cannot reject
Reject if: LM > Critical value	13.11<15.51	11.55<15.51	12.85<15.51	11.18<15.51
Df (Chi-squared)	8	8	8	8

Augmented Dickey Fuller test for non-stationarity	Ln GDP per capita	GDP growth rate (%)	Openness (%)	School enrolment (%)	FDI net inflows (%)	Inflation (%)	Property rights
H_0: *non-stationary* Reject if p<0.05	Reject	Reject	Reject	Reject	Reject	Reject	Reject
(trend & intercept) Statistic	144.79	848.46	149.99	306.56	1390.52	911.6	149.59
Probability	0.02	0.00	0.01	0.00	0.00	20.00	0.01
(intercept) Statistic		870.08			1365.39	722.2	171.37
Probability		0.00			0.00	8 0.00	0.00
Sargan's test for overidentifying restrictions							
H_0: *over-identifying restrictions are valid* Reject if: p<0.05	Cannot reject						
Sargan statistic	11.98						
Probability	0.21						

[i] Fixed effects panel data regression
[ii] Pooled regression. White's cross-section standard errors.

Appendix 6:Testing the Instruments

Variable	(1) OLS[i] *Dependent variable: FDI*	(2) First stage[i] *Dependent variable: Property rights*			(3) Instrument testing[i] *Dependent variable: FDI*			(4) Second stage[i] *Dependent variable: FDI*	(5) OLS[ii] *Dependent variable : FDI*	(6) First stage[ii] *Dependent variable: Property rights*	(7) Instrument testing[ii] *Dependent variable: FDI*	(8) Second stage[ii] *Dependent variable: FDI*
Constant									-8.90**	-2.07***	-8.06*	-8.86**
									(3.63)	(0.74)	(4.23)	(4.20)
GDP per capita	-0.54***	0.36***	0.13***	0.19***	-0.53***	-0.46***	-0.47***	-0.59***	0.85*	0.39***	0.62	0.78
	(0.06)	(0.09)	(0.03)	(0.02)	(0.11)	(0.08)	(0.09)	(0.09)	(0.48)	(0.09)	(0.57)	(0.56)
GDP_{gr}	0.06	0.01	0.03***	0.02***	0.11**	0.05	0.08**	0.08**	0.07**	0.01	0.12***	0.11***
	(0.05)	(0.01)	(0.01)	(0.01)	(0.04)	(0.03)	(0.04)	(0.04)	(0.03)	(0.01)	(0.04)	(0.04)
Openness	0.03***	0.00	0.00	0.00	0.03***	0.03***	0.03***	0.03***	0.02**	0.00	0.02***	0.02***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)
Sec. school enrol	0.34***	-0.07	0.01	-0.06*	0.41***	0.30***	0.31**	0.35***	0.02	-0.02	0.24	0.24
	(0.13)	(0.05)	(0.05)	(0.03)	(0.18)	(0.11)	(0.13)	(0.08)	(0.35)	(0.06)	(0.36)	(0.36)
Inflation rate	0.00	0.00	0.00	0.00	0.00	0.00*	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)
Property Rights	0.52				0.11	0.26	0.15	0.77***	0.71*		0.02	0.26
	(0.31)				(0.44)	(0.28)	(0.21)	(0.26)	(0.39)		(0.47)	(0.44)
Prop. Rights (-5)		0.31***			0.10					0.35***	0.61	
		(0.11)			(0.39)					(0.07)	(0.44)	
Settler Mortality			0.05***			0.03						
			(0.02)			(0.04)						
Linguistic fract.				0,14**			0.31					
				(0.06)			(0.25)					
Number of obs.	239	200	156	228	199	155	236	127	239	200	199	199

****significant at 0.1% level **significant at 5% level *significant at 10% level*

Standard errors shown in brackets

[i] **Pooled regression.** White's cross-section standard errors.

[ii] **Fixed effects panel data regression.**

Equations corresponding to the tests conducted in Appendix 6

In all equations listed below:
$X_{it} = \beta_2 \ln GDP\,pc_{it} + \beta_3 GDPgr_{it} + \beta_4 Open_{it} + \beta_5 Enrol_{it} + \beta_6 Infl_{it}$,

Pooled estimations:
$IV_{it} = Propr(-5)_{it} + SettMort_i + LinFract_i$

(1) OLS: $FDI_{it} = X_{it} + \beta_1 Propr_{it} + \nu_{it}$
(2) First Stage: $Propr_{it} = X_{it} + \beta_1 IV_{it} + \nu_{it}$
(3) Instrument testing: $FDI_{it} = X_{it} + \beta_1 Propr_{it} + \beta_2 IV_{it} + \nu_{it}$
(4) Second stage: $FDI_{it} = X_{it} + \beta_1 IV_{it} + \nu_{it}$

Fixed effects estimations:
$IV_{it} = Propr(-5)_{it}$

(5) OLS: $FDI_{it} = X_{it} + \beta_1 Propr_{it} + \lambda_i + \mu_t + \nu_{it}$
(6) First stage: $Propr_{it} = X_{it} + \beta_1 IV_{it} + \lambda_i + \mu_t + \nu_{it}$
(7) Instrument testing: $FDI_{it} = X_{it} + \beta_1 Propr_{it} + \beta_2 IV_{it} + \lambda_i + \mu_t + \nu_{it}$
(8) Second stage: $FDI_{it} = X_{it} + \beta_1 IV_{it} + \lambda_i + \mu_t + \nu_{it}$